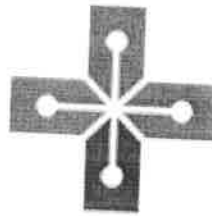


St. PETER'S INSTITUTE OF HIGHER EDUCATION AND RESEARCH

(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai - 600 054.



IGNITE • INSPIRE • INNOVATE

Academic Council

26th Meeting on 20.09.2021

AGENDA



St. Peter's Institute of Higher Education and Research

(Deemed to be University U/S 3 of the UGC Act, 1956)

AVADI, CHENNAI - 600 054. TAMIL NADU.

Phone : 26558080 - 84, Fax : 044-26555430

E-mail : spiher@spiher.ac.in

Website : www.spiher.ac.in

Dr. L. Mahesh Kumar
Registrar

SPIHER /REG/F009/AC-26/2021

11.09.2021

To

All the Members of the Academic Council,
St. Peter's Institute of Higher Education and Research.

Sir/Madam,

Sub: Academic Council – 26th meeting on 20.09.2021 –
Meeting notice - Reg.

The 26th meeting of the Academic Council is scheduled to be held on 20.09.2021(Monday) at 11.00 a.m. at the Conference Hall in the Institute. All the members are requested to attend the meeting.

Agenda will be sent later.

Yours faithfully,



L. Mahesh Kumar
Registrar
Registrar

St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai-600 054.
For information:

Copy to:

1. All the Deans/HoDs
2. The Secretary, UGC
3. The Finance Officer
4. Estate Officer
5. Office File/Guard File

1. The Chancellor
2. The Vice Chancellor

St. Peter's Institute of Higher Education and Research

(Deemed to be University U/S 3 of the UGC Act, 1956)

Avadi, Chennai - 600 054.

26th Meeting of the Academic Council

Date: 20.09.2021 at 11.00 a.m.

Agenda

- 25.1 To confirm the minutes of the 25th meeting of the Academic Council held on 10.03.2021. **(Appendix-1)**
- 25.2 To report on the action taken on the minutes of the 25th meeting of the Academic council. **(Appendix-2)**
- 25.3 To consider the minutes of the 4th / 5th / 6th / 17th / 23rd / 24th meetings of the various Boards of Studies held from 06th to 11th September, 2021. **(Appendix-3)**
- 25.4 To consider the Academic calendar for the Academic year 2021-22 with required modification due to COVID-19 pandemic. **(Appendix-4)**
- 25.5 Any other

Date: 13.09.2021


Registrar

St. Peter's Institute of Higher Education and Research

(Deemed to be University U/S 3 of the UGC Act, 1956)

Avadi, Chennai – 600 054.

Minutes of the 25th Meeting of the Academic Council held on 10th March 2021 through video conferencing

25.1 To confirm the minutes of the 24th meeting of the Academic Council held on 25.09.2020.

RESOLVED to confirm the minutes of the 24th meeting of the Academic Council held on 25.09.2020. **(Appendix-1)**

25.2 To report on the action taken on the minutes of the 24th meeting of the Academic council.

NOTED the action taken on the minutes of the 24th meeting of the Academic council held on 25.09.2020. **(Appendix-2)**

25.3 To consider the minutes of the 3rd / 4th / 5th / 16th / 22nd / 23rd meetings of the various Boards of Studies held from 19th to 25th February, 2021.

RESOLVED that the minutes of the 3rd / 4th / 5th / 16th / 22nd / 23rd meetings of the various Boards of Studies held from 19th to 25th February, 2021 be approved with the following recommendations to the concerned Board of Studies. **(Appendix-3)**

25.4 To report that the online examinations had been conducted in January 2021 in respect of the Odd Semester in the Academic Year 2020-'21 in view of COVID-19 Pandemic.

NOTED the online examinations had been conducted in January 2021 in respect of the Odd Semester in the Academic Year 2020-'21 in view of COVID-19 Pandemic.

Date: 11.03.2021

PF / 17/3/21
Vice Chancellor

Yas. K.
Registrar

St. Peter's Institute of Higher Education and Research

(Deemed to be University U/S 3 of the UGC Act, 1956)

Avadi, Chennai - 600 054.

26th Meeting of the Academic Council

Date: 20.09.2021

Action Taken on the Minutes of the 25th meeting of Academic Council held on 10.03.2021

25.1 Noted.

25.2 Noted.

25.3 Noted.

25.4 Noted.

Date: 14.03.2021


Registrar

S.NO	DEPARTMENT NAME
1.	Architecture
2.	Biomedical Engineering
3.	Civil Engineering
4.	Computer Science and Engineering
5.	Electronics and Communication Engineering
6.	Electrical and Electronics Engineering
7.	Mechanical Engineering
8.	Information Technology
9.	Biochemistry
10.	Biotechnology
11.	Business Administration
12.	Chemistry
13.	Computer Science and Application
14.	Commerce
15.	English
16.	Economics
17.	Mathematics
18.	Microbiology
19.	Physics
20.	Tamil
21.	Visual Communication

St. PETER'S INSTITUTE OF HIGHER EDUCATION AND RESEARCH

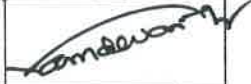
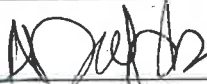



(Deemed to be University U/S 3 of the UGC Act, 1956)
AVADI, CHENNAI - 600 054.

MINUTES OF THE 17th MEETING OF THE BOARD OF STUDIES IN

B.ARCH

Held on 14.09.21

Members Present

S.No	Name	Designation	Member	Signature
1.	Ar Vasudevan T J	Professor and Director	Chairman	
2.	Ar S.Arun Deepak	Assistant Professor	Member	
3.	Ar K.Uma Mageswari	Assistant Professor	Member	
4.	Ar K.S.Subramaniann	Practicing Architect	External Member	
5.	Dr.N.Jothilakshmy	Academician	External Member	



Registrar

St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai-600 054.

Chairman

17.1	<p>Considered the minutes of the 16th meeting of Board of Studies in Architecture held on 2.3.2021</p> <p>RESOLVED that the minutes of the 16th meeting of Board of Studies in Architecture held on 2.3.2021 be confirmed.</p>
17.2	<p>REVIEWED Swapping of B.Arch 8th and 9th semester syllabus under the Regulations 2020 with Choice based credit system (CBCS)</p> <p>(Ref: Minutes of 13th Meeting of board of studies)</p> <p>RESOLVED that the Regulations and Syllabi of B. Arch. Programme under the Regulations 2020 with Choice based credit system (CBCS) to be continued taking into consideration of the suggestions and remarks given by the members to include the new elective course (Appendix - I).</p> <p>1. Sustainable urban habitat -915ART11</p>
17.3	<p>Reviewed Change in the syllabus of 2020 Regulations for AART2109 Mechanics of Structures II of B. Arch. Programme</p> <p>RESOLVED that the Regulations and Syllabi of B.Arch. Programme under the regulations 2020 be reviewed and confirmed.</p>
17.4	<p>REVIEWED the Regulations and Syllabi of B. Arch. Programme under the Reguregulations 2020.</p> <p>RESOLVED that the Regulations and Syllabi of B.Arch. Programme under the Regulations 2015 be reviewed and modified.</p>
17.5	
17.6	<p>Suggested to add syllabus and topic as per the Architectural Design studio for all semester classes, Therefore change in the syllabus topic B.Arch. programme under the Regulations 2020</p> <p>Semester IV (Change in the syllabus topic as per the Architectural Design studio) AART2116-Building Services I</p> <p>Semester V (Change in the syllabus topic as per the Architectural Design studio) AART3120- Urban Housing</p> <p style="text-align: right;"><i>hak</i> Registrar</p>

St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)

Avadi, Chennai-600 054.



AART3121-Building Materials and Construction IV
AART3122-Building Services II

Semester VI

(Change in the syllabus topic as per the Architectural Design studio)
Professional Elective I

Semester VII

(Change in the syllabus topic as per the Architectural Design studio)
AART4127 Urban Design
AART4128 Professional Practice and Ethics
Professional Elective II

Semester IX

(Change in the syllabus topic as per the Architectural Design studio)
AART5131 Dissertation
AART5132 Landscape & Urban Development
Professional Elective III
Professional Elective IV
Professional Elective V

Semester X

(Change in the syllabus topic as per the Architectural Design studio)
Professional Elective VI

14.09.21



Registrar

St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai-600 054.

Chairman

St. PETER'S INSTITUTE OF HIGHER EDUCATION AND RESEARCH

(Deemed to be University U/S 3 of the UGC Act, 1956)






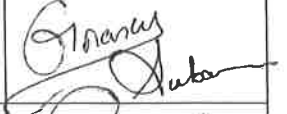

AVADI, CHENNAI – 600 054.

MINUTES OF THE 23rd MEETING OF THE BOARD OF STUDIES IN

BIO MEDICAL ENGINEERING

Held on 16.09.2021

Members Present

S.No	Name & Designation	Internal/External Member	Signature
1	Dr. Chitra Sudhakaran, Assistant Professor & Head i/c Biomedical Engineering	Chairperson	
2	Dr. Varshini Karthik HOD Department of Biomedical Engineering SRM Institute of Science and Technology Kattankulathur	External Member	
3	Dr. Balu Ranganathan Technology – Director Palms Connect LLC Chennai	External Member	
4	Dr. K. Kantharaj Professor	Internal Member	
5	Ms. A. Vanitha Assistant Professor	Internal Member	
6	Mrs.G. Gnancy Subha Assistant Professor	Internal Member	
7	Mrs. Subha Ramya Assistant Professor	Internal Member	




Registrar

St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai-600 054.

23.1 Considered the minutes of the 22nd meeting of Board of Studies in Bio Medical Engineering held on 26.02.2021.

RESOLVED that the minutes of the 22nd meeting of Board of Studies in Bio Medical Engineering held on 26.02.2021 be confirmed.

23.2 Reviewed the Syllabus of B.E. (Bio Medical Engineering) under the Regulations 2018.

RESOLVED that the Syllabus of B.E. (Bio Medical Engineering) under the Regulations 2018 be continued.

23.3 Reviewed the Syllabus of B.E. (Bio Medical Engineering) under the Regulations 2020.

RESOLVED that the Syllabus of B.E. (Bio Medical Engineering) under the Regulations 2020 be continued with a change in syllabus of Mathematics III in third semester.

23.4 Reviewed the Syllabus of M.E. (Bio Medical Engineering) under the Regulations 2018.

RESOLVED that the Syllabus of M.E. (Bio Medical Engineering) under the Regulations 2018 be continued.

23.5 Reviewed the Syllabus of M.E. (Bio Medical Engineering) under the Regulations 2021.

RESOLVED that the Syllabus of M.E. (Bio Medical Engineering) under the Regulations 2021 be approved with an addition of 19 elective courses based on recent trends in biomedical engineering.

Date:16.09.2021

*Chithya
Suahakanar*

Chairman



[Signature]
Registrar
St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai-600.054.

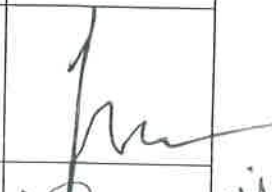






St. PETER'S INSTITUTE OF HIGHER EDUCATION AND RESEARCH

(Deemed to be University U/S 3 of the UGC Act, 1956)
AVADI, CHENNAI - 600 054.

MINUTES OF THE 23rd MEETING OF THE BOARD OF STUDIES IN CIVIL ENGINEERING


Held on 09.09.2021

Members Present

S.No	Name	Designation	Member	Signature
1.	Dr.V.B.M.SAYANA	Professor & Head Department of Civil Engineering, SPIHER	Chairman	
2.	Mr.P.BABU KAMARAJ	Professor Department of Civil Engineering, SPIHER	Internal Member	
3.	Mr.R.RAJESHWARAN	Associate Professor, Department of Civil Engineering, SPIHER	Internal Member	
4.	Dr.P.PRIYA RACHEL	Assistant Professor, Department of Civil Engineering, SPIHER	External Member (Academics)	
5.	Ms.ANITHA BHAVANI	Assistant Professor, Department of Civil Engineering, S.P.C.E.T	External Member (Academics)	
6.	Dr.S.SENTHIL SELVAN	Professor, Department of Civil Engineering, SRM University	External Member (Academics)	
7.	Mr.B.SARAVANA KUMAR	HOD/Structures Ramboll Oil & Gas	External Member (Industry)	


Chairman




Registrar
St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)

23.1 Considered the minutes of the 22nd meeting of Board of Studies in CIVIL ENGINEERING held on 23.02.2021.

RESOLVED that the minutes of the 22nd meeting of Board of Studies in CIVIL ENGINEERING held on 23.02.2021 be confirmed

23.2 Reviewed the Regulation and Syllabi of B.E (CIVIL ENGINEERING) programmes under the Regulations 2018 with Choice Based Credit System (CBCS).

RESOLVED that the Regulation and Syllabi of B.E (CIVIL ENGINEERING) programmes under the Regulations 2018 with Choice Based Credit System (CBCS) to be continued.

23.3 Reviewed the Regulation and Syllabi of B.E (CIVIL ENGINEERING under the Regulations 2020 with Choice Based Credit System (CBCS).

RESOLVED that the Regulation and Syllabi of B.E. (CIVIL ENGINEERINGs) under the Regulations 2020 with Choice Based Credit System (CBCS) be continued.

23.4 Reviewed the Regulation and Syllabi of M.E. (STRUCTURAL ENGINEERINGs) under the Regulations 2018 with Choice Based Credit System (CBCS).

RESOLVED that the Regulation and Syllabi of M.E. (STRUCTURAL ENGINEERINGs) under the Regulations 2018 with Choice Based Credit System (CBCS) be continued.




Registrar
St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai - 605 054.

23.5 Reviewed the Regulation and Syllabi of M.E (STRUCTURAL ENGINEERING) under the Regulations 2021 with Choice Based Credit System (CBCS).

RESOLVED that the Regulation and Syllabi of M.E. (STRUCTURAL ENGINEERINGS) under the Regulations 2021 with Choice Based Credit System (CBCS) be continued.

23.6 Reviewed the curricula developed having relevance to the local/national/regional/global developmental needs with learning objectives including programme outcomes, program specific outcomes and course outcomes of all the programmes.

RESOLVED that the syllabi of B.E (CIVIL) programme under the Regulations 2018 & 2013 and M.E. (STRUCTURAL ENGINEERINGS) under the Regulations 2018 & 2013 developed having relevance to the local/national/regional/global developmental needs with learning objectives including programme outcomes, program specific outcomes and course outcomes of all the programmes be approved.

23.7 Considered to include courses having focus on employability/ entrepreneurship /skill development in the syllabi of B.E (CIVIL) under the Regulations 2018 & 2013 and M.E. (STRUCTURAL ENGINEERINGS) under the Regulations 2018 & 2013

RESOLVED that the courses having focus on employability/ entrepreneurship /skill development year wise in the syllabi of B.E



Wal
Registrar
St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the USC Act, 1956)
Avadi, Chennai-600 054.

(ECE) under the Regulations 2018 & 2013 and M.E. (STRUCTURAL ENGINEERINGs) under the Regulations 2018 & 2013 to be approved.

- 23.8 Considered to include value added courses imparting transferable and life skills offered beyond the curriculum in the syllabi of B.E (CIVIL ENGINEERING) and M.E. (STRUCTURAL ENGINEERINGs).

RESOLVED that the value added courses imparting transferable and life skills offered beyond the curriculum such as course on “Advanced Antenna Design & Simulation” be approved for the upcoming semester (2018-19 – Even semester).

- 23.9 Reviewed and considered the curriculum feedback analysis and action taken report based on the suggestions given by the stake holders.

Resolved that the curriculum feedback analysis and action taken report based on the suggestions given by the stake holders to be approved.

Date: 09.09.2021

Chairman

Dr. V.B.M. SAYANA, M.E., Ph.D.,
Professor & Head
Department of Civil Engg.
Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai-600 054.



Registrar

St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai-600 054.

St. PETER'S INSTITUTE OF HIGHER EDUCATION AND RESEARCH

(Deemed to be University U/S 3 of the UGC Act, 1956)
AVADI, CHENNAI - 600 054.

MINUTES OF THE 23rd MEETING OF THE BOARD OF STUDIES IN COMPUTER SCIENCE AND ENGINEERING

Held on 13.09.2021 (Online mode)

Members Present

S.No	Name	Designation	Member
1.	Dr. B. Shanthini	Professor & Head	Chairman <i>B. Shanthini</i>
2.	Dr. S. Pushpa	Professor	Internal Member <i>Pushpa</i>
3.	Ms. A. Jayanthi	Assistant Professor	Internal Member <i>A. Jayanthi</i>
4.	Mr. S. Baskar	General Manager -IT IBM India Bangalore	External Member <i>Baskar</i>
5.	Dr. K. Suresh Joseph	Professor Dept of CSE Pondicherry University	External Member <i>Suresh</i>

B. Shanthini
Chairman



[Signature]
Registrar
St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai - 600 054

23.1 Considered the minutes of the 22nd meeting of Board of Studies in Computer Science and Engineering held on 26.02.2021

RESOLVED that the minutes of the 22nd meeting of Board of Studies in Computer Science and Engineering held on 26.02.2021 be confirmed

23.2 Reviewed the Regulation and Syllabi of B.E. (Computer Science Engineering) under the Regulations 2018

RESOLVED that the Regulation and Syllabi of B.E. (Computer Science and Engineering) under the Regulations 2018 with Choice based credit system (CBCS) to be continued.

23.3 Reviewed the Regulation and Syllabi of 5th & 6th of B.E. (Computer Science and Engineering) under the Regulations 2020 with choice based credit system (CBCS).

RESOLVED that the Regulation and Syllabi of 5th & 6th of B.E. (Computer Science and Engineering) under the Regulations 2020 with choice based credit system (CBCS) to be approved. (Appendix – I)

23.4 Considered the Regulation and Syllabi of M.E (Computer Science and Engineering) programme from the batch of students to be admitted from 2021-22 under the Regulations 2021.

RESOLVED that the Regulation and Syllabi of M.E. (Computer Science and Engineering) programme from the batch of students to be admitted from 2021-22 under the Regulations 2021 be continued.

23.5 Considered to include courses having focus on employability/ entrepreneurship /skill development in the syllabi of B.E (CSE) under the Regulations 2018 & Regulation 2020 and M.E (Computer Science and Engineering) under the Regulations 2021.

RESOLVED that the courses having focus on employability/ entrepreneurship /skill development year wise in the syllabi of B.E (CSE) under the Regulations 2018 & Regulation 2020 and M.E (Computer Science and Engineering) under the Regulations 2021 to be approved.

23.6 Reviewed the curricula developed having relevance to the local/national/regional/global developmental needs with learning objectives including programme outcomes, program specific outcomes and higher course outcomes of all the programmes.



Registrar
St. Peter's Institute of Higher Education and Research
Deemed to be University U/S 3 of the UGC Act, 1956
Avadi, Chennai - 600 054

RESOLVED that the syllabi of B.E (CSE) programme under the Regulations 2018 & 2020 and M.E (Computer Science and Engineering) under the Regulations 2021 developed having relevance to the local/national/regional/global developmental needs with learning objectives including programme outcomes, program specific outcomes and course outcomes of all the programmes be approved.

- 23.7** Considered to include value added courses imparting transferable and life skills offered beyond the curriculum in the syllabi of B.E (CSE) under the Regulations 2018 & 2020 and M.E (Computer Science and Engineering) under the Regulations 2021.

RESOLVED that the value added courses imparting transferable and life skills offered beyond the curriculum such as course on "Applications of AI in Data Science" be approved for the upcoming semester (2021-22 – Even semester)

- 23.8** Reviewed and considered the curriculum feedback analysis and action taken report based on the suggestions given by the stake holders.

Resolved that the curriculum feedback analysis and action taken report based on the suggestions given by the stake holders to be approved. (Appendix – II)

Date: 13.09.2021


Chairman




St. Peter's Institute of Higher Education and Research
Deemed to be University U/S 3 of the UGC Act, 1956
Chennai - 600 054

Appendix – I
B.E. (COMPUTER SCIENCE AND ENGINEERING)
REGULATION 2020
CHOICE BASED CREDIT SYSTEMS

718CST03- MACHINE LEARNING FOR REAL WORLD APPLICATIONS

Course Objectives

- Gain knowledge on the basics of statistical concepts used in machine learning
- To understand the basics of machine learning
- To understand the concepts of machine learning methodology
- Gain knowledge on the applications of machine learning in real life use cases

Unit I: Basics of Statistics

Matrices and vectors, matrix addition, scalar multiplication, matrix-vector multiplication, matrix-matrix multiplication, matrix inverse and transpose, distance measures (Euclidean, Manhattan, Mahalanobis, Minkowsky's)- Descriptive Statistics, Basic Probability & Distributions, Hypothesis testing, correlation, co-variance, normal distribution, Basics of Inferential Statistics, Sample , Population, regression

Unit II: Basics of Machine Learning

Data Analytics, Machine learning, Business Applications- Definitions of Supervised learning, Linear Regression, Logistic Regression- Definition of Un-supervised learning, K-Means clustering, Agglomerative Clustering- Definition, Basics of Reinforcement Learning with Examples

Unit III: Machine Learning Methodology (CRISP DM)

Steps in CRISP-DM methodology, Introduction Data Types- Handling missing data (imputation), ordering data, normalization, data merging, data manipulation, data transformation- Dimensionality reduction, Multicollinearity, Factor Analysis, PCA (Principle component Analysis)

Unit IV: Key Concepts in Machine Learning

Sample selection, Training data, Test data & Validation- modeling assumptions, assessment of modeling algorithms, parameter setting, model description- Linear Regression, Multiple Linear Regression(stepwise All), Binary Logistic Regression (Stepwise All), Multi Logistic Regression, GBM (Gradient Boosting Algorithm)- Model Validation, Confusion Matrix, ROC curve, cross Validation, AIC, R2 Value, Lift, Gain, K-fold Validation, Bootstrapping & Bagging, overfitting vs under-fitting diagnosis- Frequency of model execution, frequency of model update, monitoring- sampling algorithms (over sampling and under sampling), random over sampling, SMOTE, Random under-sampling,

Unit V: Machine Learning Algorithms with real life use cases

K-Means clustering and Hierarchical clustering- KNN classification, Decision trees (ID3, CHAID), Naïve-Bayes , Random Forests, Support Vector Machines

Course Outcomes

At the end of the course, the students will be able

CO1: Understand the statistical concepts used in machine learning



St. Peter's Institute of Higher Education and Research
Deemed to be University U/S 3 of the UGC Act, 1956
Avadi, Chennai-600 054

- CO2: Understand the key concepts in machine learning
- CO3: Gain knowledge on machine learning algorithms with real life use cases

TextBook:

1. Ethem Alpaydin, Introduction to Machine Learning, Second Edition , <http://mitpress.mit.edu/catalog/item/default.asp?ttype=2&tid=12012>.

References:

1. Stephen Marsland, Machine Learning: An Algorithmic Perspective. <http://www.amazon.com/Machine-Learning-Algorithmic-PerspectiveRecognition/dp/1420067184> .
2. Christopher M. Bishop, Pattern Recognition and Machine Learning. <http://research.microsoft.com/en-us/um/people/cmbishop/prml/>.
3. Tom Mitchell, Machine Learning, <http://www.cs.cmu.edu/~tom/mlbook.html>.

718CST12 – BIG DATA ANALYTICS

COURSE OBJECTIVES

The objective of this course is to

- Understand big data for business intelligence.
- Learn business case studies for big data analytics.
- Understand nosql big data management.
- Perform map-reduce analytics using Hadoop and related tools

UNIT I INTRODUCTION TO BIG DATA

What is big data, why big data, convergence of key trends, unstructured data, industry examples of big data, web analytics, big data and marketing, fraud and big data, risk and big data, credit risk management, big data and algorithmic trading, big data and healthcare, big data in medicine, advertising and big data, big data technologies, introduction to Hadoop, open source technologies, cloud and big data, mobile business intelligence, Crowd sourcing analytics, inter and trans firewall analytics.

UNIT II DATA MODELS

Introduction to NoSQL, aggregate data models, aggregates, key-value and document data models, relationships, graph databases, schemaless databases, materialized views, distribution models, sharding, master-slave replication, peer- peer replication, sharding and replication, consistency, relaxing consistency, version stamps, map-reduce, partitioning and combining, composing map-reduce calculations.

UNIT III HADOOP

Data format, analyzing data with Hadoop, scaling out, Hadoop streaming, Hadoop pipes, design of Hadoop distributed file system (HDFS), HDFS concepts, Java interface, data flow, Hadoop I/O, data integrity, compression, serialization, Avro, file-based data structures

UNIT IV MAP REDUCE

MapReduce workflows, unit tests with MRUnit, test data and local tests, anatomy of MapReduce job, classic Map-reduce, YARN, failures in classic Map-reduce and YARN, job



Handwritten signature
 Registrar
 St. Peter's Institute of Higher Education and Research
 Deemed to be University, UPE, UGC, 1956, Act, 1956
 Avadi, Chennai-600 051

scheduling, shuffle and sort, task execution, MapReduce types, input formats, output formats

UNIT V HADOOP TOOLS

Hbase, data model and implementations, Hbase clients, Hbase examples, praxis. Cassandra, Cassandra data model, Cassandra examples, Cassandra clients, Hadoop integration. Pig, Grunt, pig data model, Pig Latin, developing and testing Pig Latin scripts. Hive, data types and file formats, HiveQL data definition, HiveQL data manipulation, HiveQL queries

COURSE OUTCOMES

After completion of course, students would be:

CO1: Describe big data and use cases from selected business domains

CO2: Explain NoSQL big data management

CO3: Install, configure, and run Hadoop and HDFS

CO4: Perform map-reduce analytics using Hadoop

CO5: Use Hadoop related tools such as HBase, Cassandra, Pig, and Hive for big data analytics

References:

1. Michael Minelli, Michelle Chambers, and Ambiga Dhiraj, "Big Data, Big Analytics: Emerging Business Intelligence and Analytic Trends for Today's Businesses", Wiley, 2013.
2. P. J. Sadalage and M. Fowler, "NoSQL Distilled: A Brief Guide to the Emerging World of Polyglot Persistence", Addison-Wesley Professional, 2012.
3. Tom White, "Hadoop: The Definitive Guide", Third Edition, O'Reilley, 2012.
4. Eric Sammer, "Hadoop Operations", O'Reilley, 2012.
5. E. Capriolo, D. Wampler, and J. Rutherglen, "Programming Hive", O'Reilley, 2012.
6. Lars George, "HBase: The Definitive Guide", O'Reilley, 2011.
7. Eben Hewitt, "Cassandra: The Definitive Guide", O'Reilley, 2010.
8. Alan Gates, "Programming Pig", O'Reilley, 2011.



[Handwritten Signature]
Registrar
St. Peter's Institute of Higher Education and Research
Deemed to be University U/S of the UGC Act, 1956
Maradik, Chennai-600 054

St. PETER'S INSTITUTE OF HIGHER EDUCATION AND RESEARCH

(Deemed to be University U/S 3 of the UGC Act, 1956)
AVADI, CHENNAI - 600 054.

MINUTES OF THE 23rd MEETING OF THE BOARD OF STUDIES IN ELECTRONICS AND COMMUNICATION ENGINEERING (ECE)

Held on 13.09.2021 at 12.00pm (online mode)

Members Present

S.No	Name	Designation	Member
1.	Dr. G.P. Ramesh	Professor& Head	Chairman
2.	Dr.J.M.Mathana	Professor & Dean	Member
3.	Ms. T. Anne Ramya	Assistant Professor	Member
4.	Ms. R. Gomathi	Assistant Professor	Member
5.	Ms.R.Nirmala	Assistant Professor	Member
6.	Dr. C. Tharini	Professor& Head B.S.Abdur Rahman Crescent Institute of Science & Technology	Academic Expert Member
7.	Mr. V. S. Ramesh	Director - STEPS Knowledge Services Pvt Ltd Authorized Partner Texas Instruments India University Program	Industry Expert Member




Registrar

St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai-600 054



**Chairman
HEAD**

Department of ECE

St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai-600 054.

23.1 Considered the minutes of the 22nd meeting of Board of Studies in Electronics and Communication Engineering held on 26.02.2021

RESOLVED that the minutes of the 22nd meeting of Board of Studies in Electronics and Communication Engineering held on 26.02.2021 be confirmed

23.2 Reviewed the Regulation and Syllabi of B.E. (Electronics and Communication Engineering) under the Regulations 2018

RESOLVED that the Regulation and Syllabi of B.E. (Electronics and Communication Engineering) under the Regulations 2018 with Choice based credit system (CBCS) to be continued.

23.3 Reviewed the Regulation and Syllabi of 5th & 6th of B.E. (Electronics and Communication Engineering) under the Regulations 2020 with choice based credit system (CBCS).

RESOLVED that the Regulation and Syllabi of 5th & 6th of B.E. (Electronics and Communication Engineering) under the Regulations 2020 with choice based credit system (CBCS) to be approved. (Appendix – I)

23.4 Considered the Regulation and Syllabi of M.E (communication Systems) programme from the batch of students to be admitted from 2021-22 under the Regulations 2021.

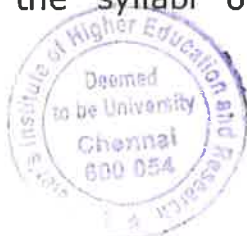
RESOLVED that the Regulation and Syllabi of M.E. (Communication Systems) programme from the batch of students to be admitted from 2021-22 under the Regulations 2021 be continued.

23.5 Considered to include courses having focus on employability/ entrepreneurship /skill development in the syllabi of B.E (ECE) under the Regulations 2018 & Regulation 2020 and M.E (communication Systems) under the Regulations 2021.

RESOLVED that the courses having focus on employability/ entrepreneurship /skill development year wise in the syllabi of B.E (ECE) under the Regulations 2018 & Regulation 2020 and M.E (communication Systems) under the Regulations 2021 to be approved.

23.6 Reviewed the curricula developed having relevance to the local/national/regional/global developmental needs with learning objectives including programme outcomes, program specific outcomes and course outcomes of all the programmes.

RESOLVED that the syllabi of B.E (ECE) programme under the




Registrar
St. Peter's Institute of Higher Education and Research
(Deemed to be University UFS 3 of the UGC Act 1956)
Avehi, Chennai, 600 054

Regulations 2018 & 2020 and M.E (communication Systems) under the Regulations 2021 developed having relevance to the local/national/regional/global developmental needs with learning objectives including programme outcomes, program specific outcomes and course outcomes of all the programmes be approved.

- 23.7** Considered to include value added courses imparting transferable and life skills offered beyond the curriculum in the syllabi of B.E (ECE) under the Regulations 2018 & 2020 and M.E (communication Systems) under the Regulations 2021.

RESOLVED that the value added courses imparting transferable and life skills offered beyond the curriculum such as course on "Device Drivers and Linux" be approved for the upcoming semester (2021-22 - Even semester)

- 23.8** Reviewed and considered the curriculum feedback analysis and action taken report based on the suggestions given by the stake holders.

Resolved that the curriculum feedback analysis and action taken report based on the suggestions given by the stake holders to be approved. (Appendix - II)

Date: 13.09.2021

Chairman

HEAD

Department of ECE

St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai-600 054.

Registrar

St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai-600 054



Appendix - I

**B.E. (ELECTRONICS AND COMMUNICATION ENGINEERING)
REGULATION 2020
CHOICE BASED CREDIT SYSTEMS**

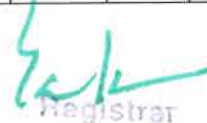
V SEMESTER

Code No.	Course Title	L	T	P	Credit	Marks		
						CA	EA	Total
Theory & Practical								
AECT3111	Digital Signal Processing	3	1	0	4	40	60	100
AECT3112	Electro Magnetic Theory and Transmission Lines	3	1	0	4	40	60	100
AECT3113	Analog and Digital Communication	3	0	0	3	40	60	100
AECT3114	Embedded and Real Time Systems	3	0	0	3	40	60	100
	Programme Elective 1	3	0	0	3	40	60	100
	Programme Elective 2	3	0	0	3	40	60	100
AECL3108	Digital Signal Processing Laboratory	0	0	4	2	40	60	100
AECL3109	Analog and Digital Communication Laboratory	0	0	4	2	40	60	100
AELL3104	Soft Skills	0	0	2	1	100	0	100
Total		18	2	10	25	420	480	900

VI SEMESTER

Code No.	Course Title	L	T	P	Credit	Marks		
						CA	EA	Total
Theory & Practical								
AECT3115	Antenna and Wave Propagation	3	0	0	3	40	60	100
AECT3116	VLSI Design	3	0	0	3	40	60	100
AMBT1101	Principles of management and Professional Ethics	3	0	0	3	40	60	100
	Programme Elective 3	3	0	0	3	40	60	100
	Open Elective-1	3	0	0	3	40	60	100
AECL3110	Embedded system Laboratory	0	0	4	2	40	60	100
AECL3111	VLSI Design Laboratory	0	0	4	2	40	60	100
AECI3102	Internship-2	0	0	0	2	100	0	100
ASSL3105	Soft Skills	0	0	2	1	100	0	100
Total		15	0	10	22	480	420	900




 Registrar
 St. Peter's Institute of Higher Education and Research
 (Deemed to be University U/S 3 of the UGC Act, 1956)
 Avadi, Chennai-600 054

Appendix -II

ACTION TAKEN REPORT ON STAKEHOLDERS FEEDBACK

2020 - 2021

Stakeholder	Feedback	Recommendation	Action taken
Student	To enhance the curriculum and syllabi	To increase the period of internship, softskills and frequency of field visits	The industry internship made mandatory in the Regulations 2018 and 2020.
Teacher	Research activities must be strengthened by conducting research conventions and conferences	To Enhanced research activities	Enhanced research activities by conducting Research Convention
Alumni	Library facilities must be augmented to meet the current requirement of the students to enable efficient learning.	Suggested to facilitate with journals	Our Library was equipped with lot of SCOPUS, IEEE journals and reprography facilities.
Parents	Placement and industrial based courses	To offer more focused placement training and industrial training and also advanced courses	To improve student communication skill 'Soft skill' course made mandatory for each semester in R-2020 and placement oriented training is also offered.


HEAD

Department of ECE

St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)

Avadi, Chennai - 600 054.




Registrar

St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)

Avadi, Chennai - 600 054

ST. PETER'S INSTITUTE OF HIGHER EDUCATION AND RESEARCH

(Deemed to be University U/S 3 of the UGC Act, 1956)
AVADI, CHENNAI – 600 054.

MINUTES OF THE 23rd MEETING OF THE BOARD OF STUDIES IN ELECTRICAL AND ELECTRONICS ENGINEERING (EEE)

Held on 11.09.2021

Members Present

S.No	Name	Designation	Member
1.	Dr. R. Rani Hemamalini	Professor & Head	Chairperson
2.	Dr. K. Balaji	Associate Professor	Internal Member
3.	Mr. K. Matthew	Assistant Professor	Internal Member
4.	Dr. S. Chandramohan	Professor & Head, Department of EEE, Anna University- Chennai	External member - Academic Expert
5.	Dr. S. U. Prabha	Principal, Dr.N.G.P Institute of Technology, Coimbatore	External member - Academic Expert
6.	Dr. Sithu D Sudarsan	Group Manager, ABB Corporate Research, Bangalore.	External member- Industrial Expert



Registrar

St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai-600 054.

R. Rani Hemamalini

R. Rani Hemamalini
K. Balaji
Matthew

S. Chandramohan

S. U. Prabha

Sithu D Sudarsan

23.1	<p>CONSIDERED the minutes of the 22nd meeting of Board of Studies in Electrical and Electronics Engineering held on 26.02.2021.</p> <p>RESOLVED that the minutes of the 22nd meeting of Board of Studies in Electrical and Electronics Engineering held on 26.02.2021 be confirmed.</p>
23.2	<p>REVIEWED the Syllabus of B.E. (Electrical and Electronics Engineering) under the Regulations 2018 and 2020.</p> <p>RESOLVED that the syllabus of B.E. (Electrical and Electronics Engineering) under the Regulations 2018 be continued.</p> <p>RESOLVED that the syllabus of B.E. (Electrical and Electronics Engineering) under the Regulations 2020 be approved with the following changes. (Appendix-I)</p> <p>(i) AEET3112 Industrial Automation-shifted to VII semester AEEP3106 Industrial Automation Lab-shifted to VII semester AEET4116 Power Systems Analysis-shifted to VI semester AEEP4107 Power Systems Analysis Lab-shifted to VI semester AEET3113 High Voltage Engineering and Travelling Waves is replaced with Artificial Intelligence applications in Electrical Transmission, Distribution, and system protection</p> <p>(ii) The minor degree with the specialization of Electric Vehicle or Smart Grid may be opted.</p>
23.3	<p>REVIEWED the Syllabus of M.E. (Power Electronics and Drives) under the Regulations 2018.</p> <p>RESOLVED that the Syllabus of M.E. (Power Electronics and Drives) under the Regulations 2018 be continued.</p>
23.4	<p>REVIEWED the syllabus of M.E. (Power Electronics and Drives) program from the batch of students admitted from 2021-22 under the Regulations 2021.</p> <p>RESOLVED that the syllabus of M.E. (Power Electronics and Drives) program from the batch of students admitted from 2021-22 under the regulations 2021 be approved with the following changes Universal Human values to be included in Audit courses.</p>
23.5	<p>Considered to include value added courses imparting transferable and life skills offered beyond the curriculum in the syllabi of B.E (Electrical and Electronics Engineering) and M.E. (Power Electronics and Drive).</p> <p>RESOLVED that the value added courses imparting transferable and life skills offered beyond the curriculum such as course on "VACEE046 – FAULT ANALYSIS IN HOME" be approved for the upcoming semester (2021-22)</p>
23.6	<p>Reviewed and considered the curriculum feedback analysis and action taken report based on the suggestions given by the stake holders.</p> <p>Resolved that the curriculum feedback analysis and action taken report based on the suggestions given by the stake holders to be approved. (Appendix – III)</p>

Date: 11.09.2021




Registrar
St. Peter's Institute of Higher Education and Research
(Deemed to be University UFS 3 of the UGC Act, 1956)
Avadi, Chennai-600 054.


Chairperson

(Appendix-I)

AEET3112	INDUSTRIAL AUTOMATION	L	T	P	C	Total Marks
		3	0	0	3	100

COURSE OBJECTIVES

- To understand the sensors used in measurement of temperature, pressure, Force, Displacement, speed, and flow in process control.
- To understand the various control mechanisms in Process Control.
- To understand the sequence control implementation
- To understand Hydraulic and Pneumatic actuators, suitable electric drives for the need of process.

UNIT I INTRODUCTION TO INDUSTRIAL AUTOMATION AND CONTROL 9

Architecture of Industrial Automation Systems. Introduction to sensors and measurement systems - Temperature measurement - Pressure and Force measurements - Displacement and speed measurement - Flow measurement techniques - Measurement of level, humidity, pH etc - Signal Conditioning and Processing - Estimation of errors and Calibration

UNIT II INTRODUCTION TO PROCESS CONTROL. 9

P-- I -- D Control- Controller Tuning. Implementation of PID Controllers - Special Control Structures – Feed forward and Ratio Control. Special Control Structures - Predictive Control, Control of Systems with Inverse Response.- Cascade Control, Overriding Control, Selective Control, Split Range Control

UNIT III INTRODUCTION TO SEQUENCE CONTROL 9

PLCs and Relay Ladder - Sequence Control - Scan Cycle, RLL Syntax - Sequence Control : Structured Design Approach- Sequence Control. Advanced RLL Programming Sequence Control - The Hardware environment - Control of Machine tools :- Introduction to CNC Machines - Control of Machine tools :


UNIT IV ANALYSIS OF CONTROL LOOP 9

Introduction to Actuators :- Flow Control Valves - Hydraulic Actuator Systems - Principles, Components and Symbols - Hydraulic Actuator Systems - Pumps and Motors - Proportional and Servo Valves.-Pneumatic Control Systems - System Components -Pneumatic Control Systems : Controllers and Integrated Control Systems

UNIT V ELECTRIC DRIVES 9

Introduction - Energy Saving with Adjustable Speed Drives. Step motors :- Principles, Construction and Drives. DC Motor Drives :- Introduction, DC--DC Converters, Adjustable Speed Drives. Induction Motor Drives- Introduction, Characteristics, Adjustable Speed Drives. Synchronous Motor Drives - Motor Principles, Adjustable Speed and Servo Drives. Networking of Sensors, Actuators and Controllers - The Field bus Communication Protocol -Introduction to Production Control Systems




Registrar
St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai-600 054.

TOTAL: 45 PERIODS

AEEP3106	INDUSTRIAL AUTOMATION LAB	L	T	P	C	Total Marks
		0	0	2	2	100

COURSE OBJECTIVE:

- Programming of PLC and DCS.
- Sensor data acquisition, data processing and visualization
- Interfacing the various field devices with PLC

LIST OF EXPERIMENTS:

1. Study of PLC field device interface modules (AI,AO,DI,DO modules)
2. Programming Logic Gates Function in PLC
3. Implementing Mathematical Operations in PLC
4. Programming Jump-to-subroutine and return operations in PLC
5. PLC Exercise: 1. Traffic Light Control and Filling/Draining Control Operation
6. PLC Exercise: 1. Reversal of DC Motor Direction 2. ON/OFF Controller for Thermal Process
7. PC based control of Level Process
8. On-line Monitoring and Control of a Pilot plant using DCS
9. PLC based Control of Flow Process
10. Study of Foundation Fieldbus /IOT/Wireless HART Enabled Transmitter



Registrar

St. Peter's Institute of Higher Education and Research,
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai-600 054.

AEET4116	POWER SYSTEM ANALYSIS	L	T	P	C	Total Marks
		3	0	0	3	100

OBJECTIVES:

- To model the power system under steady state operating condition
- To understand and apply iterative techniques for power flow analysis
- To model and carry out short circuit studies on power system
- To model and analyze stability problems in power system

UNIT I POWER SYSTEM

9

Need for system planning and operational studies – Power scenario in India – Power system components – Representation – Single line diagram – Per Unit quantities – P.U. impedance diagram – P.U. reactance diagram – Network graph, Busincidence matrix, Primitive parameters, Bus admittance matrix from primitive parameters – Representation of nominal transformer – Formation of bus admittance matrix of large power network.

UNIT II POWER FLOW ANALYSIS

9

Bus classification – Formulation of Power Flow problem in polar coordinates – Power flow solution using Gauss Seidel method – Handling of Voltage controlled buses – Power Flow Solution by Newton Raphson method.

UNIT III SYMMETRICAL FAULT ANALYSIS

9

Assumptions in short circuit analysis – Symmetrical short circuit analysis using Thevenin's theorem – Bus Impedance matrix building algorithm (without mutual coupling) – Symmetrical fault analysis through bus impedance matrix – Post fault bus voltages – Fault level – Current limiting reactors.

UNIT IV UNSYMMETRICAL FAULT ANALYSIS

9

Symmetrical components – Sequence impedances – Sequence networks – Analysis of unsymmetrical faults at generator terminals: LG, LL and LLG – unsymmetrical fault occurring at any point in a power system – computation of post fault currents in symmetrical component and phasor domains.

UNIT V STABILITY ANALYSIS

9

Classification of power system stability – Rotor angle stability – Swing equation – Swing curve – Power-Angle equation – Equal area criterion – Critical clearing angle and time – Classical step-by-step solution of the swing equation – modified Euler method.



AEEP4107	POWER SYSTEM ANALYSIS LAB	L	T	P	C	Total Marks
		0	0	2	2	100

OBJECTIVES:

- To compute the transmission line parameters
- To provide better understanding of power system analysis through digital simulation

LIST OF EXPERIMENTS:

1. Computation of Parameters and Modelling of Transmission Lines
2. Formation of Bus Admittance and Impedance Matrices and Solution of Networks.
3. Load Flow Analysis - I : Solution of load flow and related problems using Gauss-Seidel Method
4. Load Flow Analysis - II: Solution of load flow and related problems using Newton Raphson.
5. Fault Analysis
6. Transient and Small Signal Stability Analysis: Single-Machine Infinite Bus System
7. Transient Stability Analysis of Multi-machine Power Systems
8. Electromagnetic Transients in Power Systems
9. Load – Frequency Dynamics of Single- Area and Two-Area Power Systems
10. Economic Dispatch in Power Systems



[Handwritten Signature]
Registrar

St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai - 600 054.

AEET3113	HIGH VOLTAGE ENGINEERING AND TRAVELLING WAVES	L	T	P	C	Total Marks
		3	0	0	3	100

COURSE OBJECTIVES

- To impart knowledge on the following Topics
- Various types of over voltages in power system and protection methods.
- Generation of over voltages in laboratories.
- Measurement of over voltages.
- Nature of Breakdown mechanism in solid, liquid and gaseous dielectrics.
- Testing of power apparatus and insulation coordination

UNIT I BREAKDOWN IN GASES

9

Ionization processes and de-ionization processes, Types of Discharge, Gases as insulating materials, Breakdown in Uniform gap, non-uniform gaps, Townsend's theory, Streamer mechanism, Corona discharge Breakdown in liquid and solid Insulating materials - Breakdown in pure and commercial liquids, Solid dielectrics and composite dielectrics, intrinsic breakdown, electromechanical breakdown and thermal breakdown, Partial discharge, applications of insulating materials.

UNIT II GENERATION OF HIGH VOLTAGES

9

Generation of high voltages, generation of high D. C. and A.C. voltages, generation of impulse voltages, generation of impulse currents, tripping and control of impulse generators. Measurements of High Voltages and Currents - Peak voltage, impulse voltage and high direct current measurement method, cathode ray oscillographs for impulse voltage and current measurement, measurement of dielectric constant and loss factor, partial discharge measurements.

UNIT III LIGHTNING AND SWITCHING OVER-VOLTAGES

9

Charge formation in clouds, Stepped leader, Dart leader, Lightning Surges. Switching over-voltages, Protection against over-voltages, Surge diverters, Surge modifiers.

UNIT IV TRAVELLING WAVES

9

The shape, attenuation, distortion of waves, Successive reflections. Traveling waves on multi conductor systems, Theory of ground wires, counterpoise.

UNIT V HIGH VOLTAGE TESTING OF ELECTRICAL APPARATUS AND HIGH VOLTAGE LABORATORIES

9

Various standards for HV Testing of electrical apparatus, IS, IEC standards, Testing of insulators and bushings, testing of isolators and circuit breakers, testing of cables, power transformers and some high voltage equipment, High voltage laboratory layout, indoor and outdoor laboratories, testing facility requirements, safety precautions in H. V. Labs.



TOTAL; 45 PERIODS
Registrar

St. PETER'S INSTITUTE OF HIGHER EDUCATION AND RESEARCH

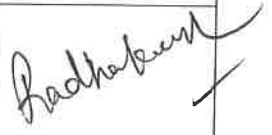




(Declared under Section 3 of the UGC Act. 1956)
AVADI, CHENNAI - 600 054.

MINUTES OF THE 10th MEETING OF THE BOARD OF STUDIES IN

BIOCHEMISTRY

Held on 20.10.2021


Members Present

S.No	Name	Designation	Member	Signature
1.	Dr. N. Radhakrishnan	Professor & Head	Chairman	
2.	Dr. P. Vasantha Srinivasan	Professor & Head	Internal Member	
3.	Ms. BV. Febiyola	Assistant Professor	Internal Member	
4.	Dr. A. Suresh Kumar	Scientist, Biochemistry & Biotech Division CSIR-CLRI, Chennai	External Member	
5.	Dr. Balu Ranganathan	Technology- Director, M/s Palms connect Solution Pvt. Ltd. Chennai.	External Member	




Registrar

St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act. 1956)
Avadi, Chennai-600 054


Chairman
Head of the Board
Biochemistry
St. Peter's Institute of Higher Education & Research
Avadi, Chennai - 600 054.

10.1 Considered the minutes of the 9th meeting of Board of Studies in BIOCHEMISTRY held on 26.10.2021.

RESOLVED that the minutes of the 9th meeting of Board of Studies in BIOCHEMISTRY held on 26.10.2021 be confirmed

11.2 Reviewed the Regulation & Syllabi of B.Sc. BIOCHEMISTRY programme under the Regulations 2020 with Choice Based Credit System (CBCS).

RESOLVED that the Regulation and Syllabi of B.Sc. (BIOCHEMISTRY) programmes under the Regulations 2020 with Choice Based Credit System (CBCS) be continued taking into consideration of the suggestions and remarks given by the members to include the following new elective course (Appendix - I)

1. ABTT2610- Biotechnology
2. ABYT2602- Nutritional Biochemistry

11.3 Reviewed the Regulation & Syllabi of M.Sc. BIOCHEMISTRY programme under the Regulations 2020 with Choice Based Credit System (CBCS).

RESOLVED that the Regulation and Syllabi of M.Sc. (BIOCHEMISTRY) programmes under the Regulations 2020 with Choice Based Credit System (CBCS) be continued taking into consideration of the suggestions and remarks given by the members to include the new elective course "ABYT2909 - Immunology" (Appendix - II)

11.4 Reviewed the curricula developed having relevance to the local/national/regional/global developmental needs with learning objectives including programme outcomes, program specific outcomes and course outcomes of all the programmes.

RESOLVED that the syllabi of B.Sc. (BIOCHEMISTRY) programme under the Regulations 2020 and M.Sc. (BIOCHEMISTRY) under the Regulations 2020 developed having relevance to the local/national/regional/global developmental needs with learning objectives including programme outcomes, program specific outcomes and course outcomes of all the programmes be approved.


11.5 Reviewed and considered the curriculum feedback analysis and action taken report based on the suggestions given by the stake holders.

Resolved that the curriculum feedback analysis and action taken report based on the suggestions given by the stake holders to be approved. (Appendix - III)



Date: 20.10.2021


Registrar
St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai - 600 054


Chairman
Head of the Department
Biochemistry
St. Peter's Institute of Higher Education & Research
Avadi, Chennai - 600 054

B.Sc BIOCHEMISTRY -APPENDIX – I

Course Objectives:

1. To enable the learner to understand the basic concept of nutrition, role of nutrients and dietary requirements of carbohydrates, proteins, fats, vitamins and minerals etc.
2. To enable the learner to understand the importance of essential amino acids, essential fatty acid and vitamins for the body.

Unit I:Basic concepts of nutrition

No. Of Hours:

12

Basic concepts of nutrition, Nutrients, function of nutrients. Measurement of the fuel values of foods. Basal metabolic rate: factors affecting BMR, measurement and calculation of BMR.

Unit II:Elements of nutrition

No. Of Hours:

12

Elements of nutrition – Dietary requirement of carbohydrates, lipids and proteins. Balanced diet, Concept of protein quality. Essential amino acids, essential fatty acids and their physiological functions.

Unit III:Minerals

No. Of Hours:

12

Minerals – Nutritional significance of dietary calcium, phosphorus, magnesium, iron, iodine, zinc and copper.

Unit IV:Vitamins

No. Of Hours:

12

Vitamins – Dietary sources, biochemical functions, requirements and deficiency diseases associated with vitamin B complex, C and A, D, E and K vitamins.

Unit V:Malnutrition

No. Of Hours:

12

Malnutrition –Recommended dietary allowances, nutritive value of common foods. Protein-calorie malnutrition. Obesity – Definition, Genetic and environmental factors leading to obesity.

TOTAL HOURS : 60

Suggested readings:

1. Swaminathan, Advanced Textbooks of food and Nutrition, Vol 1, 2, BAPPCO Press, 2005.
 2. Viswanath Sardesai, Introduction to Clinical nutrition, 3rd edition, 2011.
 3. Geissler C, Powers H. Human Nutrition. Edinburgh: Elsevier Churchill Livingstone, 2010.
 4. Devlin, T.M., Textbook of Biochemistry with Clinical Correlations, John Wiley & Sons, Inc.(New York), 2011.
 5. Harper's Illustrated Biochemistry, Victor W. Rodwell, David Bender, Kathleen M. Botham, Peter J. Kennelly, P. Anthony Weil, (31st Edition), McGraw Hill Professional, 2018.
- Fundamentals of Biochemistry, A. C. Deb., (9th edition), New Central Book Agency (P) Limited, 2001.




Registrar

St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act. 1956)
Avadi, Chennai - 600 054

Course Objectives:

1. To enable the learner to gain basic knowledge of recombinant DNA technology and cloning techniques.
2. To enable the learner to understand the methods for production of proteins using recombinant DNA technology and their application in industrial systems.

Unit 1: Introduction to Biotechnology**No. Of Hours: 12**

Biotechnology: Definition and scope, types and branches of biotechnology. Recombinant DNA technology – Basic techniques – cutting and joining of DNA molecules, Methods of gene transfer - transfection, electroporation, Selection and screening of recombinants. Insertional inactivation. Role of enzymes - Restriction endo nucleases, DNA ligases, Reverse transcriptase, DNA polymerase. Use of Linkers and Adapters, homopolymer tailing, Synthetic oligonucleotides.

Unit II: Cloning vectors**No. Of Hours: 12**

Plasmids and bacteriophages as vectors for gene cloning. Cloning vectors based on E. coli plasmids, pBR322, pUC8, pGEM3Z. Viruses as vectors, cloning vectors based on M13 and λ bacteriophage. Cosmids and Yeast artificial vectors (YAC).

Unit III: Protein engineering**No. Of Hours: 12**

T4-lysozyme, Site-directed mutagenesis, yeast two hybrid systems, Production of recombinant pharmaceuticals such as insulin, human growth hormone, factor VIII. Recombinant vaccines.

Unit IV: Plant genetic engineering**No. Of Hours: 12**

Gene isolation, gene transfer systems, Ti plasmid, plant virus vectors, electroporation, micro injection, micro projectile technology, gene expression, regeneration. Application in relation to protein quality, photosynthetic efficacy, nitrogen fixation efficiency and resistance to environmental stresses.

Unit V: Fermentation technology**No. Of Hours: 12**

Fermentors, general design of fermentor, fermentation processes, production of alcohols, antibiotics, steroids and enzymes.

TOTAL HOURS : 60**Suggested readings:**

1. Sathyanarayana, Biotechnology, Books and allied Publishers, 3rd edition, 2006.
2. Dubey. R.C, Text book of Biotechnology, S. Chand & Co, 2009.
3. Gene Cloning and DNA Analysis, 6thed., Brown, T.A., Wiley-Blackwell publishing (Oxford, UK), 2010.
4. Molecular Cloning: A laboratory manual, 4th ed., 3rd Volume, Michael R Green and J. Sambrook Cold spring Harbor laboratory press, 2014.

Expected Course Outcomes:

On the successful completion of the course, students will be able to

CO1: Understand the basic knowledge of recombinant DNA technology.

CO2: Understand the basic concept of cloning and expression vectors, creation of genomic and cDNA libraries and their applications.

CO3: Understand the methods for production of proteins using recombinant DNA technology and their application in industrial systems.



[Handwritten Signature]
Registrar

St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai - 600 054

M.Sc BIOCHEMISTRY -APPENDIX – II

616UBYT03 - CORE ELECTIVE PAPER - II - IMMUNOLOGY

UNIT-I

Types of immunity- innate and acquired. Humoral and cell mediated immunity. Immune system – functions and structural components – lymphoreticular system – lymphoid organs- primary and central lymphoid organs – structure and functions of lymphoid cells – types and functions of B, T and null cells. Role of phagocytes and mast cells.

UNIT-II

Antigens – definition – types – haptens, isoantigens, neoantigens. Factors affecting antigenicity and immunogenicity of antigens. Antibodies – definition and classification. General structure and functions of IgM, IgD, IgA, IgG and IgE, Isohemeagglutinins and natural antibodies. Clonal selection theory of antibody formation. Complement – biochemical functions. Activation by classical and alternative pathways.

UNIT-III

Antigen – antibody interaction – types – precipitation and agglutination mechanism. Applications of agglutination reaction in diagnosis of diseases – Vidal test – complement fixation test. Blood grouping- major and minor blood groups. Erythroblastosis fetalis, Blood transfusion. Mismatched blood transfusion and its consequences, Principle and applications of RIA and ELISA.

UNIT-IV

Immunization practices- passive and active Immunization. Commonly used vaccines- killed and live attenuated. Vaccination schedule for children. Production of polyclonal and monoclonal antibodies- principle and applications.

UNIT-V

Disorders of immune system – hypersensitivity – causes, types and pathology of type I, II, III and IV hypersensitivity – Auto Immunity – causes and the pathology of Rheumatoid arthritis, systemic lupus erythematosus, Hashimoto's thyroiditis, thyrotoxicosis, autoimmune hemolytic anemia. Disorders of B-cells, T-cells and complement deficiency.

Books recommended

1. Judy Owen , Jenni Punt Kuby (2013) ,Immunology (Kjndt, Kuby Immunology) (7 ed)
W. H. Freeman & Co
2. Janis Kuby (1997),Immunology (3rd ed), W. H. Freeman & Co
3. David Male (2012) , Immunology, (Immunology (Roitt) (8th ed), Saunders
4. Ivan Roitt and Peter Delves (2001), Roitts Essential Immunology (10th ed)
5. Donald M. Weir (1998), Immunology (8th ed) , Churchill Livingstone




Registrar

St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai-600 054

Appendix – III

Program	Stakeholder	Feedback	Recommendation	Action taken
iotechnology	Students	It seems that students still requires more competent skills to face the industrial evaluation	Teaching and educational activities to be incorporated in future.	Students were asked to present PPT on the assured topics & activities like Role play were included
	Teachers	Evaluation practices require more improvement to streamline the curriculum taught.	Evaluation practices needs to be conducted more in future.	Continuous assessment tests & Model Exams were conducted to enhance the follow-up of concepts taught.
	Alumni	Upgrading on use of ICT methods were favoured.	Facultie were insisted to use more ICT enabled teaching methods.	Faculties were requested to opt for ICT teaching methods like PPTs presentation, online quiz.




 Registrar
 St. Peter's Institute of Higher Education and Research
 (Deemed to be University U/S 3 of the UGC Act. 1956)
 Avadi, Chennai - 600 054

St. PETER'S INSTITUTE OF HIGHER EDUCATION AND RESEARCH

(Deemed to be University U/S 3 of the UGC Act, 1956)
AVADI, CHENNAI – 600 054.

MINUTES OF THE 23rd MEETING OF THE BOARD OF STUDIES IN **MECHANICAL ENGINEERING**

Held on 06.09.2021

Members Present

S. No.	Name of the Member	Designation	Member
1.	Dr. N. Rajeswari	Professor & Head, Dept. of Mechanical Engg. SPIHER.	Chairperson
2.	Dr. P. Periyasamy	Professor, Dept. of Mechanical Engg. SPIHER.	Member
3.	Dr. D. Chandramohan	Professor, Dept. of Mechanical Engg. SPIHER.	Member
4.	Dr. K. Gurusami	Asso. Professor, Dept. of Mechanical Engg. SPIHER.	Member
5.	Dr. M. Dhanashekar	Asst. Professor, Dept. of Mechanical Engg. SPIHER.	Member
6.	Mrs. K. Sunitha	Asst. Professor, Dept. of Mechanical Engg. SPIHER.	Member
7.	Mr. S. Dinesh Kumar	Asst. Professor, Dept. of Mechanical Engg. SPIHER.	Member
8.	Mr. S. Rangarajan	Asst. Professor, Dept. of Mechanical Engg. SPIHER.	Member
9.	Mr. M. Kamal	Asst. Professor, Dept. of Mechanical Engg. SPIHER.	Member
10.	Dr. A. Elayaperumal	Professor, Engineering Design division Anna University.	Academic Expert Member
11.	Dr. Raja Rasalnath Selvaraj	Director, Burnpass Engg. Solutions & Tech. Pvt. Ltd. Chennai.	Industry Expert Member



23.1 Considered the minutes of the 22nd meeting of Board of Studies in Mechanical Engineering held on 24.02.2021.

RESOLVED that the minutes of the 22nd meeting of Board of Studies in Mechanical Engineering held on 24.02.2021 be confirmed.

23.2 Reviewed the Regulation and Syllabi of B.E. (Mechanical Engineering under the Regulations 2018 with choice based credit system.

RESOLVED that the Regulation and Syllabi of B.E. (Mechanical Engineering) under the Regulations 2018 with choice based credit system be continued.

23.3 Reviewed the Curriculum and Syllabi of B.E. (Mechanical Engineering) programme under the Regulations 2020.

RESOLVED that the Curriculum and Syllabi of B.E. (Mechanical Engineering) programme under the Regulations 2020 from 1st to 4th semester to be effected from 2020-21 be continued with following changes (Appendix – I)

1. Considered the changes in syllabus of the subject AMET2105 Engineering Thermodynamics in III semester.

RESOLVED the changes in syllabus of the subject AMET2105 Engineering Thermodynamics in III semester be approved.

2. Considered the changes in syllabus of the subject AMET2106 Manufacturing Technology-I in III semester.

RESOLVED the changes in syllabus of the subject AMET2106 Manufacturing Technology-I in III semester be approved.

3. Considered the changes in syllabus of the subject AMET2107 Engineering Materials and Metallurgy in III semester.

RESOLVED the changes in syllabus of the subject AMET2107 Engineering Materials and Metallurgy in III semester be approved.




Registrar
St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai-600 054

4. Considered the changes in syllabus of the subject AMET2109- Thermal Engineering in IV semester.

RESOLVED the changes in syllabus of the subject AMET2109- Thermal Engineering in IV semester be approved.

5. Considered the changes in syllabus of the subject AMET2110- Manufacturing Technology- II in IV semester.

RESOLVED the changes in syllabus of the subject AMET2110- Manufacturing Technology- II in IV semester be approved.

23.4 Reviewed the Regulation and Syllabi of 5th & 6th of B.E. (Mechanical Engineering) under the Regulations 2020 with choice based credit system (CBCS).

RESOLVED that the Regulation and Syllabi of 5th & 6th of B.E. (Mechanical Engineering) under the Regulations 2020 with choice based credit system (CBCS) to be approved. (Appendix – II)

23.5 Considered the Regulation and Syllabi of M.E (Advanced Manufacturing Technology) programme from the batch of students to be admitted from 2021-22 under the Regulations 2021.

RESOLVED that the Regulation and Syllabi of M.E. (Advanced Manufacturing Technology) programme from the batch of students to be admitted from 2021-22 under the Regulations 2021 be continued.

23.6 Considered to include courses having focus on employability/ entrepreneurship /skill development in the syllabi of B.E (Mechanical Engineering) under the Regulations 2018 & Regulation 2020 and M.E (Advanced Manufacturing Technology) under the Regulations 2021.

RESOLVED that the courses having focus on employability/ entrepreneurship /skill development year wise in the syllabi of B.E (Mechanical Engineering) under the Regulations 2018 & Regulation 2020 and M.E (Advanced Manufacturing Technology) under the Regulations 2021 to be approved.




Registrar
St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UCC Act, 1956)
Avadi, Chennai-600 054.

23.7 Reviewed the curricula developed having relevance to the local/national/regional/global developmental needs with learning objectives including programme outcomes, program specific outcomes and course outcomes of all the programmes.

RESOLVED that the syllabi of B.E (Mechanical Engineering) programme under the Regulations 2018 & 2020 and M.E (Advanced Manufacturing Technology) under the Regulations 2021 developed having relevance to the local/national/regional/global developmental needs with learning objectives including programme outcomes, program specific outcomes and course outcomes of all the programmes be approved.

23.8 Considered to include value added courses imparting transferable and life skills offered beyond the curriculum in the syllabi of B.E (Mechanical Engineering) under the Regulations 2018 & 2020 and M.E (Advanced Manufacturing Technology) under the Regulations 2021.

RESOLVED that the value added courses imparting transferable and life skills offered beyond the curriculum such as course on "Corrosion Prevention and Control" be approved for the upcoming semester (2021-22 Even semester)

Date: 06.09.2021



Chairman



Registrar

St. Peter's Institute of Higher Education
(Deemed to be University U/S 3 of the U.C.E. Act, 1956)
Avadi, Chennai-600 054.

Annexure I
B.E. MECHANICAL ENGINEERING
REGULATION 2020
(Choice Based Credit System)

B.E. (Mechanical Engineering) programme under the Regulations 2020 from 1st to 4th semester to be effected with following highlighted topics inclusions in the syllabus.

AMET2104	FLUID MECHANICS AND MACHINERY	L	T	P	C	Total Marks
		3	0	0	3	100

Prerequisites: MATHEMATICS I & II

COURSE OBJECTIVES:

The main learning objective of this course is to provide knowledge on

- To understand the applications of conservation laws to flow through pipes and hydraulic machines are studied.
- To understand the importance of dimensional analysis and hydraulic machinery.

UNIT 1- FLUID PROPERTIES AND FLOW CHARACTERISTICS **9 hrs**

Units and dimensions- Properties of fluids- mass density, specific weight, specific volume, specific gravity, viscosity, compressibility, vapor pressure, surface tension and capillarity. Flow characteristics – concept of control volume - application of continuity equation, energy equation and momentum equation. **Manometers- Hydrostatic forces- Forces on submerged bodies**

UNIT 2- FLOW THROUGH CIRCULAR CONDUCTS **9 hrs**

Hydraulic and energy gradient - Laminar flow through circular conduits and circular annuli-Boundary layer concepts – types of boundary layer thickness – Darcy Weisbach equation –friction factor- Moody diagram- commercial pipes- minor losses – Flow through pipes in series and parallel. **Reynold's experiment through circular pipes- Power transmission**

UNIT 3- DIMENSIONAL ANALYSIS **9 hrs**

Need for dimensional analysis – methods of dimensional analysis – Similitude –types of similitude - Dimensionless parameters- application of dimensionless parameters – Model analysis. **Buckingham's π theorem applications- Similarity laws and models**

UNIT 4- PUMPS **9 hrs**

Impact of jets - Euler's equation - Theory of roto-dynamic machines – various efficiencies– velocity components at entry and exit of the rotor- velocity triangles - Centrifugal pumps– working principle - work done by the impeller - performance curves - Reciprocating pump- working principle – Rotary pumps – classification. **Air vessels- Ideal and Actual Indicator diagram-Estimation of power required- Percentage slip and Efficiency**

UNIT 5- TURBINES **9 hrs**

Classification of turbines – heads and efficiencies – velocity triangles. Axial, radial and mixed flow turbines. Pelton wheel, Francis turbine and Kaplan turbines- working principles - work done by water on the runner – draft tube. Specific speed - unit quantities performance curves for turbines –governing of turbines.

Total Hours: 45



[Signature]
 Registrar
 St. Peter's Institute of Higher Education and Research
 (Deemed to be University) U/S of the
 Avadi, Chennai-600 054

COURSE OUTCOMES:

Upon the completion of this course the students will be able to

- CO1-**Apply mathematical knowledge to predict the properties and characteristics of fluid.
- CO2-** Analyse and calculate major and minor losses associated with pipe flow in piping networks.
- CO3-** Mathematically predict the nature of physical quantities.
- CO4-**Critically analyse the performance of pumps.
- CO5-**Critically analyse the performance of turbines

TEXT / REFERENCE BOOKS:

1. Dr.R.K.Bansal "**Fluid Mechanics**",Laxmi Publications (2018).
2. Modi P.N. and Seth S.M. "**Hydraulics and Fluid Mechanics**", Standard Book House, New Delhi (2019).
3. Agarwal.S.K."**Fluid Mechanics and Machinery**", Tata McGraw Hill Publishing Co., New Delhi (2003).
4. Jain.A.K."**FluidMechanics**",Khanna Publishers (2016).
5. Streeter V. L. and Wylie E. B "**Fluid Mechanics**", Tata McGraw Hill Publishing Co., New Delhi (2010).
6. Kumar K. L. "**Engineering Fluid Mechanics**", Eurasia Publishing House(p) Ltd., New Delhi (2018).

AMET2105	ENGINEERING THERMODYNAMICS	L	T	P	C	Total Marks
		3	0	0	3	100

Prerequisites: Mathematics I & II

COURSE OBJECTIVES:

The main learning objective of this course is to provide knowledge on:

- Principles of thermodynamics and its role to analyse the bulk behavior of simple physical systems.
- Thermodynamic principles, thermodynamics of state, basic thermodynamic relations, Properties of pure substances.
- To enlighten the basic concepts of steam formation and its thermodynamic properties.

UNIT I BASICS, ZEROth AND FIRST LAW

9hrs.

Review of Basics – Thermodynamic systems, Properties and processes Thermodynamic Equilibrium - Displacement work - P-V diagram. Thermal equilibrium - Zeroth law – Concept of temperature and Temperature Scales. First law – application to closed and open systems – steady and unsteady flow processes.

UNIT II SECOND LAW AND ENTROPY

9 hrs.

Heat Engine – Refrigerator - Heat pump, statements of Second Law and their equivalence &Corollaries. Carnot Cycle - Reversed Carnot Cycle - Performance - Clausius inequality. Concept of Entropy - T-S diagram - Tds Equations - Entropy change for a pure substance.

UNIT III AVAILABILITY AND APPLICATIONS OF II LAW

9 hrs.

Ideal gases undergoing different processes - principle of increase in entropy.Applications of II Law. High and low grade energy. Availability and Irreversibility for open and closed system processes - I and II law Efficiency.

UNIT IV PROPERTIES OF PURE SUBSTANCES

9 hrs.



Registrar
St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai-600 054.

Steam - formation and its thermodynamic properties - p-v, p-T, T-v, T-s, h-s diagrams. PVT surface. Determination of dryness fraction. Calculation of work done and heat transfer in non-flow and flow processes using Steam Table and Mollier Chart.

UNIT V GAS MIXTURES AND THERMODYNAMIC RELATIONS

9 hrs.

Properties of Ideal gas, real gas - comparison. Equations of state for ideal and real gases. Vander Waal's relation - Reduced properties - Compressibility factor - Principle of Corresponding states - Generalized Compressibility Chart. Maxwell relations - Tds Equations - heat capacities relations - Energy equation, Joule-Thomson experiment - Clausius-Clapeyron equation. Vapours power cycle and thermodynamic relations

Total Hours: 45

COURSE OUTCOMES:

Upon completion of this course, the students will be able to:

CO1- Apply the zeroth and first law of thermodynamics by formulating temperature scales and calculating the property changes in closed and open engineering systems.

CO2- Analyze the performance of thermal devices through energy and entropy calculations by applying the second law of thermodynamics.

CO3- Evaluate the various properties of steam using steam tables and Mollier chart.

CO4- Compute the macroscopic properties of ideal and real gases using gas laws and appropriate thermodynamic relations.

CO5- Apply the properties of gas mixtures in calculating the properties of gas mixtures and applying various thermodynamic relations to calculate property changes.

TEXT / REFERENCE BOOKS:

1. Nag, P.K. "**Engineering Thermodynamics**", 6th Edition, Tata McGraw Hill Publishing Co. New Delhi (2017),
2. Natarajan, E. "**Engineering Thermodynamics: Fundamentals and Applications**", 2nd Edition, Anuragam Publications, Chennai (2014).
3. Arora C.P "**Thermodynamics**", Tata McGraw Hill Publishing Co., New Delhi (2003).
4. Holman.J.P "**Thermodynamics**", 3rd Edition, Tata McGraw Hill Publishing Co., New Delhi (2007).
5. Rathakrishnan E. "**Fundamentals of Engineering Thermodynamics**", 2nd Edition, Prentice Hall of India Pvt. Ltd.(2006).
6. Venkatesh. A "**Basic Engineering Thermodynamics**", Universities Press (India) Limited (2007).

AMET2106	MANUFACTURING TECHNOLOGY – I	L	T	P	C	Total Marks
		3	0	0	3	100

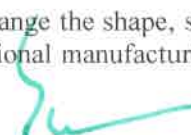
Prerequisites: Engineering Practices

COURSE OBJECTIVES:

The main learning objective of this course is to provide knowledge on:

- The concepts of basic manufacturing processes and fabrication techniques, such as metal casting, metal joining, metal forming and manufacture of plastic components.
- To identify the appropriate processes in correlation with material properties which change the shape, size and form of the raw materials into the desirable product by conventional or unconventional manufacturing methods




 Registrar
 St. Peter's Institute of Higher Education and Research
 (Deemed to be University U/S 3 of the UGC Act, 1956)
 Avadi, Chennai-600 054.

UNIT 1 METAL CASTING PROCESSES**9 hrs**

Sand Casting : Sand Mould – Type of patterns - Pattern Materials – Pattern allowances –Moulding sand Properties and testing – Cores –Types and applications – Moulding machines– Types and applications; Melting furnaces : Blast and Cupola Furnaces; Principle of special casting processes : Shell - investment – Ceramic mould – Pressure die casting - Centrifugal Casting - CO2 process – Stir casting; Defects in Sand casting.

UNIT 2 JOINING PROCESSES**9 hrs**

Operating principle, basic equipment, merits and applications of: Fusion welding processes: Gas welding - Types – Flame characteristics; Manual metal arc welding – Gas Tungsten arc welding - Gas metal arc welding – Submerged arc welding – Electro slag welding; Operating principle and applications of: Resistance welding - Plasma arc welding – Thermit welding – Electron beam welding – Friction welding and Friction Stir Welding; Brazing and soldering; Weld defects: types, causes and remedies.

UNIT 3 METAL FORMING PROCESSES**9 hrs**

Hot working and cold working of metals – Forging processes – Open, impression and closed die forging – forging operations. Rolling of metals– Types of Rolling – Flat strip rolling – shape rolling operations – Defects in rolled parts. Principle of rod and wire drawing – Tube drawing – Principles of Extrusion – Types – Hot and Cold extrusion. Powder metallurgy-production of metal powders-stages in powder metallurgy

UNIT 4 SHEET METAL PROCESSES**9 hrs**

Sheet metal characteristics – shearing, bending and drawing operations – Stretch forming operations – Formability of sheet metal – Test methods –special forming processes-Working principle and applications – Hydro forming – Rubber pad forming – Metal spinning– Introduction of Explosive forming, magnetic pulse forming, peen forming, Super plastic forming – Micro forming.

UNIT 5 MANUFACTURE OF PLASTIC COMPONENTS**9 hrs**

Types and characteristics of plastics – Moulding of thermoplastics – working principles and typical applications – injection moulding – Plunger and screw machines – Compression moulding, Transfer Moulding – Typical industrial applications – introduction to blow moulding –Rotational moulding – Film blowing – Extrusion – Thermoforming – Bonding of Thermoplastics.

Total Hours: 45**COURSE OUTCOMES:**

Upon completion of this course, students will be able to

- CO1**-Differentiate and identify suitable manufacturing method to fabricate different products.
- CO2**-Identify the suitable casting processes with appropriate pattern types, materials and allowances.
- CO3**-Explain the principles, basic equipments and merits and demerits of various metal joining processes.
- CO4**-Outline various sheet metal operations, special forming processes principles and applications.
- CO5**- Assess various types of plastics, their unique characteristics and components manufacturing.

TEXT / REFERENCEBOOKS:

1. HajraChoudhary S.K. and HajraChoudhuryA.K. *“Elements of workshop Technology”*, volume I and II, Media promoters and Publishers Private Limited, Mumbai (2011).
2. Serope Kalpakjian; Steven R Schmid *“Manufacturing Engineering and Technology”*, Pearson Education India Edition (2014).
3. Gowri P. Hariharan, SureshBabu. A *“Manufacturing Technology I”*, Oxford University Press India, (2020)
4. Sharma P.C *“A Text book of Production Technology”*, S. Chand and Co. Ltd. (2014).
5. Rao P.N *“Manufacturing Technology Foundry, Forming and Welding”*, 5th Edition, TMH (2019).




Registrar
St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai-600 054

AMET2107	ENGINEERING MATERIALS AND METALLURGY	L	T	P	C	Total Marks
		3	0	0	3	100

Prerequisites: Physics

COURSE OBJECTIVES:

The main learning objective of this course is to provide knowledge on:

- Microstructure, mechanical properties and various methods to quantify their mechanical integrity and failure criteria, treatment, testing and applications of metals and non-metallic materials so as to identify and select suitable materials for various engineering applications.
- Construction and detailed interpretation of equilibrium phase diagrams.

UNIT 1 ALLOYS AND PHASE DIAGRAMS

9 hrs

Constitution of alloys – Solid solutions, substitutional and interstitial – phase diagrams, Isomorphous, eutectic, eutectoid, peritectic, and peritectoid reactions, Iron – carbon equilibrium diagram. Classification of steel and cast Iron microstructure, properties and application. Mechanism of Crystallization- Nucleation- Homogeneous and Heterogeneous Nucleation- Growth of crystals- Planar growth – dendritic growth.

UNIT 2 HEAT TREATMENT

9 hrs

Definition – Full annealing, stress relief, recrystallisation and spheroidising – normalising, hardening and Tempering of steel. Isothermal transformation diagrams – cooling curves superimposed on I.T. diagram CCR – Hardenability, Jominy end quench test - Austempering, martempering – case hardening, carburizing, Nitriding, cyaniding, carbonitriding – Flame and Induction hardening – Vacuum and Plasma hardening.

UNIT 3 FERROUS AND NON-FERROUS METALS

9 hrs

Effect of alloying additions on steel- α and β stabilisers– stainless and tool steels – HSLA, Maraging steels – Cast Iron - Grey, white, malleable, spheroidal – alloy cast irons, Copper and copper alloys – Brass, Bronze and Cupronickel – Aluminium and Al-Cu – precipitation strengthening treatment – Bearing alloys, Mg-alloys, Ni-based super alloys and Titanium alloys.

UNIT 4 NON-METALLIC MATERIALS

9 hrs

Polymers – types of polymer, commodity and engineering polymers – Properties and applications of various thermosetting and thermoplastic polymers (PP, PS, PVC, PMMA, PET, PC, PA, ABS, PI, PAI, PPO, PPS, PEEK, PTFE, Polymers – Urea and Phenol formaldehydes)- Engineering Ceramics – Properties and applications of Al₂O₃, SiC, Si₃N₄, PSZ and SIALON –Composites-Classifications- Metal Matrix and FRP - Applications of Composites.

UNIT 5 MECHANICAL PROPERTIES AND DEFORMATION MECHANISMS

9 hrs

Mechanisms of plastic deformation, slip and twinning – Types of fracture – Testing of materials under tension, compression and shear loads – Hardness tests (Brinell, Vickers and Rockwell), hardness tests, Impact test Izod and Charpy, fatigue and creep failure mechanisms.

Total Hours: 45

COURSE OUTCOMES:

Upon completion of this course, students will be able to

- CO1-**Construct the phase diagram and select appropriate heat treatment methods to tailor the properties of Fe-C alloys.
- CO2-** Select and apply various engineering materials based on their mechanical properties.
- CO3-** Tailor material properties of ferrous and non-ferrous alloys for their uses in engineering field
- CO4-** Apply the different polymer, ceramics and composites and their uses in engineering field.
- CO5-** Apply the various testing procedures and failure mechanism in engineering field.



Registrar
St. Peter's Institute of Higher Education and Research
(Deemed to be University) U/S 3 of the UGC Act, 1956
Avadi, Chennai-600 054.

TEXT / REFERENCE BOOKS:

1. Avner S.H "**Introduction to Physical Metallurgy**", Tata Mcgraw -Hill Company (2008).
2. Williams D.Callister "**Material Science and Engineering: An Introduction**", Wiley India Pvt. Ltd, Revised Indian Edition (2018).
3. Raghavan V "**Materials Science and Engineering**", Prentice Hall of India Pvt. Ltd. (2015).
4. Kenneth G. Budinski and Michael K. Budinski "**Engineering Materials: Properties and Selection**", Pearson India Education, 9th Indian Reprint (2016).
5. Upadhyay G.S. and AnishUpadhyay "**Materials Science and Engineering**", Viva Books Pvt. Ltd., New Delhi (2006).
6. U.C. Jindal "**Material Science and Metallurgy**", Pearson Education India (2012).

AMET2109	THERMAL ENGINEERING	L	T	P	C	Total Marks
		3	0	0	3	100

Prerequisites: Thermodynamics

COURSE OBJECTIVES:

The main learning objective of this course is to provide knowledge on:

- To integrate the concepts, laws and methodologies from the first course in thermodynamics into analysis of cyclic processes.
- To apply the thermodynamic concepts into various thermal application like IC engines, Steam Turbines, Compressors and Refrigeration and Air conditioning systems.
- Analyzing the performance of steam nozzle, calculate critical pressure ratio
(Use of standard refrigerant property data book, Steam Tables, Mollier diagram and psychrometric chart permitted)

UNIT 1 GAS POWER CYCLES**9 hrs**

Otto, Diesel, Dual, Brayton cycles, Calculation of mean effective pressure, and air standard efficiency - Comparison of cycles.

UNIT 2 INTERNAL COMBUSTION ENGINES**9 hrs**

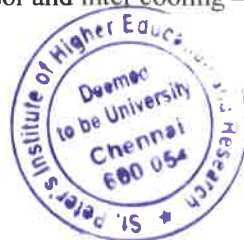
Classification - Components and their function. Valve timing diagram and port timing diagram - actual and theoretical p-V diagram of four stroke and two stroke engines. Simple and complete Carburettor.MPFI, Diesel pump and injector system.Battery and Magneto Ignition System - Principles of Combustion and knocking in SI and CI Engines.Lubrication and Cooling systems.Performance calculation.

UNIT 3 STEAM NOZZLES AND TURBINES**9 hrs**

Flow of steam through nozzles, shapes of nozzles, effect of friction, critical pressure ratio, supersaturated flow.Impulse and Reaction principles, compounding, velocity diagram for simple and multi-stage turbines, speed regulations –Governors.

UNIT 4 AIR COMPRESSOR**9 hrs**

Classification and working principle of various types of compressors, work of compression with and without clearance, Volumetric efficiency, Isothermal efficiency and Isentropic efficiency of reciprocating compressors, Multistage air compressor and inter cooling –work of multistage air compressor.



[Handwritten Signature]
Registrar
St. Peter's Institute of Higher Education and Research
(Deemed to be University) (UGC Recognition and Research)
(Acted under Section 3 of the UGC Act, 1956)
Avadi, Chennai-600 054.

UNIT 5 REFRIGERATION AND AIR CONDITIONING**9 hrs**

Refrigerants - Vapour compression refrigeration cycle- super heat, sub cooling – Performance calculations - working principle of vapour absorption system, Ammonia –Water, Lithium bromide –water systems (Description only) .Air conditioning system - Processes, Types and Working Principles. - Concept of RSHF, GSHF, ESHF- Cooling Load calculations. Cryogenic Engineering

Total Hours: 45**COURSE OUTCOMES:****Upon completion of this course, the students will be able to:**

CO1-Apply the concepts and laws of thermodynamics to predict the operation of thermodynamic cycles and performance of Internal Combustion(IC) engines and Gas Turbines.

CO2-Analyze the performance of steam nozzle and construct velocity diagrams.

CO3-Define the principles of various types of compressors and measure various types of efficiency.

CO4- Understand and analyze the working of IC engines and various auxiliary systems present in IC engines

CO5- Acquire the concepts behind Refrigeration and Air Conditioning system.

TEXT / REFERENCEBOOKS:

1. Rajput. R. K **“Thermal Engineering”**, S.Chand Publishers (2015).
2. Kothandaraman.C.P, Domkundwar. A.V M **“A course in Thermal Engineering”**,5thEdition, Dhanpat Rai & sons (2002).
3. Sarkar, B.K **“Thermal Engineering”**, Tata McGraw-Hill Publishers, New Delhi (2007).
4. Ballaney. P.L **“Thermal Engineering”**, Khanna publishers, 24th Edition (2012).
5. Ganesan V **“Internal Combustion Engines”**, Third Edition, Tata Mcgraw-HillPublishers, New Delhi (2007).
6. Arora .C.P., **“Refrigeration and Air Conditioning”**, Tata Mc Graw Hill, (2008).
7. Ramalingam. K.K., **“Thermal Engineering”**, SCITECH Publications (India) Pvt. Ltd. (2009).

Total Hours: 45

AMET2110	MANUFACTURING TECHNOLOGY- II	L	T	P	C	Total Marks
		3	0	0	3	100

Prerequisites: Engineering Practices, Manufacturing Technology I**COURSE OBJECTIVES:****The main learning objective of this course is to provide knowledge on:**

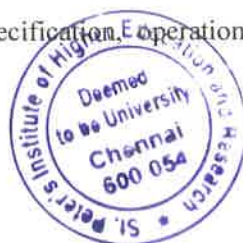
- The concept and basic mechanics of metal cutting, working of standard machine tools such as lathe, shaping and allied machines, milling, drilling and machines, grinding and allied machines and broaching.
- The basic concepts of Computer Numerical Control (CNC) of machine tools and CNC Programming.

UNIT 1 THEORY OF METAL CUTTING**9 hrs**

Mechanics of chip formation, single point cutting tool, forces in machining, Types of chip, cutting tools – nomenclature, orthogonal metal cutting, thermal aspects, cutting tool materials, tool wear, tool life, surface finish, cutting fluids and machinability. **Machine tool vibration- stability of cutting operation - regenerative chatter - testing of machine tools for alignment and accuracy.**

UNIT 2 TURNING MACHINES**9 hrs**

Centre lathe, constructional features, specification, operations – taper turning methods, thread cutting



Registrar
St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avaliti, Chennai - 600 054

methods, special attachments, machining time and power estimation. Capstan and turret lathes- tool layout – automatic lathes: semi automatic – single spindle : Swiss type, automatic screw type – multi spindle.

UNIT 3 SHAPER, MILLING AND GEAR CUTTING MACHINES **9 hrs**

Shaper - Types of operations. Drilling ,reaming, boring, Tapping. Milling operations -types of milling cutter. Gear cutting – forming and generation principle and construction of gear milling ,hobbing and gear shaping processes –finishing of gears.

UNIT 4 ABRASIVE PROCESS AND BROACHING **9 hrs**

Abrasive processes: grinding wheel – specifications and selection, types of grinding process– cylindrical grinding, surface grinding, centreless grinding and internal grinding- Typical applications – concepts of surface integrity, broaching machines: broach construction – push, pull, surface and continuous broaching machines.

UNIT 5 CNC MACHINING **9 hrs**

Numerical Control (NC) machine tools – CNC types, constructional details, special features, machining centre, part programming fundamentals CNC – manual part programming – micromachining – water machining.

Total Hours: 45

COURSE OUTCOMES:


Upon completion of this course, the students will be able to:

- CO1-**Apply fundamental knowledge, principles in material removal processes and importance of metal cutting parameters
- CO2-**Apply the fundamentals of turning and automatic machine tools
- CO3-**Apply the principles of reciprocating, milling and gear cutting machines.
- CO4-**Apply the principles of abrasive processes and broaching processes
- CO5-** Apply the CNC machine tools and programming manufacturing processes

TEXT / REFERENCE BOOKS:

1. HajraChoudhary S.K. and Hajra Choudhury A.K. *“Elements of workshop Technology”*, volume II, Media promoters and Publishers Private Limited, Mumbai (2011).
2. Rao. P.N *“Manufacturing Technology - Metal Cutting and Machine Tools”*, Tata McGraw-Hill, New Delhi, (2019).
3. Richard R Kibbe, John E. Neely, Roland O. Merges and Warren White *“Machine Tool Practices”*, Prentice Hall of India, (2009).
4. HMT *“Production Technology”*, Tata McGraw HillPublishers, New Delhi (2008).
5. Geoffrey Boothroyd *“Fundamentals of Metal Machining and Machine Tools”*, Taylor and Francis, an imprint of CRC Press (2006)
6. Roy. Lindbergh, *“Process and Materials of Manufacture”*, Fourth Edition, PHI/Pearson Education (2006).




St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai-600 054.

Appendix – II
B.E. MECHANICAL ENGINEERING
REGULATION 2020
(Choice Based Credit System)

SEMESTER V									
Sl. No.	Course Code	Course Title	L	T	P	C	CA	EA	TOTAL
1.	AMET3113	Design of Machine Elements	3	0	0	3	40	60	100
2.	AMET3114	Dynamics of Machines	3	0	0	3	40	60	100
3.	AMET3115	Gas Dynamics and Jet Propulsion	3	0	0	3	40	60	100
4.	AMBT1101	Principles of Management & Professional Ethics	3	0	0	3	40	60	100
5.	AMET3116	Automobile Engineering and New Generation Vehicles	3	0	0	3	40	60	100
6.		Programme Elective I	3	0	0	3	40	60	100
7.	AMEL3106	Thermal Engineering Laboratory- I	0	0	4	2	40	60	100
8.	AMEL3107	Dynamics and Metrology Laboratory	0	0	4	2	40	60	100
9.	ASSL3104	Soft Skill Laboratory - IV	0	0	2	1	100	-	100
		TOTAL	18	0	10	23	420	480	900

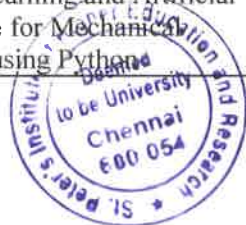



 Registrar
 St. Peter's Institute of Higher Education and Research
 (Deemed to be University U/S 3 of the UBE Act, 1956)
 Avadi, Chennai-600 054.

SEMESTER VI										
Sl.No	Course Code	Course Title	L	T	P	C	CA	EA	TOTAL	
1.	AMET3117	Design of Transmission Systems	3	1	0	4	40	60	100	
2.	AMET3118	Heat and Mass Transfer	3	0	0	3	40	60	100	
3.	AMET3119	Mechatronics	3	0	0	3	40	60	100	
4.		Programme Elective II	3	0	0	3	40	60	100	
5.		Programme Elective III	3	0	0	3	40	60	100	
6.	AMEL3108	Thermal Engineering Laboratory- II	0	0	4	2	40	60	100	
7.	ASSL3105	Soft Skill Lab V	0	0	2	1	100	--	100	
8.	AMEI3102	Internship II	0	0	2	2	100	--	100	
9.		NCC / NSS	0	0	0	0				
TOTAL			15	1	8	21	440	360	800	

Programme Electives (PE) offered by the Department related to the Major Programme of study.
A student should choose at least 6 courses during the programme.

Sl.No.	Course Code	Course Title	Prerequisite Courses	Credits
GROUP A - Design				
1.	AMET3120	Design for Manufacturing	Design	3
2.	AMET3121	Product Design and Development	Design	3
3.	AMET3122	Design of Heat Exchangers	Design	3
4.	AMET3123	Computational Techniques for Fluid Dynamics	Design	3
5.	AMET3124	Mechanical Vibrations and Noise Control	Design	3
6.	AMET3170	Machine Learning and Artificial Intelligence for Mechanical Engineers using Python	Design	3

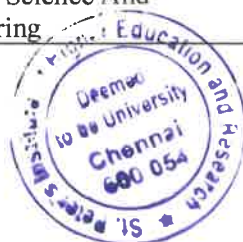


7.	AMET4143	Applied Finite Element Analysis	Design	3
8.	AMET4144	Modern Concepts of Engineering Design	Design	3
9.	AMET4145	Design of Jigs, Fixtures and Press Tools	Design	3
10.	AMET4146	Tribology In Design	Design	3
11.	AMET4147	Dynamics and Control	Design	3
GROUP B- Manufacturing				
1.	AMET3125	Enterprise Resource Planning	Manufacturing	3
2.	AMET3126	Non-destructive Evaluation of Materials	Manufacturing	3
3.	AMET3127	Casting and Welding Processes	Manufacturing	3
4.	AMET3128	Process Planning and Cost Estimation	Manufacturing	3
5.	AMET3129	Computer Integrated manufacturing	Manufacturing	3
6.	AMET3171	IOT & smart Manufacturing (23 rd BoS)	Manufacturing	3
7.	AMET4148	Quality and Reliability Engineering	Manufacturing	3
8.	AMET4149	Production and Operations Management	Manufacturing	3
9.	AMET4150	Precision Manufacturing	Manufacturing	3
10.	AMET4151	Unconventional Machining Techniques	Manufacturing	3
11.	AMET4152	Lean Six Sigma	Manufacturing	3
GROUP C - Thermal Engineering				
1.	AMET3130	Energy Conservation in Industries	Thermal Engineering	3
2.	AMET3131	Refrigeration and Air Conditioning	Thermal Engineering	3
3.	AMET3132	Turbo Machinery	Thermal Engineering	3



Registrar
St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UOD Act, 1956)
Avadi, Chennai-600 054.

4.	AMET3133	Advanced Internal Combustion Engineering	Thermal Engineering	3
5.	AMET3134	Energy Efficient Mechanical Systems For Buildings	Thermal Engineering	3
6.	AMET4153	Gas Dynamics for Space Propulsion	Thermal Engineering	3
7.	AMET4154	Solar Energy Technology	Thermal Engineering	3
8.	AMET4155	Marine Propellers and Propulsion	Thermal Engineering	3
9.	AMET4156	Nanotechnology for Energy Systems	Thermal Engineering	3
10.	AMET4157	Waste to Energy Conversion	Thermal Engineering	3
GROUP D - Engineering Materials				
1.	AMET3135	Composite Materials and Mechanics	Engineering Materials	3
2.	AMET3136	MEMS and Microsystems	Engineering Materials	3
3.	AMET3137	Mechanical Metallurgy	Engineering Materials	3
4.	AMET3138	Smart Materials: Application Of Nanomaterial For Batteries, Solar And Fuel Cells	Engineering Materials	3
5.	AMET3139	Powder Metallurgy	Engineering Materials	3
6.	AMET4158	Heat Treatment of Metals And Alloys	Engineering Materials	3
7.	AMET4159	Characterization of Materials	Engineering Materials	3
8.	AMET4160	Creep And Fatigue Behavior of Materials	Engineering Materials	3
9.	AMET4161	Fracture Mechanics and Failure Analysis	Engineering Materials	3
10.	AMET4162	Polymer Science And Engineering	Engineering Materials	3



St. Peter's Institute of Higher Education and Research
 (Deemed to be University) V/S 3 of the U. A. Act, 1986
 Avadi, Chennai - 600 054

St. PETER'S UNIVERSITY

St. PETER'S INSTITUTE OF HIGHER EDUCATION AND RESEARCH

(Declared under Section 3 of the UGC Act. 1956)

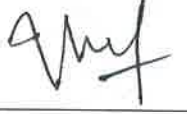
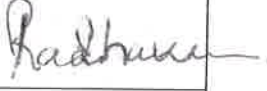

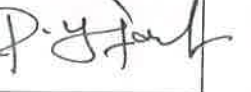


AVADI, CHENNAI - 600 054.

MINUTES OF THE 10th MEETING OF THE BOARD OF STUDIES IN

BIOTECHNOLOGY

Held on 20.10.2021

Members Present

S.No	Name	Designation	Member	Signature
1.	Dr. P. Vasantha Srinivasan	Professor & Head	Chairman	
2.	Dr. N. Radhakrishnan	Professor & Head	Internal Member	
3.	Dr. K. Amala	Assistant Professor	Internal Member	
4.	Ms. P. Yogarajalakshmi	Assistant Professor	Internal Member	
5.	Dr. A. Suresh Kumar	Scientist, Biochemistry & Biotech Division CSIR-CLRI, Chennai	External Member	
6.	Dr. Balu Ranganathan	Technology-Director, M/s Palms connect Solution Pvt. Ltd. Chennai.	External Member	

St. Peter's Institute of Higher Education and Research
(Declared under Section 3 of the UGC Act. 1956)
AVADI, CHENNAI - 600 054




Chairman

Head of the Department
Biotechnology
St. Peter's Institute of Higher Education & Research
Avadi, Chennai - 600 054.

10.1 Considered the minutes of the 9th meeting of Board of Studies in Biotechnology held on 26.02.2021.

RESOLVED that the minutes of the 10th meeting of Board of Studies in Biotechnology held on 26.02.2021 be confirmed

10.2 Reviewed the Regulation & Syllabi of B.Sc. Biotechnology programme under the Regulations 2020 with Choice Based Credit System (CBCS).

RESOLVED that the Regulation and Syllabi of B.Sc. (Biotechnology) programmes under the Regulations 2020 with Choice Based Credit System (CBCS) be continued taking into consideration of the suggestions and remarks given by the members to include the following new elective course (Appendix – I)

1. ABTT2602- Enzymology
2. ABTT2604- Biostatistics

10.3 Reviewed the Regulation & Syllabi of M.Sc. Biotechnology programme under the Regulations 2020 with Choice Based Credit System (CBCS).

RESOLVED that the Regulation and Syllabi of M.Sc. (Biotechnology) programmes under the Regulations 2020 with Choice Based Credit System (CBCS) be continued taking into consideration of the suggestions and remarks given by the members to include the new elective course "ABTT2909 – Plant and Animal Biotechnology" (Appendix – II)

10.4 Reviewed the curricula developed having relevance to the local/national/regional/global developmental needs with learning objectives including programme outcomes, program specific outcomes and course outcomes of all the programmes.

RESOLVED that the syllabi of B.Sc. (Biotechnology) programme under the Regulations 2020 and M.Sc. (Biotechnology) under the Regulations 2020 developed having relevance to the local/national/regional/global developmental needs with learning objectives including programme outcomes, program specific outcomes and course outcomes of all the programmes be approved.

10.5 Reviewed and considered the curriculum feedback analysis and action taken report based on the suggestions given by the stake holders.

Resolved that the curriculum feedback analysis and action taken report based on the suggestions given by the stake holders to be approved. (Appendix – III)




Registrar

St. Peter's Institute of Higher Education and Research
(Deemed to be University (U.S.) of the UGC Act 1956)
Avadi, Chennai - 600 054


Chairman

Head of the Department
Biotechnology
St. Peter's Institute of Higher Education & Research
Avadi, Chennai - 600 054

Appendix – I

Elective-I (ABTT2602) - III Semester

Enzymology

Course objectives:

1. To enable the learner to understand the classification and characterization of enzymes with reference to biological systems.
2. To enable the learner to understand the production and industrial applications of enzymes

Unit I : Enzymes

Enzymes: Definition, historical perspective, general characteristics, co-factors – coenzymes and metal ions. Classification and units of enzymes: Based on IUB with examples. Unit of enzyme activity – definition of IU, enzyme turn over number and nature of non-enzymatic and enzymatic catalysis. Specific activity. Enzyme specificity. Concept of active site, ES complex, specificity, Theories of enzyme catalysis: Lock and key model, Koshland's induced fit theory. Enzyme kinetics: Factors affecting rate of enzyme catalyzed reactions.

Unit II : Characterization of enzymes

Characterization: Effect of enzyme concentration, substrate concentration, pH and temperature. Michaelis – Menten equation, Lineweaver – Burk (L-B) plot. Determination of V_{max} & K_m from L-B plot and their significance. Enzyme inhibition –competitive, noncompetitive and uncompetitive.. Chemical modification of active site groups. Site directed mutagenesis of enzymes. Mechanism of action of chymotrypsin

Unit III : Allosteric enzymes

Allosteric enzymes: Sigmoidal curve, positive and negative modulators, qualitative description of “concerted” & “sequential” models for allosteric enzymes. Half site reactivity, Flip flop mechanism, positive and negative co-operativity with special reference to aspartate transcarbamylase and phosphofructokinase.

Unit IV : Isoenzymes

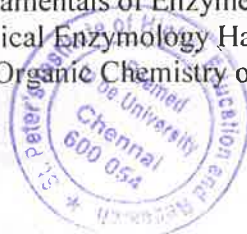
Isoenzymes: Detection, nature, importance. Lactate dehydrogenase as an example. Multi enzyme complex – Pyruvate dehydrogenase complex. – Composition, subunits, assembly, enzymatic reaction functions. RNA as an enzyme. (Ribozymes).Industrial and medical application of enzymes.

Unit V : Applications of Enzymes

Applications of Enzymes: Enzymes as reagents, Marker enzymes in diagnostics, Immobilized enzymes, Industrial applications of enzymes.

Suggested readings:

1. Biochemistry, Lubert Stryer, 6th Edition, WH Freeman, 2006.
2. Harper's illustrated Biochemistry by Robert K. Murray, David A Bender, Kathleen M.Botham, Peter J. Kennelly, Victor W. Rodwell, P. Anthony Weil. 28th Edition, McGrawHill, 2009.
3. Biochemistry, Donald Voet and Judith Voet, 2nd Edition, Publisher: John Wiley andSons, 1995.
4. Biochemistry by Mary K.Campbell & Shawn O.Farrell, 5th Edition, Cenage Learning,2005.
5. Fundamentals of Enzymology Nicholas Price and Lewis Stevens Oxford University Press 1999
6. Fundamentals of Enzyme Kinetics Athel Cornish-Bowden Portland Press 2004
7. Practical Enzymology Hans Bisswanger Wiley–VCH 2004
8. The Organic Chemistry of Enzyme-catalyzed Reactions Richard B. Silverman Academic Press 20 02.



Registrar
St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Central - 600 054

COURSE OUTCOME

CO1: Understand the significance of enzymes with reference to biological systems

CO2. Understand the importance of Allosteric and isoenzymes

CO3. Understand the production and industrial applications of enzymes

CO4: Gain knowledge on medical application of enzymes.

CO5: Acquired knowledge on Characterization of enzymes

Elective-I (ABTT2604) - IV Semester

Biostatistics

Course objectives:

- To understand about collection, classification and tabulation of statistical data
- To Gain knowledge about the various application of biostatistics and plotting graphs

UNIT I

Biostatistics - definition - statistical methods - basic principles. Variables - measurements, functions, limitations and uses of statistics

UNIT II

Statistics – collection, classification, tabulations of Statistical Data – Diagrammatic representation – graphs – plotted curve – Sampling method and standard errors – random sampling – means – confidence limits – standard errors – variance.

UNIT III

Correlation - types and methods of correlation, regression, simple regression equation, fitting prediction, similarities and dissimilarities of correlation and regression.

UNIT IV

Probability distributions – Binomial and negative binomial, compound and multinomial distributions – Tests of significance – t tests – F tests – Analysis of variance – Spread sheets – Data entry – Graphics display – word processes.

Suggested readings:

1. Sundar Rao P.S.S., Jesudian G. and Richard J. 1987. An introduction to Bio-Statistics (2nd Ed). Prestographik, Vellore, India.
2. Gupta, S.P. 1997. Biostatistical Methods, S.Chand and Sons.
3. Elhance, d.n.1972. Fundamentals of Statistics, Kitab Mhal, Allahabad.
4. Sokal, P.R and Rohif, F.R. 1969. Biometry: The Principles and Practice of Statistics, in Biological Research, Freeman and company, San Francisco.
5. Snedecor, George, W.Cochran and William, G. 1967. Statistical Methods, Sixth edition, Oxford and IBH Publishing Co., Oxford
6. Federer W.R 1955. Experimental Design: Theory and Applications, Oxford Publishing Co. Pvt. Ltd., New Delhi.

COURSE OUTCOME

CO1: Understand about collection, classification and tabulation of statistical data

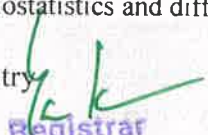
CO2: Student will understand various statistical methods

CO3: Gain basic knowledge about the applications of biostatistics and different forms of plotting graphs.

CO4: Understand about the analysis of variance

CO5: Acquired knowledge on spread sheets data entry




Registrar
St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai - 600 054

Appendix – II

Elective-I (ABTT2909) -III Semester

Plant and Animal Biotechnology

Course objectives:

- This course aims to help the students to gain an advanced level of understanding in the comprehensive components of plant biotechnology
- The content of the course contributes for food security and human health towards sustainable agriculture. They will also gain a good knowledge on global regulation framework on GM crops and product as well as intellectual property rights related to plant biotechnology.

Unit-1 Introduction of plant tissue culture

Introduction of plant tissue culture, composition of media, Micropropagation, organogenesis, somatic embryogenesis, haploid and triploid production, protoplast isolation and fusion, hybrid and cybrid, synthetic seed production, secondary metabolic production.

Unit-2 Plant Transformation

Plant Transformation Direct transformation by electroporation and particle gun bombardment. - Agrobacterium, Ti plasmid vector. Theory and techniques for the development of new genetic traits, conferring resistance to biotic and abiotic. Plant engineering towards development of enriched food products, plant growth regulators.

Unit -3 vaccines

Animal health disease diagnosis, hybridoma technique, monoclonal antibodies, application of probes for disease diagnosis of existing and emerging animal diseases. Prophylaxis - Vaccines, Oral vaccines . DNA Vaccines in animal disease. Cell culture: primary and established culture; organ culture; tissue culture

Unit -4 Tissue and primary culture

Disaggregation of tissue and primary culture; cell separation, Slide and cover slip cultures, flask culture, test tube culture techniques, cell synchronization, cryopreservation. Scaling up of animal cell culture, cell line and cloning .micromanipulation and cloning, somatic cell cloning. Karyotyping; measuring parameters for growth, measurement of cell death, apoptosis and its determination, cytotoxicity assays.

Unit -5 Hematopoietic cells for cellular and gene therapy

Nuclear magnetic resonance methods of monitoring cell metabolism culturing animal cells in fluidised bed reactors- GPI- Anchored fusion proteins- harvesting GPI- anchored proteins from CHO cells- Hematopoietic cells for cellular and gene therapy. Transgenic animals: Production and application; transgenic animals in livestock improvement, transgenic animals as model for human diseases.

Suggested Readings:

1. Razdan.M.K., 2011. Plant tissue culture. Oxford and IBH publishing Company Pvt. Ltd, New delhi.
2. Chawla.H.S., 2010. Introduction to plant biotechnology. Oxford and IBH publishing company pvt. Ltd, New delhi.
3. Ian Freshney, 2010. Culture of animal cells. 6th edition., Wiley-Blackwell publishers.
4. Slater, 2008. Plant Biotechnology: The Genetic manipulation of plants, Second Edition, Oxford University Press, USA.

COURSE OUTCOME

CO1: Emphasis will be placed on developing an understanding of microbial cell biology, genetics, the interactions of microbes with their environment.

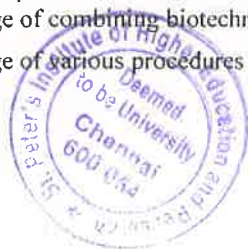
CO1: Understand the basic principles of plant kingdom and their economic importance.

CO2: Explain the basics, methodology and applications of plant tissue culture.

CO3: Design experiments for functional characterization of plant genes and to identify those suitable for creating agronomically important traits

CO4: knowledge of combining biotechnological methods to achieve the desired result.

CO5: knowledge of various procedures for biotechnological analysis and their application.



Registrar
St. Peter's Institute of Higher Education and Research
(Deemed to be University)
Acted U.S. 3 of the UGC Act, 1956
Chennai - 600 054

Appendix – III

Program	Stakeholder	Feedback	Recommendation	Action taken
iotechnology	Students	It seems that students still requires more competent skills to face the industrial evaluation	Teaching and educational activities to be incorporated in future.	Students were asked to present PPT on the assured topics & activities like Role play were included
	Teachers	Evaluation practices require more improvement to streamline the curriculum taught.	Evaluation practices needs to be conducted more in future.	Continuous assessment tests & Model Exams were conducted to enhance the follow-up of concepts taught.
	Alumni	Upgrading on use of ICT methods were favoured.	Facultie were insisted to use more ICT enabled teaching methods.	Faculties were requested to opt for ICT teaching methods like PPTs presentation, online quiz.




 Registrar
 St. Peter's Institute of Higher Education and Research
 (Deemed to be University) U/S 3 of the UGC Act, 1956
 Avadi, Chennai - 600 054

St. PETER'S INSTITUTE OF HIGHER EDUCATION AND RESEARCH

(Deemed to be University U/S 3 of the UGC Act, 1956)
AVADI, CHENNAI - 600 054.

MINUTES OF THE 24th MEETING OF THE BOARD OF STUDIES IN DEPARTMENT OF MANAGEMENT STUDIES

Held on 23.08.2021

Members Present

S.No	Name	Designation	Member	
1.	Dr. R.Balaji	Professor & Head of Management studies	Chairman	
2.	Dr.S.Ramachandran	Assistant Professor	Member	
3.	Ms. D. Divya	Assistant Professor	Member	
4.	Ms.Dhaniya	Assistant Professor	Member	
5.	Dr.V.Nagajothi	Principal, Sree Chandraprabhu Jain College, Meenjur, Chennai Metro	External Member	
6.	Mr. C.K.Kumaravel	CEO. Naturals Salon & Spa	External Member	




Registrar

St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai-600 054


Chairman

HEAD OF DEPARTMENT
School of Commerce &
Management Studies
SPIHER, Chennai

24.1 Considered the minutes of the 23rd meeting of Board of Studies in Department of Management Studies held on 15.02.2021

RESOLVED that the minutes of the 23rd meeting of Board of Studies in Department of Management Studies held on 15.02.2021 be confirmed

24.2 Reviewed the Regulation & Syllabi of Department of Management Studies MBA programme under the Regulations 2020 with Choice Based Credit System (CBCS).

RESOLVED that the Regulation & Syllabi of Department of Management Studies MBA programme under the Regulations 2020 with Choice Based Credit System (CBCS) be continued.

24.3 Reviewed the Regulation & Syllabi of Department of Management Studies BBA programmes under the Regulations 2020 with Choice Based Credit System (CBCS).

RESOLVED that the Syllabi of Department of Management Studies under the Regulations 2020 with Choice Based Credit System (CBCS) to be continued.

24.4 Reviewed the syllabus of Department of Management Studies MBA programme from the batch of students to be admitted from 2021-22 under the Regulations 2020.

RESOLVED that the Syllabus of Department of Management Studies MBA under the Regulations 2020 been approved.

24.5 Reviewed the syllabus of semester of Department of Management Studies BBA programme from the batch of students to be admitted from 2021-22 under the Regulations 2020.

RESOLVED that the syllabus of semester of Department of Management Studies BBA programme from the batch of students to be admitted from 2021-22 under the Regulations 2020 been approved.

24.6 Reviewed the curricula developed having relevance to the local/national/regional/global developmental needs with learning objectives including programme outcomes, program specific outcomes and course outcomes of all the programmes.




Registrar
St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai-600 054

RESOLVED that the syllabi of Department of Management Studies of MBA programme under the Regulations 2020 and Department of Management Studies of BBA under the Regulations 2020 developed having relevance to the local/national/regional/global developmental needs with learning objectives including programme outcomes, program specific outcomes and course outcomes of all the programmes be approved.

- 24.7** Considered to include courses having focus on employability/ entrepreneurship /skill development in the syllabi of Department of Management Studies of MBA under the Regulations 2020 and Department of Management Studies of BBA under the Regulations 2020.

RESOLVED that the courses having focus on employability/ entrepreneurship /skill development year wise in the syllabi of Department of Management Studies of MBA under the Regulations 2020 and Department of Management Studies of BBA under the Regulations 2020 to be approved.

- 24.8** Reviewed and considered the curriculum feedback analysis and action taken report based on the suggestions given by the stake holders.

Resolved that the curriculum feedback analysis and action taken report based on the suggestions given by the stake holders to be approved. (Appendix – I)

Date: 23.08.2021




Registrar

Peter's Institute of Higher Education and Research
Deemed to be University U/S 3 of the UGC Act, 1956
Avadi, Chennai-600 054


Chairman

HEAD OF DEPARTMENT
School of Commerce &
Management Studies
SPIHER, Chennai

Appendix – I

Programme	Stakeholder	Feedback	Recommendation	Action taken
MBA & BBA	Student	Students suggested the need for job oriented courses which supports legal drafting and writing which enhance the skill and job opportunity in corporate office, as well can start own office, also get knowledge about legal service and aid. which need to over come the present situation.	To offer multilingual program which given creativity and some connectivity towards the interview performance both in subject and practical.	Carrier guidance programs were given and counselling cell supported the development of skills and ability and how to defeat the interview skill and meet the corporate knowledge expectation.
	Teacher	Teaching methods and teaching aids must be improved and learning management system has to be properly introduced	Suggested for advance learning and introduce new aid for betterment understanding of students teacher interactions	Learning Management Systems about to introduced by our management side for better clarity and benefits out of our methods which we adopt
	Alumni	More emphasis should be on the applications of the opted field of study. Focus more on inter- disciplinary activities of many courses which creates skill, entrepreneurship as well employment to meet the future technology and to settle in life.	Suggested for Inter-disciplinary projects which creates job opportunity.	Inter departmental research initiatives was encouraged both students as well faculty to go for next level in LMS.




Registrar
 St. Peter's Institute of Higher Education and Research
 (Deemed to be University U/S 3 of the UGC Act, 1956)
 Avadi, Chennai-600 054

AMBP1916- DATA ANALYSIS AND BUSINESS MODELING

SUBJECT CODE	SUBJECT TITLE	L	T	P	TOTAL LTP	C
AMBP1916	DATA ANALYSIS AND BUSINESS MODELING	0	0	2	2	4

OBJECTIVE :

- To have hands-on experience on decision modeling.
- To obtain, clean/process and transform data

[Business models studied in theory to be practiced using Spreadsheet / Analysis Software]

S.No.	Exp. No.	Details of experiments	Duration
Name			
1	1	Descriptive Statistics	4
2	2	Hypothesis - Parametric	4
3	3	Hypothesis – Non-parametric	4
4	4	Correlation & Regression	4
5	5	Forecasting	4
6	-	Extended experiment – 1	4
7	6	Portfolio Selection	4
8	7	Risk Analysis & Sensitivity Analysis	4
9	8	Revenue Management	4
10	-	Extended experiment – 2	4



Registrar

St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai - 600 054

11	9	Transportation & Assignment	4
12	10	Networking Models	4
13	11	Queuing Theory	4
14	12	Inventory Models	4
15	-	Extended experiments – 3	4

Spreadsheet Software and
 Data Analysis Tools

COURSE OUTCOME:

- CO1** Knowledge of spreadsheets and data analysis software for business modeling
- CO2** Analyze and interpret data using an ethically responsible approach.
- CO3** Use appropriate models of analysis, assess the quality of input, derive insight from results, and investigate potential issues
- CO4** Formulate and use appropriate models of data analysis to solve hidden solutions to business-related challenges

TEXTBOOKS

1. David M. Levine et al, "Statistics for Managers using MS Excel" (6th Edition) Pearson, 2010
2. David R. Anderson, et al, 'An Introduction to Management Sciences: Quantitative approaches to Decision Making, (13th edition) South-Western College Pub, 2011.
3. Hansa Lysander Manohar, "Data Analysis and Business Modelling using MS Excel", PHI Learning private Ltd, 2017.
4. William J. Stevenson, Ceyhan Ozgur, 'Introduction to Management Science with Spreadsheet', Tata McGraw Hill, 2009.
5. Wayne L. Winston, Microsoft Excel 2010: Data Analysis & Business Modeling, 3rd edition, Microsoft Press, 2011.
6. Vikas Gupta, Comdex Business Accounting with Ms Excel, 2010 and Tally ERP 9.0 CourseKit, Wiley India, 2012
7. Kiran Pandya and Smriti Bulsari, SPSS in simple steps, Dreamtech, 2011.



[Handwritten Signature]
 Registrar
 St. Peter's Institute of Higher Education and Research
 (Deemed to be University U/S 3 of the UGC Act, 1956)
 Avadi, Chennai - 600 054

AICTE III	CYBER SECURITY FUNDAMENTALS	L	T	P	C	Total Marks
		3	0	0	3	100

PREREQUISITE: None

COURSE OBJECTIVES:

- Overview of Cyber Security
- Understand Cyber Security Vulnerabilities
- Understand Intrusion Detection and Prevention
- With cyberspace and cyber forensics

UNIT 1 INTRODUCTION TO CYBER SECURITY

9Hrs

Overview of Cyber Security, Internet Governance – Challenges and Constraints, Cyber Threats:-Cyber Warfare-Cyber Crime-Cyber terrorism-Cyber Espionage, Need for a Comprehensive Cyber Security Policy, Need for a Nodal Authority, Need for an International convention on Cyberspace.

UNIT 2 CYBER SECURITY VULNERABILITIES AND CYBER SECURITY SAFEGUARDS

9Hrs

Cyber Security Vulnerabilities-Overview, vulnerabilities in software, System administration, Complex Network Architectures, Open Access to Organizational Data, Weak Authentication, Unprotected Broadband communications, Poor Cyber Security Awareness, Cyber Security Safeguards- Overview, Access control, Audit, Authentication, Biometrics, Cryptography, Deception, Denial of Service Filters, Ethical Hacking, Firewalls, Intrusion Detection Systems, Response, Scanning, Security policy, Threat Management.

UNIT 3 INTRUSION DETECTION AND PREVENTION

9Hrs

Intrusion, Physical Theft, Abuse of Privileges, Unauthorized Access by Outsider, Malware Infection, Intrusion detection and Prevention Techniques, Anti-Malware software, Network based Intrusion detection Systems, Network based Intrusion Prevention Systems, Host based Intrusion prevention Systems, Security Information Management, Network Session Analysis, System Integrity Validation.

UNIT 4 CYBERSPACE AND THE LAW

9Hrs

Introduction, Cyber Security Regulations, Roles of International Law, the state and Private Sector in Cyberspace, Cyber Security Standards, The INDIAN Cyberspace, National Cyber Security Policy 2013.

UNIT 5 CYBER FORENSICS

9Hrs

Introduction to Cyber Forensics, Handling Preliminary Investigations, Controlling an Investigation, Conducting disk-based analysis, Investigating Information-hiding, Scrutinizing E-mail, Validating E-mail header information, Tracing Internet access, Tracing memory in real-time.

Total Hours:45 Hrs

COURSE OUTCOMES

- CO1:Challenges and Constraints of Internet Governance
- CO2:Understand about Cyber Security Safeguards
- CO3:Intrusion prevention Systems and Security Information Management
- CO4:Study about Cyber Law and Indian Cyberspace
- CO5: Investigate Information-hiding, Scrutinize and validate E-mail

Text Books:

1. Introduction to Cyber Security available at <http://uou.ac.in/foundation-course>
2. Fundamentals of Information Security <http://uou.ac.in/progdetail?pid=CEGCS-17>

References:

1. Cyber Security Techniques <http://uou.ac.in/progdetail?pid=CEGCS-17>
2. Cyber Attacks and Counter Measures: User Perspective <http://uou.ac.in/progdetail?pid=CEGCS-17>
3. Information System <http://uou.ac.in/progdetail?pid=CEGCS-17>



[Signature]
Registrar

[Signature]
HEAD OF DEPARTMENT
School of Commerce &
Management Studies
SPIHER, Chennai

St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai-600 054

ACPT2611	Work Ethics, Corporate Governance and Corporate Social Responsibility	L	T	P	C
		6	0	0	3

COURSE OBJECTIVES

This particular course introduces student to the basic concept of work ethics, corporate governance and Corporate Social Responsibility. It helps student to understand how it influence the working environment.

Unit-I: 09

Ethics in work place- Nature and essence of ethics -Importance of good work ethics-Characteristics of Having Good Work ethics-Developing a strong work Ethics-Managing ethics in organization

Unit-II: 09

Values – Importance, Sources of Value Systems, Types, Values, Loyalty and Ethical Behaviour, Values across Cultures; Business Ethics – Nature, Characteristics and Needs, Ethical Practices in Management

Unit-III: 09

Corporate Governance: Issues, need, corporate governance code, transparency & disclosure, role of auditors, board of directors and shareholders; Global issues of governance, accounting and regulatory frame work, corporate scams, committees in India and abroad, corporate social responsibility

Unit-IV: 09

Meaning and Definition, History of CSR, Concepts of Charity, Corporate philanthropy, Corporate Citizenship, Sustainability and Stakeholder Management. Environmental aspect of CSR Chronological evolution and Models of CSR in India Carroll's model Major codes on CSR Initiatives in India.

Unit-V: 09

Scope for CSR Activities under Schedule VII, Appointment of Independent Directors on the Board, and Computation of Net Profit's Implementing Process in India. **Total : 45 Hours**



Handwritten signature

Registrar

St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai - 600 054

TEXTBOOKS

1. S.A. Sherlekar, Ethics in Management, Himalaya Publishing House, 2009.
2. William B. Werther and David B. Chandler, Strategic corporate social responsibility, Sage Publications Inc., 2011
3. Robert A.G. Monks and Nell Minow, Corporate governance, John Wiley and Sons, 2011.

REFERENCES

4. W.H. Shaw, Business Ethics, Cengage Learning, 2007.
5. Beeslory, Michel and Evens, Corporate Social Responsibility, Taylor and Francis, 1978.
6. Philip Kotler and Nancy Lee, Corporate social responsibility: doing the most good for company and your cause, Wiley, 2005.
7. Subhabrata Bobby Banerjee, Corporate social responsibility: the good, the bad and the ugly, Edward Elgar Publishing, 2007.
8. Satheesh Kumar, Corporate Governance, Oxford University Press, 2010.

COURSE OUTCOME

- CO1** To understand the ethical practices in work place
- CO2** To know the value of work ethics
- CO3** To understand Corporate Governance
- CO4** To know the basics of Corporate social responsibility
- CO5** To understand the activities under CSR



[Handwritten Signature]
Registrar
St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai-600 054

[Handwritten Signature]
HEAD OF DEPARTMENT
School of Commerce &
Management Studies

AMBT2918- STRATEGIC MANAGEMENT

SUBJECT CODE	SUBJECT TITLE	L	T	P	TOTAL LTP	C
AMBT2918	STRATEGIC MANAGEMENT	4	0	0	4	4

OBJECTIVE:

- To equip students with the to develop and sharpen your skills for formulating, deploying and assessing an organization's strategy for achieving competitive advantage in the marketplace.
- To learn the major initiatives taken by a company's top management on behalf of corporates, involving resources and performance in external environments
- to understand the analysis and implementation of strategic management in strategic business units

UNIT I STRATEGY AND PROCESS

Conceptual framework for strategic management, the Concept of Strategy and the Strategy Formation Process – Stakeholders in business – Vision, Mission and Purpose – Business definition, Objectives and Goals - Corporate Governance and Social responsibility-case study.

(12 Hours)

UNIT II COMPETITIVE ADVANTAGE

External Environment - Porter's Five Forces Model-Strategic Groups Competitive Changes during Industry Evolution-Globalisation and Industry Structure - National Context and Competitive advantage Resources- Capabilities and competencies–core competencies-Low cost and differentiation Generic Building Blocks of Competitive Advantage- Distinctive Competencies-Resources and Capabilities durability of competitive Advantage- Avoiding failures and sustaining competitive advantage-Case study.

(12 Hours)

UNIT III STRATEGIES

The generic strategic alternatives – Stability, Expansion, Retrenchment and Combination strategies - Business level strategy- Strategy in the Global Environment-Corporate Strategy- Vertical Integration-Diversification and Strategic Alliances- Building and Restructuring the corporation-Strategic analysis and choice - Environmental Threat and Opportunity Profile (ETOP) - Organizational Capability Profile - Strategic Advantage Profile - Corporate Portfolio Analysis - SWOT Analysis - GAP Analysis - Mc Kinsey's 7s Framework - GE 9 Cell Model - Distinctive competitiveness - Selection of matrix - Balance Score Card-case study.

(12 Hours)




Registrar

St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai-600 054

UNIT IV STRATEGY IMPLEMENTATION & EVALUATION

The implementation process, Resource allocation, Designing organisational structure-Designing Strategic Control Systems- Matching structure and control to strategy-Implementing Strategic change-Politics-Power and Conflict-Techniques of strategic evaluation & control-case study.
(12 Hours)

UNIT V OTHER STRATEGIC ISSUES

Managing Technology and Innovation-Strategic issues for Non Profit organisations. New Business Models and strategies for Internet Economy-case study (12 Hours)

COURSE OUTCOME :

- CO1 Employ strategic concepts to analyze a chosen industry.
- CO2 Analyze the strategic effectiveness of an organization.
- CO3 Evaluate the implications of strategic decisions made by one business discipline on others and on the business as a whole.
- CO4 Present a multi-year strategic plan to a group of interested stakeholder
- CO 5 Design organizational structure and Design Strategic Control Systems

REFERENCES :

1. Hill. Strategic Management : An Integrated approach, 2009 Edition Wiley (2012).
2. John A.Parnell. Strategic Management, Theory and practice Biztantra (2012).
3. Azhar Kazmi, Strategic Management and Business Policy, 3rd Edition, Tata McGraw Hill,2008
4. Adriaan H Aberberg and Alison Rieple, Strategic Management Theory & Application, Oxford University Press, 2008.
5. Gupta, Gollakota and Srinivasan, Business Policy and Strategic Management – Concepts and Application, Prentice Hall of India, 2005.
6. Dr.Dharma Bir Singh, Strategic Management & Business Policy, KoGent Learning Solutions Inc., Wiley, 2012.
7. John Pearce, Richard Robinson and Amitha Mittal, Strategic Management, McGraw Hill, 12th Edition, 2012.




Registrar
St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai-600 054

AMBT2924- SERVICES MARKETING

SUBJECT CODE	SUBJECT TITLE	L	T	P	TOTAL LTP	C
AMBT2924	SERVICES MARKETING	3	0	0	3	3

OBJECTIVE:

- To emphasize the significance of services marketing in the global economy
- To make the students understand the deeper aspects of successful services marketing.
- To provide insights to the challenges and opportunities in services marketing.

UNIT I INTRODUCTION

Definition – Service Economy – Evolution and growth of service sector – Nature and Scope of Services – Unique characteristics of services - Challenges and issues in Services Marketing.

(9 Hours)

UNIT II SERVICE MARKETING OPPORTUNITIES

Assessing service market potential - Classification of services – Expanded marketing mix – Service marketing – Environment and trends – Service market segmentation, targeting and positioning. (9 Hours)

UNIT III SERVICE DESIGN AND DEVELOPMENT

Service Life Cycle – New service development – Service Blue Printing – GAP model of service quality – Measuring service quality – SERVQUAL – Service Quality function development.

(9 Hours)

UNIT IV SERVICE DELIVERY AND PROMOTION

Positioning of services – Designing service delivery System, Service Channel – Pricing of services, methods – Service marketing triangle - Integrated Service marketing communication.

(9 Hours)




Registrar
St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai-600 054

UNIT V SERVICE STRATEGIES

Service Marketing Strategies for health – Hospitality – Tourism – Financial – Logistics - Educational – Entertainment & public utility Information technique Services (9 Hours)

COURSE OUTCOME:

CO1 Will be able to apply the concepts of services marketing in promoting services.

CO2 Explain Definition, Significance, Characteristics of Services

CO3 Frame Extended Marketing Mix for Services

CO4 Demonstrate Applications of Service Marketing: like Tourism, Hospitality, Airlines, etc
CO 5 Development of the delivery on service and promotion

REFERENCES :

1. Chiristopher H.Lovelock and Jochen Wirtz, Services Marketing, Pearson Education, NewDelhi, 7th edition, 2011.
2. Hoffman, Marketing of Services, Cengage, 4th Edition, 2010.
3. Kenneth E Clow, et al, Services Marketing Operation Management and Strategy, Biztantra, 2nd Edition, New Delhi, 2004.
4. Valarie Zeithaml et al, Services Marketing, 5th International Edition, Tata McGraw Hill, 2007.
5. Gronroos, Service Management and Marketing –Wiley India, 3rd Edition, 2009




Registrar
St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai-600 054

AMBT2925- SOCIAL MARKETING

SUBJECT CODE	SUBJECT TITLE	L	T	P	TOTAL LTP	C
AMBT2925	SOCIAL MARKETING	3	0	0	3	3

OBJECTIVE:

- To enhance Competiveness in Social Marketing by ethical values and social media in Marketing.
- Understand social marketing process
- Equip students with trends in social marketing

UNIT I INTRODUCTION

Social marketing - Definition - Scope and concept - Evolution of Social marketing - Need for Social marketing - A comparative study between Commercial and Social marketing - Use of market research - social change tools - Factors influencing Social marketing - Challenges and opportunities.

(9 Hours)

UNIT II SOCIAL MARKETING PROCESS AND PLANNING

Introduction - Environment Monitoring - Social Class and self-efficacy - social capital - Social ecology - Advocacy - A global phenomenon - Social marketing Process - Stages - Ethical considerations. Planning - Formative Research in Social marketing. Analysis - Problem - Environment - Resource.

Segmentation - Motives and benefits - Sheth's and Frazier's attitude - behavior segmentation - Stage approach to segmentation - Selecting target audiences - Cross cultural targeting - cultural and individual tailoring.

(9 Hours)

UNIT III SOCIAL MARKETING MIX

Social marketing mix - policy - product - place - price - promotion - people - partnership.

Rating & Reviews - Virtual world - Using media in social marketing - Importance - effectiveness of mass media in social marketing - Practical model for media use in social marketing - Advertisement - Publicity - Edutainment - Civic or Public - Choosing media & methods.

Role of media in social marketing campaigns - planning and developing Social media campaigning - Campaign vs Programme - Programme planning models - conceptual model Lawrence Green's PRECEDE-PROCEED model.

(9 Hours)




Registrar
St. Peter's Institute of Higher Education and Research,
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai-600 054

UNIT IV ETHICAL ISSUES AND CHALLENGES

Ethical principles - Codes of behaviour - Critics of social marketing - Critic of power imbalance in social marketing - Criticism of unintended consequences - Competition in social marketing- Definition - monitoring - countering competition - competition and principle of differential advantage - Internal competition. (9 Hours)

UNIT V TRENDS IN SOCIAL MARKETING

Future of Social marketing - setting priorities in social marketing - Repositioning strategies- Future of Public sector – NGO – Private sector social marketing.

Social Media marketing - Importance - Big Brands & Small business - E mail marketing -Social Media Tools –Marketing with Social network sites, blogging, micro blogging, podcasting with Podomatic (9 Hours)

COURSE OUTCOME:

CO1Applying Ethical Principles in Social Marketing through advanced marketing medias

CO2Understand concepts of social marketing

CO3Various models of social marketing

CO4 Analyze the Ethical issues and challenges CO5 Discuss the current trends in social marketing

REFERENCES :

1. Rob Donovan & Nadine Henley. (2011). Principles and Practice of Social Marketing-an international perspective. Cambridge University Press.
2. Kotler, P., Roberto, N., & Lee, N. (2008). Social Marketing – Influencing Behaviors forGood. (3rd ed.). Thousand Oaks, CA: Sage Publications, Inc.
3. French, J., Blair-Stevens, C., McVey, D., & Merritt, R. Social Marketing and Public Health. Oxford, UK: University Press 2010.
4. Hastings, G. Social Marketing: Why should the Devil Have All the Best Tunes, Routledge2013
5. Social marketing in the 21st Century- Alan
6. R. Andreasen- sage Publication, 2012 34.




Registrar
St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai-600 054

AMBT2931- STRATEGIC INVESTMENT AND FINANCING DECISIONS

SUBJECT CODE	SUBJECT TITLE	L	T	P	TOTAL LTP	C
AMBT2931	STRATEGIC INVESTMENT AND FINANCING DECISIONS	3	0	0	3	3

OBJECTIVE :

- To acquaint the students with concepts of Financial management from strategic perspective and
- To familiarize various Techniques and Models of Strategic Financial Management.

UNIT I INVESTMENT DECISIONS

Project Investment Management Vs Project Management – Introduction to profitable projects – evaluation of Investment opportunities – Investment decisions under conditions of uncertainty – Risk analysis in Investment decision – Types of investments and disinvestments.

(9 Hours)

UNIT II CRITICAL ANALYSIS OF APPRAISAL TECHNIQUES

Significance of Information and data bank in project selections – Investment decisions under capital constraints – capital rationing, Portfolio – Portfolio risk and diversified projects.

(9 Hours)

III STRATEGIC ANALYSIS OF SELECTED INVESTMENT DECISIONS

Lease financing – Lease Vs Buy decision – Hire Purchase and installment decision – Hire Purchase Vs Lease Decision – Mergers and acquisition – Cash Vs Equity for mergers.

(9 Hours)



Registrar

St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai - 600 054

UNIT IV FINANCING DECISIONS

Capital Structure – Capital structure theories – Capital structure Planning in Practice. (9 Hours)

UNIT V FINANCIAL DISTRESS

Consequences, Issues, Bankruptcy, Settlements, reorganization and Liquidation in bankruptcy. (9 Hours)

COURSE OUTCOME :

CO1 Have a good understanding of all key concepts in the corporate finance area.

CO2 Understanding the financial problems faced by the firm today, their impact on other aspects of the firm's activities, and how to analyze and solve these problems.

CO3 Conduct discounted cash flow calculations, including net present value, internal rate of return, and modified internal rate of return.

CO4 Possess good knowledge in techniques for making strategic investment decision and tackling financial distress

CO 5 To have a detailed understanding on strategic analysis of selected investment decisions

REFERENCES:

1. Prasanna Chandra, Financial Management, Tata McGraw Hill, 9th Edition, 2012.
2. Prasanna Chandra, Projects : Planning, Analysis, Financing Implementation and Review, TMH, New Delhi, 2011.
3. Bodie, Kane, Marcus: Investment, Tata McGraw Hill, New Delhi, 2010.
4. Brigham E. F & Houston J.F. Financial Management, Thomson Publications, 9 th edition, 2010.
5. M. Pandey, Financial Management, Vikas Publishing House, 10th edition, 2010.
6. M. Y. Khan and P. K. Jain, Financial Management Text and Problems, Tata McGraw Hill Publishing Co, 2011.
7. Website of IDBI Related to Project Finance.




Registrar
St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai-600 054

AMBT2937- STRATEGIC HUMAN RESOURCE MANAGEMENT

SUBJECT CODE	SUBJECT TITLE	L	T	P	TOTAL LTP	C
AMBT2937	STRATEGIC HUMAN RESOURCE MANAGEMENT	3	0	0	3	3

OBJECTIVE:

- To help students understand the transformation in the role of HR functions from being a support function to strategic function
- Understand the various terms used to define strategy & its process
- Understand HR strategies in Indian & global perspective

UNIT I HUMAN RESOURCE DEVELOPMENT

Meaning – Strategic framework for HRM and HRD – Vision, Mission and Values – Importance – Challenges to Organisations – HRD Functions - Roles of HRD Professionals - HRD Needs Assessment - HRD practices – Measures of HRD performance – Links to HR, Strategy and Business Goals – HRD Program Implementation and Evaluation – Recent trends – Strategic Capability , Bench Marking and HRD Audit.

(9 Hours)

UNIT II E-HRM

e- Employee profile– e- selection and recruitment - Virtual learning and Orientation – e - training and development – e- Performance management and Compensation design – Development and Implementation of HRIS – Designing HR portals – Issues in employee privacy – Employee surveys online.

(9 Hours)

UNIT III CROSS CULTURAL HRM

Domestic Vs International HRM - Cultural Dynamics - Culture Assessment - Cross Cultural Education and Training Programs – Leadership and Strategic HR Issues in International Assignments - Current challenges in Outsourcing, Cross border Mergers and Acquisitions - Repatriation etc - Building Multicultural Organisation - International Compensation.

(9 Hours)




Registrar
St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai-600 054

UNIT IV CAREER & COMPETENCY DEVELOPMENT

Career Concepts – Roles – Career stages – Career planning and Process – Career development Models– Career Motivation and Enrichment –Managing Career plateaus- Designing Effective Career Development Systems – Competencies and Career Management – Competency Mapping Models – Equity and Competency based Compensation.

(9 Hours)

UNIT V EMPLOYEE COACHING & COUNSELING

Need for Coaching – Role of HR in coaching – Coaching and Performance – Skills for Effective Coaching – Coaching Effectiveness– Need for Counseling – Role of HR in Counseling - Components of Counseling Programs – Counseling Effectiveness – Employee Health and Welfare Programs – Work Stress – Sources - Consequences – Stress Management Techniques.- Eastern and Western Practices - Self Management and Emotional Intelligence.

(9 Hours)

COURSE OUTCOME:

CO1 Analyse problems and develop managerial solutions to employment relations problems at both national and workplace level.

CO2 Demonstrate the application of problem solving and evaluation skills in HRM through exercises and case study work

CO3 Communicate knowledge of SHRM and employment relations in both written and verbal formats reactive to both audience and purpose.

CO4 Investigate and communicate the professional values of HRM including the ethical problems inherent in HRM professionals, including managers and consultants

CO5 Understand the various Components of Counseling Programs

REFERENCES :

1. Randy L. Desimone, Jon M. Werner – David M. Mathis, Human Resource Development, Cengage Learning, Edition 6, 2012.
2. Paul Boselie. Strategic Human Resource Management. Tata McGraw Hill. 2012.
3. Jeffrey A Mello, Strategic Human Resource Management, Cengage, Southwestern 2007.
4. Robert L. Mathis and John H. Jackson, Human Resource Management, Cengage, 2007.
5. Monir Tayeb. International Human Resource Management. Oxford. 2007
6. Randall S Schuler and Susan E Jackson. Strategic Human Resource Management. Wiley India. 2nd edition
7. McLeod. The Counsellor's workbook. Tata McGraw Hill. 2011



Registrar

St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai-600 054

AMBT2948- SUPPLY CHAIN MANAGEMENT

SUBJECT CODE	SUBJECT TITLE	L	T	P	TOTAL LTP	C
AMBT2948	SUPPLY CHAIN MANAGEMENT	3	0	0	3	3

OBJECTIVE:

- To develop an understanding of the strategic importance of SCM and how it can provide a competitive advantage in the marketplace
- To develop knowledge of the issues related to designing and managing SCM and the techniques to do so.
- To help understand the importance of and major decisions in supply chain management for gaining competitive advantage

UNIT I INTRODUCTION

Supply Chain – Fundamentals – Evolution- Role in Economy - Importance - Decision Phases - Supplier- Manufacturer-Customer chain. - Enablers/ Drivers of Supply Chain Performance. Supply chain strategy - Supply Chain Performance Measures. **(9 Hours)**

UNIT II STRATEGIC SOURCING

Outsourcing – Make Vs buy - Identifying core processes - Market Vs Hierarchy - Make Vs buy continuum -Sourcing strategy - Supplier Selection and Contract Negotiation. Creating a world class supply base- Supplier Development - World Wide Sourcing. **(9 Hours)**

UNIT III SUPPLY CHAIN NETWORK

Distribution Network Design – Role - Factors Influencing Options, Value Addition – Distribution Strategies - Models for Facility Location and Capacity allocation. Distribution Center Location Models. Supply Chain Network optimization models. Impact of uncertainty on Network Design - Network Design decisions using Decision trees. **(9 Hours)**




Registrar
St. Peter's Institute of Higher Education and Research
{Deemed to be University U/S 3 of the UGC Act, 1956}
Avadi, Chennai-600 054

UNIT IV PLANNING DEMAND, INVENTORY AND SUPPLY

Managing supply chain cycle inventory. Uncertainty in the supply chain — Analyzing impact of supply chain redesign on the inventory - Risk Pooling - Managing inventory for short life - cycle products -multiple item -multiple location inventory management. Pricing and Revenue Management
(9 Hours)

UNIT V CURRENT TRENDS

Supply Chain Integration - Building partnership and trust in SC Value of Information: Bullwhip Effect - Effective forecasting - Coordinating the supply chain. . SC Restructuring - SC Mapping -SC process restructuring, Postpone the point of differentiation – IT in Supply Chain - Agile Supply Chains -Reverse Supply chain. Agro Supply Chains.
(9 Hours)

COURSE OUTCOME:

- CO1** Understand Framework of the Supply Chain Management, Value chain and Value delivery system of Supply chain Management
- CO2** Gain knowledge on Integrated Logistics Management
- CO3** Understand Role of IT in Supply Chain Management
- CO4** Ability to build and manage a competitive supply chain using strategies, models, techniques and information technology
- CO5** Knowledge on Supply Chain Integration

REFERENCES :

1. Janat Shah, Supply Chain Management – Text and Cases, Pearson Education, 2009.
2. Sunil Chopra and Peter Meindl, Supply Chain Management-Strategy Planning and Operation, PHI Learning / Pearson Education, Sixth edition, 2015.
3. Ballou Ronald H, Business Logistics and Supply Chain Management, Pearson Education, 5th Edition, 2007.
4. David Simchi-Levi, Philip Kaminsky, Edith Simchi-Levi, Designing and Managing the Supply Chain: Concepts, Strategies, and Cases, Tata McGraw-Hill, 2005.
5. Altekar Rahul V, Supply Chain Management-Concept and Cases, PHI, 2005.
6. Shapiro Jeremy F, Modeling the Supply Chain, Cengage, Second Reprint , 2002.
7. Joel D. Wisner, G. Keong Leong, Keah-Choon Tan, Principles of Supply Chain Management- A Balanced Approach, South-Western, Cengage, 2012.




Registrar

St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai-600 054

AMBT2968- Introduction to Entrepreneurship

SUBJECT CODE	SUBJECT TITLE	L	T	P	TOTAL LTP	C
AMBT2968	Introduction to Entrepreneurship	3	0	0	3	3

Course Objective :

- 1) The purpose of the course is that the students acquire necessary knowledge and skills required for organizing and carrying out entrepreneurial activities, to develop the ability of analysing and understanding business situations in which entrepreneurs act and to master the knowledge necessary to plan entrepreneurial activities.
- 2) The objective of the course is, further on, that the students develop the ability of analysing various aspects of entrepreneurship – especially of taking over the risk, and the specificities as well as the pattern of entrepreneurship development and, finally, to contribute to their entrepreneurial and managerial potentials.

UNIT I

Entrepreneur - meaning - importance - Qualities, nature types, traits, culture, Similarities and differences between entrepreneur and entrepreneurship. Entrepreneurship and economic development - its importance - Role of entrepreneurship - entrepreneurial - environment. (9 hrs)

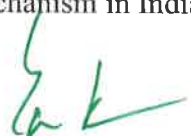
UNIT II

Evolution of entrepreneurs - entrepreneurial promotion: Training and developing motivation: factors - mobility of entrepreneurs - entrepreneurial change - occupational mobility - factors in mobility - Role of consultancy organizations in promoting entrepreneurs - Forms of business for entrepreneurs. (9 hrs)

UNIT III

Small Business : Concept & Definition, Role of Small Business in the modern Indian Economy, Small entrepreneur in International business; Steps for starting a small industry, registration as SSI, Role of SIDBI; advantages and problems of SSIs; Institutional Support mechanism in India; Incentives & Facilities, Govt. Policies for SSIs (9 hrs)




Registrar
St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai-600 054

UNIT IV

Setting MSMEs"- location of enterprise - steps in setting - Problems of entrepreneurs -Sickness in small industries - reasons and remedies - Incentives and subsidies - Evaluating entrepreneurial performance - Rural entrepreneurship - Women Entrepreneurship. (9 hrs)

UNIT V

Project finance: Sources of finance – Institutional finance - Role of IFC, IDBI, ICICI,LIC, SFC, SIPCOT, and Commercial Bank - Appraisal of bank for loans. Institutional aids for entrepreneurship development - Role of DST, DICS, SIDCO, NSICS, IRCI, NIDC, SIDBI, SISI, SIPCOT, Entrepreneurial guidance bureau - Approaching Institutions for assistance. (9 hrs)


COURSE OUTCOME

- CO1** Review the characteristics of successful entrepreneurs and apply techniques for generating ideas to initiate a market analysis and supporting due-diligence assessment for a startup business.
- CO2** Prepare a business plan and presentation including reference to legal forms of business, and moral, legal and ethical business behaviours.
- CO3** Prepare a financial report identifying and outlining the financial aspects of a business startup which indicate the likelihood of a successful venture; including interpretation of financial statements, and the effects of cashflow.
- CO4** Have the ability to discern distinct entrepreneurial traits and Understand the systematic process to select and screen a business idea
- CO5** Know the parameters to assess opportunities and constraints for new business ideas

References:

1. Vasanth Desai "Dynamics of Entrepreneurial Development and Management" Himalaya Publishing House.
2. N.P.Srinivasan & G.P. Gupta "Entrepreneurial Development" Sultanchand & Sons.
3. P.Saravanelu "Entrepreneurship Development" Eskapee publications.
4. S.S.Khanka "Entrepreneurial Development" S.Chand & Company Ltd.,
5. Satish Taneja, Entrepreneur Development ; New Venture Creation.




Registrar
St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai-600 054

AMBT2969 - ENTREPRENUERIAL BUSINESS ENVIRONMENT

SUBJECT CODE	SUBJECT TITLE	L	T	P	TOTAL LTP	C
AMBT2969	ENTREPRENUERIAL BUSINESS ENVIRONMENT	3	0	0	3	3

Objective:

The course helps the student to understand the meaning, nature and the existing business environment available for students who desire to take entrepreneurship in their life. It also helps to build necessary competencies, support services, the know-how and skills in various functional areas of management.

Unit – I: Introduction to Entrepreneurship: Entrepreneur and Entrepreneurship – Entrepreneurship as a Career – Roles and Functions of an Entrepreneur – Innovation, Risk and Uncertainty – An Imitating Entrepreneur – Small Business – Types - Role, Problems and Challenges of a Small Business – Entrepreneurial Competencies, Motivation, Performance and Rewards – Opportunities in Entrepreneurship and Idea Generation – Feasibility Analysis and Creation of Business Plan. (9 hrs)

Unit – II: Constitutional Support and Framework for Entrepreneurship: Institutions– All India, State Level, and Fund-Based – Supporting Policies of Entrepreneurship – Industrial Policy – Fiscal Incentives – Measures for Promotion and Development of Entrepreneurs. (9 hrs)

Unit – III: Production, Quality and Growth: Managerial Roles in Entrepreneurship –Plant Location, Layout – Types and Factors influencing Layout – Production Management– Manufacturing Process– Production Planning and Control – Quality Control and Productivity – Growth Strategies for Entrepreneurs. (9 hrs)

Unit – IV: Accounting and Finance for Entrepreneurs: Basics of Book Keeping – Double Entry – Journal – Ledger – Trial Balance – Cash Book, Pass Book and Bank Reconciliation Statement – Profit Ascertainment and Analysis of Financial Statements – Lease Financing, Hire-Purchase and Factoring (Business Finance). (9 hrs)



Registrar

St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai-600 054

Unit – V: Marketing Environment for Entrepreneurs: Basic Concepts of Marketing – Research, Segmentation, and Strategies – Product Life Cycle – Problems and Challenges of Small Scale Units – Promotion – Factors – Advertising – Personal Selling. (9 hrs)

COURSE OUTCOME:

- CO1** Review the roles and functions of an successful entrepreneurs and apply techniques.**CO2** Prepare a Constitutional Support and Framework for Entrepreneurship at all levels **CO3** Prepare a and plan for the location and layout.
- CO4** Have and experience on all the accounting and financial requirement for a business
- CO5** Know the parameters to assess opportunities and constraints for new business ideas

Reference Books:

1. Brandt, Steven C., The 10 Commandments for Building a Growth Company, Third Edition, Macmillan Business Books, Delhi, 1977
2. Bhide, Amar V., The Origin and Evolution of New Business, Oxford University Press, New York, 2000.
3. Dollinger M.J., „Entrepreneurship strategies and Resources“, 3rd edition, Pearson Education, New Delhi 2006.
4. Desai, Vasant Dr. (2004) Management of small scale enterprises New Delhi: Himalaya Publishing House,
5. Taneja, Gupta, Entrepreneur Development New Venture Creation,: 2nd ed. Galgotia Publishing Company




Registrar

St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956*)
Avadi, Chennai-600 054

AMBT2970- ENTREPRENEURSHIP AND INNOVATIONS

SUBJECT CODE	SUBJECT TITLE	L	T	P	TOTAL LTP	C
AMBT2970	ENTREPRENEURSHIP AND INNOVATIONS	3	0	0	3	3

Objective

To enable the students to learn the various aspects of innovation and methods of fostering Innovation

UNIT I

Innovation in business – the big picture –The IQ – Innovation Quotient – Stepping off the cliff – Establishing environments for creativity - Cycling worlds – Creating the climate –Taking risks, failing and being OK. (9 hrs)

UNIT II

Working in an environment for creativity – The death of the chairperson – Listening: for ideas and to the meeting in your head – Speaking for easy listening – Questioning... the wisdom? – The destructive nature of questions – Hiding ideas behind questions – Discounting and revenge cycles –itemized response. (9 hrs)

UNIT III

The Creative Problem – solving Structure - Planning - Task analysis – Springboards –Speculative thinking exercise – Imaging, metaphor, analogy and excursion – Journey into absurdity – Selection of springboards – Idea development – Developmental thinking exercise – Next steps – Learning from actual experience. (9 hrs)

UNIT IV

Invention and Innovation – The Breakthrough Dilemmas – Invention : Seeing Differently– Innovation: The Long Road – Fostering Invention – Mentoring and Apprenticeship – Fostering Innovation –Innovative Research Groups – Obstacles to Radical Innovation – Cultures of Innovation
– Innovation at the Crossroads. (9 hrs)




Registrar
St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai - 600 054

UNIT V

Innovation and the Market – Assessing the Risk - The Innovation Process – Where Are We Now ?
–The Diagnosis – The Consultation Group – Selecting a Strategy – Preparing the Organisation –
Setting up the Investment. Evaluating the Costs of the Project – Evaluating the Impact of the
Project
- Innovation is a State of Mind – Technology Watch– Acquiring Technological Innovation –
Intellectual Property. (9 hrs)


COURSE OUTCOME

- CO1 To gain experience in establishing environments for creativity
CO2 Prepare the individual to work in an environment of creativity
CO3 Keep the individual open to face creative problems
CO4 Have an edge of identification over Invention and Innovation
CO5 Know risk involved in creativity and acquire knowledge in facing them

REFERENCE

1. Bellon Whittington “Competing through Innovation” , Prentice
2. Peter F. Drucker, Innovation and Entrepreneurship
3. Michael H. Morris, Donald F. Kuratko, and Jeffery G Covin, Corporate
4.
5. Entrepreneurship & Innovation
6. Robin Lowe and Sue Marriott, Enterprise: Entrepreneurship and Innovation: Concepts, Contexts
and Commercialization
7. John Bessant and Joe Tidd, Innovation and Entrepreneurship
9. Maylor, Project Management




Registrar
St. Peter's Institute of Higher Education and Research
{Deemed to be University U/S 3 of the UGC Act, 1956}
Avadi, Chennai - 600 054

AMBT2971- BUSINESS PLAN AND ETHICS

SUBJECT CODE	SUBJECT TITLE	L	T	P	TOTAL LTP	C
AMBT2971	BUSINESS PLAN AND ETHICS	3	0	0	3	3

Objective

To disseminate the knowledge regarding Business Plans and the relevance of Ethics while taking business decisions.

UNIT - I

Business Plan - Meaning- The why of business plan - Basic parameters - Timing of decision undertaken Project parameters - the common considerations - Factors of successful business - capital management- financial control -anticipating change and adaptability(9 hrs)

UNIT – II

Business plan process - sources of information - Internet, government sources and statistics - offline research resources - library - SBDC'S -Trade and industries associations- sources of market research - evaluating data- benefits of market study -coverage of market study - information sources.(9 hrs)

UNIT - III

Business Plan components - The Executive Summary - company description - Industry analysis and trends - Target market - Competition - strategic position and risk assessment - Marketing plan and sales strategy - operations - Technology plan -management and organization(9 hrs)

UNIT - IV

Business ethics - Definition and importance. Benefits of business ethics. Emerging ethical issues in business. Ethics as a dimension of social responsibility. (9 hrs)




Registrar

St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai-600 054

UNIT - V

The ethical decision making process - understanding ethical decision making and corporate governance. Individual factors, organizational factors. Implementing and auditing ethics programs. Business ethics in a global economy. (9 hrs)

COURSE OUTCOME

CO1 Review the term business plan and its overall terms
CO2 To identify the various business plan process

CO3 Prepare a business plan and its components

CO4 Understand the ethics of business

CO5 To gain knowledge in Implementing and auditing ethics programs

REFERENCE

I. Business ethics - Ethical decision making and cases. O.C.Ferrell John Paul 23.

Fraedrich




Registrar
St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai - 600 054



St.PETER'S INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Deemed to be University U/S 3 of the UGC Act, 1956)
AVADI, Chennai – 600054, TamilNadu.

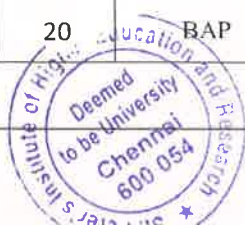
IGNITE * INSPIRE * INNOVATE

Phone:044-26558080-84
E-mail:registrar@spiher.ac.in
Website:www.spiher.ac.in

NEW COURSES FOR THE ACADEMIC YEAR 2021-2022

MASTER OF BUSINESS ADMINISTRATION

S.No	Programme Code	Programme Name	Course Code	Name of the Course
1	BAP	Master of Business Administration	AMBT2917	INTERNATIONAL BUSINESS MANAGEMENT
2	BAP	Master of Business Administration	AMBT2918	STRATEGIC MANAGEMENT
3	BAP	Master of Business Administration	AMBT2915	BRAND MANAGEMENT
4	BAP	Master of Business Administration	AMBT2918	INTEGRATED MARKETING COMMUNICATION
5	BAP	Master of Business Administration	AMBT2919	RETAIL MARKETING
6	BAP	Master of Business Administration	AMBT2922	BANKING FINANCIAL SERVICES MANAGEMENT
7	BAP	Master of Business Administration	AMBT2923	CORPORATE FINANCE
8	BAP	Master of Business Administration	AMBT2926	SECURITY ANALYSIS AND PORTFOLIO MANAGEMENT
9	BAP	Master of Business Administration	AMBT2927	STRATEGIC INVESTMENT AND FINANCING DECISIONS
10	BAP	Master of Business Administration	AMBT2928	ENTREPRENEURSHIP DEVELOPMENT
11	BAP	Master of Business Administration	AMBT2935	MATERIAL MANAGEMENT
12	BAP	Master of Business Administration	AMBT2936	PRODUCT DESIGN
13	BAP	Master of Business Administration	AMBT2933	STRATEGIC HUMAN RESOURCE MANAGEMENT
14	BAP	Master of Business Administration	AMBT2956	DESTINATION MARKETING
15	BAP	Master of Business Administration	AMBT2957	RESORT PLANNING & DEVELOPMENT
16	BAP	Master of Business Administration	AMBT2959	DEVELOPMENT OF ENTREPRENEURIAL SKILLS
17	BAP	Master of Business Administration	AMBT2938	SERVICES OPERATIONS MANAGEMENT
18	BAP	Master of Business Administration	AMBT2940	HOSPITAL ARCHITECTURE, PLANNING, DESIGN AND MAINTENANCE
19	BAP	Master of Business Administration	AMBT2941	CLINICAL SERVICES
20	BAP	Master of Business Administration	AMBT2943	EPIDEMIOLOGY & PUBLIC HEALTH SYSTEMS



Registrar
St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai - 600 054

HEAD OF DEPARTMENT
School of Commerce & Management Studies
SPIHER, Chennai

21	BAP	Master of Business Administration	AMBT2947	EXIM MANAGEMENT
22	BAP	Master of Business Administration	AMBT948	FUNDAMENTALS OF SHIPPING
23	BAP	Master of Business Administration	AMBT2924	SERVICE MARKETING
24	BAP	Master of Business Administration	AMBT2925	SOCIAL MARKETING
25	BAP	Master of Business Administration	AMBT2931	STRATEGIC INVESTMENT AND FINANCING DECISIONS
26	BAP	Master of Business Administration	AMBT2937	STRATEGIC HUMAN RESOURCE MANAGEMENT
27	BAP	Master of Business Administration	AMBT2948	SUPPLY CHAIN MANAGEMENT
28	BAP	Master of Business Administration	AMBT2968	INTRODUCTION TO ENTREPRENEURSHIP
29	BAP	Master of Business Administration	AMBT2969	ENTREPRENEURIAL BUSINESS ENVIRONMENT
30	BAP	Master of Business Administration	AMBT2970	ENTREPRENEUSIP AND INNOVATIONS
31	BAP	Master of Business Administration	AMBT2971	BUSINESS PLAN AND ETHICS
32	BAP	Master of Business Administration	AMBT2967	RESORT PLANNING & DEVELOPMENT
33	BAP	Master of Business Administration	AMBP2962	SUMMER TRAINING
34	BAP	Master of Business Administration	AMBP2963	PROJECT WORK



Lak
Registrar

St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai-600 054

Ukaner
HEAD OF DEPARTMENT
School of Commerce &
Management Studies
SPIHER, Chennai

AMBT3919- RETAIL MARKETING

SUBJECT CODE	SUBJECT TITLE	L	T	P	TOTAL LTP	C
AMBT3919	RETAIL MARKETING	3	0	0	3	3

OBJECTIVE:

- To provide insights into all functional areas of retailing.
- To give an account of essential principles of retailing.
- To give a perspective of the Indian retailing scenario

UNIT I INTRODUCTION

An overview of Global Retailing – Challenges and opportunities – Retail trends in India – Socio economic and technological Influences on retail management – Government of India policy implications on retails. (9 Hours)

UNIT II RETAIL FORMATS

Organized and unorganized formats – Different organized retail formats – Characteristics of each format – Emerging trends in retail formats – MNC's role in organized retail formats. (9 Hours)

UNIT III RETAILING DECISIONS

Choice of retail locations - internal and external atmospherics – Positioning of retail shops – Building retail store Image - Retail service quality management – Retail Supply Chain Management – Retail Pricing Decisions. Mercandising and category management – buying. (9 Hours)

UNIT IV RETAIL SHOP MANAGEMENT

Visual Merchandise Management – Space Management – Retail Inventory Management – Retail accounting and audits - Retail store brands – Retail advertising and promotions – Retail Management Information Systems - Online retail – Emerging trends . (9 Hours)

UNIT V RETAIL SHOPPER BEHAVIOUR

Understanding of Retail shopper behavior – Shopper Profile Analysis – Shopping Decision Process - Factors influencing retail shopper behavior – Complaints Management - Retail sales force Management – Challenges in Retailing in India. (9 Hours)

OUTCOME:

CO1 To manage the retail chains and understand the retail customer's behavior

CO2 Explain Retailing Environment

CO3 Illustrate Retail Location & Site Selection

CO4 Explain Retail Communication

CO5 Understanding the Retail Shopper behavior




Registrar
St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai-600 054

FINANCIAL MANAGEMENT

AMBT3922 - BANKING FINANCIAL SERVICES MANAGEMENT

SUBJECT CODE	SUBJECT TITLE	L	T	P	TOTAL LTP	C
AMBT3922	BANKING FINANCIAL SERVICES MANAGEMENT	3	0	0	3	3

OBJECTIVES:

- To get acquainted with the changed role of Banking post 1991 Reforms
- Grasp how banks raise their sources and how they deploy it and manage the associated risks .
- To know the procedural compliances by bank's functionality.
- Understand e-banking and the threats that go with it

UNIT I OVERVIEW OF INDIAN BANKING SYSTEM

Overview of Indian Banking System, Functions of banks, key Acts governing the functioning of Indian banking system – RBI Act 1934, Negotiable Instruments Act 1881, Banking Regulations Act 1948 – Rights and obligations of a banker, Overview of Financial statement of banks – Balance sheet and Income Statement. (9 Hours)

UNIT II SOURCES AND APPLICATION OF BANK FUNDS

Capital adequacy, Deposits and non-deposit sources, Designing of deposit schemes and pricing of deposit services, application of bank funds – Investments and Lending functions, Types of lending – Fund based, non-fund based, asset based – Different types of loans and their features, Major components of a typical loan policy document, Steps involved in Credit analysis, Credit delivery and administration, Pricing of loans, Customer profitability analysis. (9 Hours)

UNIT II CREDIT MONITORING AND RISK MANAGEMENT

Need for credit monitoring, Signals of borrowers' financial sickness, Financial distress prediction models – Rehabilitation process, Risk management – Interest rate, liquidity, forex, credit, market, operational and solvency risks – risk measurement process and mitigation, Basic understanding of NPAs and ALM. (9 Hours)

UNIT IV MERGERS, DIVERSIFICATION AND PERFORMANCE EVALUATION

Mergers and Diversification of banks into securities market, underwriting, Mutual funds and Insurance business, Risks associated therewith. Performance analysis of banks – background factors, ratio analysis and CAMELS. (9 Hours)

UNIT V HIGH TECH E-BANKING

Payment system in India – Paper based, e-payments – Electronic banking – advantages – Plastic money, E-money – Forecasting of cash demand at ATMs – Security threats in e-banking and RBI's initiatives (9 Hours)



Registrar
St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai-600 054

AMBT3926- SECURITY ANALYSIS AND PORTFOLIO MANAGEMENT

SUBJECT CODE	SUBJECT TITLE	L	T	P	TOTAL LTP	C
AMBT3926	SECURITY ANALYSIS AND PORTFOLIO MANAGEMENT	3	0	0	3	3

OBJECTIVES :

- Enables student to Understand the nuances of stock market operations.
- To enable the students to understand the two main dimensions of the investment namely risk and return
- To understand the features of common stock.
- To be able to evaluate the performance of the portfolio

UNIT I INVESTMENT SETTING

Financial and economic meaning of Investment – Characteristics and objectives of Investment – Types of Investment – Investment alternatives – Choice and Evaluation – Risk and return concepts. **(9 Hours)**

UNIT II SECURITIES MARKETS

Financial Market - Segments – Types - - Participants in financial Market – Regulatory Environment, Primary Market – Methods of floating new issues, Book building – Role of primary market – Regulation of primary market, Stock exchanges in India – BSE, OTCEI , NSE, ISE, and Regulations of stock exchanges – Trading system in stock exchanges –SEBI. **(9 Hours)**

UNIT III FUNDAMENTAL ANALYSIS

Economic Analysis – Economic forecasting and stock Investment Decisions – Forecasting techniques. Industry Analysis : Industry classification, Industry life cycle – Company Analysis Measuring Earnings – Forecasting Earnings – Applied Valuation Techniques – Graham and Dodds investor ratios. **(9 Hours)**




Registrar

St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai-600 054

HUMAN RESOURCE MANAGEMENT

AMBT3928- ENTREPRENEURSHIP DEVELOPMENT

SUBJECT CODE	SUBJECT TITLE	L	T	P	TOTAL LTP	C
AMBT3928	ENTREPRENEURSHIP DEVELOPMENT	3	0	0	3	3

OBJECTIVE:

- To instill a spirit of entrepreneurship among the student participants.
- To develop and strengthen entrepreneurial quality and motivation in students.
- To impart basic entrepreneurial skills and understandings to run a business efficiently and effectively
- Need, Problems & Development of Rural Entrepreneurship

UNIT I ENTREPRENEURIAL COMPETENCE

Entrepreneurship concept – Entrepreneurship as a Career – Entrepreneurial Personality - Characteristics of Successful, Entrepreneur – Knowledge and Skills of Entrepreneur. (9 Hours)

UNIT II ENTREPRENEURIAL ENVIRONMENT

Business Environment - Role of Family and Society - Entrepreneurship Development Training and Other Support Organisational Services - Central and State Government Industrial Policies and Regulations - International Business. (9 Hours)

UNIT III BUSINESS PLAN PREPARATION

Sources of Product for Business - Prefeasibility Study - Criteria for Selection of Product - Ownership - Capital - Budgeting Project Profile Preparation - Matching Entrepreneur with the Project - Feasibility Report Preparation and Evaluation Criteria. (9 Hours)

UNIT IV LAUNCHING OF SMALL BUSINESS

Finance and Human Resource Mobilization Operations Planning - Market and Channel Selection - Growth Strategies - Product Launching – Incubation, Venture capital, IT startups. (9 Hours)

UNIT V MANAGEMENT OF SMALL BUSINESS

Monitoring and Evaluation of Business - Preventing Sickness and Rehabilitation of Business Units- Effective Management of small Business. (9 Hours)



[Signature]
Registrar
St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai-600 054

AMBT2936- PRODUCT DESIGN

SUBJECT CODE	SUBJECT TITLE	L	T	P	TOTAL LTP	C
AMBT2936	PRODUCT DESIGN	3	0	0	3	3

OBJECTIVES

- The goal of the course is to give an introduction to multidisciplinary aspects of product development and innovation.
- Students will familiarize themselves with basic methodology and tools that can be used in product development projects.
- Equip students with Practical problems in cooperation with companies in order to simulate real product development situations

UNIT I INTRODUCTION

Defining Product, Types of products. Product development – characteristics, duration and cost, challenges. Development Process: Generic Process- Adapting to product types. Evaluation – decay curve – cost expenditure curve. **(9 Hours)**

UNIT II PRODUCT PLANNING

Product Planning Process – Steps. Opportunity identification – breakdown structure- product development charter. Product Life Cycle. Technology Life Cycle - Understanding Customer Needs - Disruptive Technologies- Product Specification - Concept Generation – Activity- Steps- Techniques. **(9 Hours)**

UNIT III PRODUCT CONCEPT

Concept Selection – Importance, Methodology, concept Screening, Concept Scoring. Concept Testing. Product Architecture- Definition, Modularity, implication, Establishment, Delayed Differentiation, Platform Planning. **(9Hours)**

UNIT IV INDUSTRIAL DESIGN AND DESIGN TOOLS

Industrial Design, Design for Manufacturing-Value Engineering-Ergonomics-Prototyping-Robust Design- Design for X-failure rate curve-product use testing-Collaborative Product development-Product development economics-scoring model- financial analysis. **(9 Hours)**

UNIT V PATENTS

Defining Intellectual Property and Patents, Patent Searches and Application, Patent Ownership and Transfer, Patent Infringement, New Developments and International Patent Law. **(9 Hours)**



Registrar

St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai-600 054

AMBT2966- DESTINATION MARKETING

SUBJECT CODE	SUBJECT TITLE	L	T	P	TOTAL LTP	C
AMBT2966	DESTINATION MARKETING	3	0	0	3	3

Objectives :

- The main aim of the course to elaborate on Tourism Attraction
- To give a detailed understanding on strategy formulation
- A brief outline on the destination marketing and its strategy

Unit I:

Tourism Attraction : Definition, Characteristics, Typology, Criteria for Tourist Attractiveness, development and design of tourist attractions, Life Cycle. **(9 Hours)**

Unit II:

Tourism Definition Planning, Environmental Analysis, Resource Analysis, Regional Environmental Analysis, Market Analysis, Competitor Analysis, Regional Environmental Scanning. **(9 Hours)**

Unit III

Regional Goal Formulation – Strategy formulation, Product Portfolio Strategies, Tourism Portfolio model, analysis of Portfolio, approaches, Market segmentation in the regional context – Bases, Steps and categories, Target Marketing – targeting options, positioning strategy. **(9 Hours)**


Unit IV:

Components of Destination Marketing Mix, Product Strategy – Nature & characteristics, Managing existing Tourism Products, New Product development in Regional Tourism, Pricing Strategies – Tourists Perception of Price. **(9 Hours)**

Unit V:

The Tourism Distribution Strategy – Choice of distribution channel, Developing a Destination Promotional strategy, Evaluation and Control. **(9 Hours)**




Registrar
St. Peter's Institute of Higher Education and Research
'Deemed to be University U/S 3 of the UGC Act, 1956'
Avadi, Chennai-600 054

COURSE OUTCOME:

CO1 The students will be able to do an analysis on all the external factors

CO2 The learners will be able developing a destination promotional strategy

CO3: Practice and knowledge on the evaluation and control process

CO4 : Understanding the various Destination Marketing Mix

CO5 : Knowledge on development and design of tourist attractions

Suggested Readings:

1. Ernie Health & Geoffrey Wall, Marketing Tourism Destinations , John Wiley & Sons. Inc.
2. J. Christopheo Holloway & Chris Robinson, Marketing for Tourism
3. Philip Kotler, Jon Bower, Marketing for Hospitality and Tourism



A handwritten signature in green ink, appearing to be "L. K. K.", written over the printed name "Registrar".

Registrar

St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai-600 054

AMBT2957- RESORT PLANNING & DEVELOPMENT

SUBJECT CODE	SUBJECT TITLE	L	T	P	TOTAL LTP	C
AMBT2957	Resort planning & Development	3	0	0	3	3

Objective :

- Understand the opportunities in Resort and its planning
- Detailed analysis on economic factors

Unit – I: Resort: Concept, Evaluation. Scope, Trends and development. Roles of Resorts in Tourism and Hospitality, Nature of Demand of Resort. **(9 Hours)**

Unit – II: Different Types of Resorts- Product, Functional specifications. Strategy and organizational structures. **(9 Hours)**

Unit – III: Resort Planning: Location, Feasibility analysis, Architecture, Macro & Micro business environment.-The five phases of Resort planning and development. **(9hours)**

Unit – IV: Economic analysis of Resort operation and Forecasting. **(9 Hours)**

Unit – V: Impact analysis of Resorts: Social Impact, the economic impact, physical and environmental. **(9 Hours)**

COURSE OUTCOME:

CO1 Understanding the demand for the resort

CO2 Formulation of Strategy and organizational structures.

CO3 It helps the learners to have knowledge on five phases of Resort planning and development

CO4 Framing the various economic analysis of resort operation

CO5 The students are educated on the Impact analysis of Resorts

Suggested Readings:

1. Gee Chuck Y., Resort Development and Management -
2. Stipnauk, David M. and Roffman, Harold, Facilities Management
3. Lawson , Hotels and Resorts: Planning, Design and Refurbishment




Registrar
St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai-600 054

AMBT3935- MATERIALS MANAGEMENT

SUBJECT CODE	SUBJECT TITLE	L	T	P	TOTAL LTP	C
AMBT3935	MATERIALS MANAGEMENT	3	0	0	3	3

OBJECTIVE :

- To make the students to understand the production function, process and plant design, Planning functions, Material Planning and Layout and Scheduling.
- To enable students to choose appropriate statistical techniques for improving processes and write reports to management describing processes and recommending ways to improve them.
- To familiarize students with the design, planning and control of an organization's processes with the objective of creating and delivering products & services to customers and improving process & supply chain performance

UNIT I INTRODUCTION

Operating environment-aggregate planning-role, need, strategies, costs techniques, approaches-master scheduling-manufacturing planning and control system-manufacturing resource planning-enterprise resource planning-making the production plan **(9 Hours)**

UNIT II MATERIALS PLANNING

Materials requirements planning-bill of materials-resource requirement planning-manufacturing resource planning-capacity management-scheduling orders-production activity control-codification. **(9 Hours)**

UNIT III INVENTORY MANAGEMENT

Policy Decisions-objectives-control -Retail Discounting Model, Newsvendor Model; EOQ and EBQ models for uniform and variable demand With and without shortages -Quantity discount models. Probabilistic inventory models. **(9 Hours)**

UNIT IV PURCHASING MANAGEMENT

Establishing specifications-selecting suppliers-price determination-forward buying-mixed buying strategy-price forecasting-buying seasonal commodities-purchasing under uncertainty-demand management-price forecasting-purchasing under uncertainty-purchasing of capital equipment-international purchasing **(9 Hours)**

UNIT V WAREHOUSE MANAGEMENT

Warehousing functions – types - Stores management-stores systems and procedures-incoming materials control-stores accounting and stock verification-Obsolete, surplus and scrap-value analysis-material handling-transportation and traffic management -operational efficiency-productivity-cost effectiveness-performance measurement **(9 Hours)**



Registrar

St. Peter's Institute of Higher Education and Research
'Deemed to be University U/S 3 of the UGC Act, 1956'
Avadi, Chennai-600 054

AMBT2950- CLINICAL SERVICES

SUBJECT CODE	SUBJECT TITLE	L	T	P	TOTAL LTP	C
AMBT2950	CLINICAL SERVICES	3	0	0	3	3

OBJECTIVES

- To develop a basic understanding of clinical services in the hospital sector
- To seek a thorough knowledge in health care policies
- To understand the management and organization of various departments in the hospital sector
- To understand the process of quality management in the hospital sector
- To understand the other clinical services such as surgical and allied services in the hospital sector.

Unit : 1

Introduction to Hospital services: Meaning and scope of patient care services – significance of patient care – role of administration in patient care – classification of Hospitals. **(9 Hours)**

Unit: 2

Clinical services 1: Outpatient services – Inpatient services – Accident and Emergency services – Billing services. **(9 Hours)**

Unit: 3

Clinical services-2: Laboratory services -Blood bank services – Radiology and Imaging services Telemedicine -Rehabilitation services. **(9 Hours)**

Unit: 4

Clinical services-3: Operation theatre – Intensive care units – Hospital acquired infections – Sterilization – Nursing services – Ward management. **(9 hours)**

Unit: 5

Total quality Management: Concept of quality – Quality control and assurance – ISO 9000 standards– TQM – NABH– JCAHO –ACHS Accreditation– Quality manual.**(9 Hours)**




Registrar
St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai-600 054

OUTCOME

- CO1** Students will be able to understand the overall health care delivery system
- CO2** Procedures adopted in the hospital sector.
- CO3** Students will be able to understand different health care policies
- CO4** Students will be able to familiarize to manage and organize various departments in the hospital.
- CO5** Students will be able to understand various process involved in quality management and the accreditation of hospitals

REFERENCE BOOKS:

1. Management process in Health care - S. Srinivasan
2. Hospital department Profiles - Gold Berry A.J




Registrar

St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai-600 054

AMBT2943- EPIDEMIOLOGY & PUBLIC HEALTH SYSTEMS

SUBJECT CODE	SUBJECT TITLE	L	T	P	TOTAL LTP	C
AMBT2943	EPIDEMIOLOGY & PUBLIC HEALTH SYSTEMS	3	0	0	3	3

OBJECTIVES

- To understand the basic concepts of health and diseases.
- To expand the understanding of epidemiology and its principles, methods and designs
- To provide a broad understanding of the core subject areas of infection prevention and control.
- To introduce to proper determination and management of hazardous waste
- To understand the practical epidemiology and evaluation of health intervention

Unit: 1

Basic concepts and methods of Epidemiology and application to the variety of disease problems – Health for all and primary Health care – Clinical trails – community trails – ethical considerations – inference from epidemiological studies. **(9 Hours)**

Unit: 2

National Health Programmes related to Communicable diseases- Malaria, Filial, Tuberculosis, Leprosy, AIDS, and STD National Health Programmes related to Non Communicable diseases – Cancer, Blindness, Diabetes, and Mental Health Reproductive and child health programme (RCH)- Health related national programmes – Integrated Child development scheme, water supply and sanitation, minimum needs programme. **(9 Hours)**

Unit: 3

Alcoholism and drug dependency: Alcohol and alcoholism – opioid drug use – cocaine and other commonly abused drugs – nicotine addiction – setting up de-addiction and rehabilitation centers. **(9 Hours)**

Unit: 4

Environmental and Occupational hazards – Hazards of environment and work place – Sterilizations – Autoclaves – Waste disposal management (Solids and Liquids) – Incinerators. **(9 Hours)**

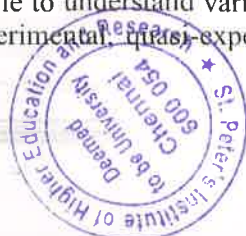
Unit: 5

Emergency Epidemic Management System – Safety systems – Immunization and Isolation systems – Communication systems – Public Health Service Systems – Health and Population policy and Strategies – District Health Organization – Regionalization of health care. **(9 Hours)**

OUTCOME

CO1 Students will be able to define and distinguish the concepts of health, quality of life, impairment, activity limitation, and participation restriction. They will also be able to describe the contribution of epidemiology to the scientific study of health and disease.

CO2 Students will be able to understand various experimental designs and methods and also able to differentiate among experimental, quasi-experimental, correlation, and observational study designs and methods.



Registrar

St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai-600 054

AMBT3943- EPIDEMIOLOGY & PUBLIC HEALTH SYSTEMS

SUBJECT CODE	SUBJECT TITLE	L	T	P	TOTAL LTP	C
AMBT3943	EPIDEMIOLOGY & PUBLIC HEALTH SYSTEMS	3	0	0	3	3

OBJECTIVES

- To understand the basic concepts of health and diseases.
- To expand the understanding of epidemiology and its principles, methods and designs
- To provide a broad understanding of the core subject areas of infection prevention and control.
- To introduce to proper determination and management of hazardous waste
- To understand the practical epidemiology and evaluation of health intervention

Unit: 1

Basic concepts and methods of Epidemiology and application to the variety of disease problems – Health for all and primary Health care – Clinical trails – community trails – ethical considerations – inference from epidemiological studies. **(9 Hours)**

Unit: 2

National Health Programmes related to Communicable diseases- Malaria, Filarial, Tuberculosis, Leprosy, AIDS, and STD National Health Programmes related to Non Communicable diseases – Cancer, Blindness, Diabetes, and Mental Health Reproductive and child health programme (RCH)-Health related national programmes – Integrated Child development scheme, water supply and sanitation, minimum needs programme. **(9 Hours)**

Unit: 3

Alcoholism and drug dependency: Alcohol and alcoholism – opiod drug use – cocaine and other commonly abused drugs – nicotine addiction – setting up de-addiction and rehabilitation centers. **(9 Hours)**

Unit: 4

Environmental and Occupational hazards – Hazards of environment and work place – Sterilizations – Autoclaves – Waste disposal management (Solids and Liquids) – Incinerators. **(9 Hours)**

Unit: 5


Emergency Epidemic Management System – Safety systems – Immunization and Isolation systems – Communication systems – Public Health Service Systems – Health and Population policy and Strategies – District Health Organization – Regionalization of health care. **(9 Hours)**

OUTCOME

CO1 Students will be able to define and distinguish the concepts of health, quality of life, impairment, activity limitation, and participation restriction. They will also be able to describe the contribution of epidemiology to the scientific study of health and disease.

CO2 Students will be able to understand various experimental designs and methods and also able to differentiate among experimental correlation, and observational study designs and methods.




 Registrar
 St. Peter's Institute of Higher Education and Research
 (Deemed to be University U/S 3 of the UGC Act, 1956)
 Avadi, Chennai-600 054

CO3 Knowledge on World's leading container terminals and location characteristics.

CO4 Discussion on Types of container leasing and their terms

CO5 Understanding of Multimodal transport

REFERENCES:

1. Marc Levinson, The Box: How the Shipping Container Made the World Smaller and the World Economy Bigger, Princeton University Press, 2008.
2. Dr. K. V. Hariharan, Containerisation, Multimodal Transport & Infrastructure Development In India, Sixth Edition, Shroff Publishers and Distributors, 2015.
3. Lee, C.-Y., Meng, Q. (Eds.), Handbook of Ocean Container Transport Logistics Making Global Supply Chains Effective, Springer, 2015

AMBT39547- EXIM MANAGEMENT

SUBJECT CODE	SUBJECT TITLE	L	T	P	TOTAL LTP	C
AMBT3947	EXIM MANAGEMENT	3	0	0	3	3

COURSE OBJECTIVE:

- To enlighten the students about the major functions in export and import processes.
- To provide the expertise for solving issues related to requirements in exim management.

UNIT - I FUNDAMENTALS OF IMPORT AND EXPORT

Role of Import and Export Trade in an Economy - Institutional Framework for Foreign Trade in India -Role of Director General of Foreign Trade and Commerce - Objectives of EXIM Policy - Global trade flows - Contract of International Sale of Goods - INCOTERMS 2010 **(9 Hours)**

UNIT - II OVERVIEW OF EXPORT AND IMPORT

Marketing for Exports - Negotiation and finalization of Export contract - Export Documentation Procedures - Cargo Insurance - Export Promotion Councils and incentive schemes- Role of Logistics in Exports- Export Houses / Trading Houses **(9 Hours)**

UNIT - III DOCUMENTATION FRAMEWORK

Import for industrial use / trading - Import Documentation and Customs clearance procedures - Types of Imports - Import Licenses - Cargo Insurance - Role of Logistics in Import**(9 Hours)**

UNIT - IV CREDIT AND PAYMENTS Payment methods in Foreign Trade - Documentary Credit / Letter of Credit-UCP 600 with respect to Shipping Documents and L/C Negotiation - Export / import financing strategies - Managing payment risks. **(9 Hours)**

UNIT - V CUSTOMS CLEARANCE AND DUTIES



[Handwritten Signature]
Registrar
St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai-600 064

Roles of Service providers in EXIM transactions – Global Traders – Commodity Brokers - Custom House Agents – Transport Operators – Freight Forwarders – Warehousing and 3PL service providers – Liners /Ship Agencies – Container Freight Stations - Port – Inspection Agencies/ surveyors – Quarantine Agencies – Pest Control Agencies – Chamber of Commerce. **(9 Hours)**

COURSE OUTCOME:

- CO1** The students would be aware about the formalities of export and import industry
- CO2** The students will be able to comprehend the importance of exim management.
- CO3** The student will be well versed on the documentation framework
- CO4** Knowledge on various payment methods in foreign trade
- CO5** Understanding the roles of customs clearance and agencies

REFERENCES:

1. Justin Pauland Rajiv Aserkar, Export Import Management, Second Edition, Oxford University Press, 2013.
2. Usha Kiran Rai, Export - Import and Logistics Management, Second Edition, PHI Learning, 2010.
3. Director General of Foreign Trade, Foreign Trade Policy and Handbook of Procedures, 2015

AMBT3948- FUNDAMENTALS OF SHIPING

SUBJECT CODE	SUBJECT TITLE	L	T	P	TOTAL LTP	C
AMBT3948	FUNDAMENTALS OF SHIPING	3	0	0	3	3

COURSE OBJECTIVE:

- To provide the knowledge about fundamentals of shipping management
- to equip the students with the knowledge of shipping, ship building and repair

UNIT - I INTERDICTION OF SHIPPING

Role of Shipping in International trade-Types of ships and cargoes carried by them - International Organizations serving the shipping industry (IMO, BIMCO, ICS, IACS, IAPH)- Ship Registration and Classification. **(9 Hours)**

UNIT - II LINER SHIPPING OPERATIONS

Liner shipping business - Types of Liner services - Container shipping lines and their services - Break bulk, Ro-Ro and project cargo services - Liner freight rates - Liner cargo documentation - Liner agency functions **(9 Hours)**

UNIT - III DRY BULK BUSINESS



[Handwritten Signature]
 Registrar
 St. Peter's Institute of Higher Education and Research
 Deemed to be University U/S 3 of the UGC Act, 1956
 Avadi, Chennai-600 054

AMBT2925- SOCIAL MARKETING

SUBJECT CODE	SUBJECT TITLE	L	T	P	TOTAL LTP	C
AMBT2925	SOCIAL MARKETING	3	0	0	3	3

OBJECTIVE:

- To enhance Competiveness in Social Marketing by ethical values and social media in Marketing.
- Understand social marketing process
- Equip students with trends in social marketing

UNIT I INTRODUCTION

Social marketing - Definition - Scope and concept - Evolution of Social marketing - Need for Social marketing - A comparative study between Commercial and Social marketing - Use of market research - social change tools - Factors influencing Social marketing - Challenges and opportunities. (9 Hours)

UNIT II SOCIAL MARKETING PROCESS AND PLANNING

Introduction - Environment Monitoring - Social Class and self-efficacy - social capital - Social ecology - Advocacy - A global phenomenon - Social marketing Process - Stages - Ethical considerations. Planning - Formative Research in Social marketing. Analysis - Problem - Environment - Resource.

Segmentation - Motives and benefits - Sheth's and Frazier's attitude - behavior segmentation - Stage approach to segmentation - Selecting target audiences - Cross cultural targeting - cultural and individual tailoring. (9 Hours)

UNIT III SOCIAL MARKETING MIX

Social marketing mix - policy - product - place - price - promotion - people - partnership.

Rating & Reviews - Virtual world - Using media in social marketing - Importance - effectiveness of mass media in social marketing - Practical model for media use in social marketing - Advertisement -Publicity - Edutainment - Civic or Public - Choosing media & methods.

Role of media in social marketing campaigns - planning and developing Social media campaigning – Campaign vs Programme - Programme planning models – conceptual model Lawrence Green's PRECEDE-PROCEED model. (9 Hours)



Eak
Registrar

St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai-600 054

UNIT IV ETHICAL ISSUES AND CHALLENGES

Ethical principles - Codes of behaviour - Critics of social marketing - Critic of power imbalance in social marketing - Criticism of unintended consequences - Competition in social marketing- Definition - monitoring - countering competition - competition and principle of differential advantage - Internal competition. (9 Hours)

UNIT V TRENDS IN SOCIAL MARKETING

Future of Social marketing - setting priorities in social marketing - Repositioning strategies- Future of Public sector – NGO – Private sector social marketing.

Social Media marketing - Importance - Big Brands & Small business - E mail marketing -Social Media Tools –Marketing with Social network sites, blogging, micro blogging, podcasting with Podomatic (9 Hours)

COURSE OUTCOME:

CO1 Applying Ethical Principles in Social Marketing through advanced marketing medias

CO2 Understand concepts of social marketing

CO3 Various models of social marketing

CO4 Analyze the Ethical issues and challenges CO5 Discuss the current trends in social marketing

REFERENCES :

1. Rob Donovan & Nadine Henley. (2011). Principles and Practice of Social Marketing-an international perspective. Cambridge University Press.
2. Kotler, P., Roberto, N., & Lee, N. (2008). Social Marketing – Influencing Behaviors for Good. (3rd ed.). Thousand Oaks, CA: Sage Publications, Inc.
3. French, J., Blair-Stevens, C., McVey, D., & Merritt, R. Social Marketing and Public Health. Oxford, UK: University Press 2010.
4. Hastings, G. Social Marketing: Why should the Devil Have All the Best Tunes, Routledge 2013
5. Social marketing in the 21st Century- Alan R. Andreasen- sage Publication, 2012 34.




Registrar
St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai-600 054

AMBT2927 - CORPORATE FINANCE

SUBJECT CODE	SUBJECT TITLE	L	T	P	TOTAL LTP	C
AMBT2927	CORPORATE FINANCE	3	0	0	3	3

OBJECTIVES :

- Nuances involved in short term corporate financing
- learn to apply the analytical techniques required for developing effective and workable financial solutions at the executive level
- study the concepts of financial risk, return, and the valuation of bonds, common and preferred stock, cost of capital, capital budgeting, capital structure, and the evaluation of investment opportunities

UNIT I INDUSTRIAL FINANCE

Indian Capital Market – Basic problem of Industrial Finance in India. Equity – Debenture financing – Guidelines from SEBI, advantages and disadvantages and cost of various sources of Finance - Finance from international sources, financing of exports – role of EXIM bank and commercial banks.– Finance for rehabilitation of sick units. (9 Hours)

UNIT II SHORT TERM-WORKING CAPITAL FINANCE

Estimating working capital requirements – Approach adopted by Commercial banks, Commercial paper- Public deposits and inter corporate investments. (9 Hours)

UNIT III ADVANCED FINANCIAL MANAGEMENT

Appraisal of Risky Investments - certainty equivalent of cash flows and risk adjusted discount rate - risk analysis in the context of DCF methods using Probability information - nature of cash flows - Sensitivity analysis - Simulation and investment decision, Decision tree approach in investment decisions. (9 Hours)

UNIT IV FINANCING DECISION

Simulation and financing decision - cash inadequacy and cash insolvency - determining the probability of cash insolvency- Financing decision in the Context of option pricing model and agency costs- Inter-dependence of investment- financing and Dividend decisions. (9 Hours)




Registrar
St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai-600 054

UNIT V CORPORATE GOVERNANCE

Corporate Governance - SEBI Guidelines- Corporate Disasters and Ethics-Corporate Social Responsibility- Stakeholders and Ethics- Ethics, Managers and Professionalism.

(9 Hours)

COURSE OUTCOME :

CO1 Apply time-value-of-money techniques to the valuation of bonds and common and preferred stock.

CO2 Estimate the relevant cash flows and the appropriate discount rates in making capital budgeting decisions.

CO3 Examine the factors that drive a company's need for external financing and for determining the optimal mix of debt and equity financing.

CO4 Analyze the relationship between risk and return in the evaluation of investment opportunities.

CO5 Brief outline on the guidelines of SEBI

REFERENCES :

1. Richard A. Brealey, Stewart C. Myers and Mohanthy, Principles of Corporate Finance, Tata McGraw Hill, 9th Edition, 2011
2. I.M. Pandey, Financial Management, Vikas Publishing House Pvt., Ltd., 12th Edition, 2012.
3. Brigham and Ehrhardt, Corporate Finance - A focused Approach, Cengage Learning, 2nd Edition, 2011.
4. M.Y Khan, Indian Financial System, Tata McGraw Hill, 6th Edition, 2011
5. Smart, Megginson, and Gitman, Corporate Finance, 2nd Edition, 2011.
6. Krishnamurthy and Viswanathan, Advanced Corporate Finance, PHI Learning, 2011.
7. Website of SEBI
8. Besley, Brigham, Parasuraman, Corporate Finance, Cengage Learning, 2015
9. Michael C. Ehrhardt, Eugene F. Brigham, Corporate Finance – A focused approach, Cengage Learning, 2011.
10. Madura, International Corporate Finance, 10th edition, Cengage Learning, 2014




Registrar

St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai-600 054

SUBJECT CODE	SUBJECT TITLE	L	T	P	TOTAL LTP	C
AMBT2931	STRATEGIC INVESTMENT AND FINANCING DECISIONS	3	0	0	3	3

AMBT2931- STRATEGIC INVESTMENT AND FINANCING DECISIONS

OBJECTIVE :

- To acquaint the students with concepts of Financial management from strategic perspective and
- To familiarize various Techniques and Models of Strategic Financial Management.

UNIT I INVESTMENT DECISIONS

Project Investment Management Vs Project Management – Introduction to profitable projects – evaluation of Investment opportunities – Investment decisions under conditions of uncertainty – Risk analysis in Investment decision – Types of investments and disinvestments.

(9 Hours)

UNIT II CRITICAL ANALYSIS OF APPRAISAL TECHNIQUES

Significance of Information and data bank in project selections – Investment decisions under capital constraints – capital rationing, Portfolio – Portfolio risk and diversified projects.

(9 Hours)

III STRATEGIC ANALYSIS OF SELECTED INVESTMENT DECISIONS

Lease financing – Lease Vs Buy decision – Hire Purchase and installment decision – Hire Purchase Vs Lease Decision – Mergers and acquisition – Cash Vs Equity for mergers.

(9 Hours)

UNIT IV FINANCING DECISIONS

Capital Structure – Capital structure theories – Capital structure Planning in Practice. **(9 Hours)**

UNIT V FINANCIAL DISTRESS

Consequences, Issues, Bankruptcy, Settlements, reorganization and Liquidation in bankruptcy.

(9 Hours)



G. K.
Registrar

St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai-600 054

COURSE OUTCOME :

- CO1** Have a good understanding of all key concepts in the corporate finance area.
- CO2** Understanding the financial problems faced by the firm today, their impact on other aspects of the firm's activities, and how to analyze and solve these problems.
- CO3** Conduct discounted cash flow calculations, including net present value, internal rate of return, and modified internal rate of return.
- CO4** Possess good knowledge in techniques for making strategic investment decision and tackling financial distress
- CO 5** To have a detailed understanding on strategic analysis of selected investment decisions

REFERENCES:

1. Prasanna Chandra, Financial Management, Tata McGraw Hill, 9th Edition, 2012.
2. Prasanna Chandra, Projects : Planning, Analysis, Financing Implementation and Review, TMH, New Delhi, 2011.
3. Bodie, Kane, Marcus: Investment, Tata McGraw Hill, New Delhi, 2010.
4. Brigham E. F & Houston J.F. Financial Management, Thomson Publications, 9 th edition, 2010.
5. M. Pandey, Financial Management, Vikas Publishing House, 10th edition, 2010.
6. M. Y. Khan and P. K. Jain, Financial Management Text and Problems, Tata McGraw Hill Publishing Co, 2011.
7. Website of IDBI Related to Project Finance.



Lak
Registrar

St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai-600 054

AMBT2969 - ENTREPRENUERIAL BUSINESS ENVIRONMENT

SUBJECT CODE	SUBJECT TITLE	L	T	P	TOTAL LTP	C
AMBT2969	ENTREPRENUERIAL BUSINESS ENVIRONMENT	3	0	0	3	3

Objective: The course helps the student to understand the meaning, nature and the existing business environment available for students who desire to take entrepreneurship in their life. It also helps to build necessary competencies, support services, the know-how and skills in various functional areas of management.

Unit – I: Introduction to Entrepreneurship: Entrepreneur and Entrepreneurship – Entrepreneurship as a Career – Roles and Functions of an Entrepreneur – Innovation, Risk and Uncertainty – An Imitating Entrepreneur – Small Business – Types - Role, Problems and Challenges of a Small Business – Entrepreneurial Competencies, Motivation, Performance and Rewards – Opportunities in Entrepreneurship and Idea Generation – Feasibility Analysis and Creation of Business Plan. (9 hrs)

Unit – II: Constitutional Support and Framework for Entrepreneurship: Institutions– All India, State Level, and Fund-Based – Supporting Policies of Entrepreneurship – Industrial Policy – Fiscal Incentives – Measures for Promotion and Development of Entrepreneurs. (9 hrs)

Unit – III: Production, Quality and Growth: Managerial Roles in Entrepreneurship –Plant Location, Layout – Types and Factors influencing Layout – Production Management– Manufacturing Process Production Planning and Control – Quality Control and Productivity – Growth Strategies for Entrepreneurs. (9 hrs)

Unit – IV: Accounting and Finance for Entrepreneurs: Basics of Book Keeping – Double Entry –Journal – Ledger – Trial Balance – Cash Book, Pass Book and Bank Reconciliation Statement – Profit Ascertainment and Analysis of Financial Statements – Lease Financing, Hire-Purchase and Factoring (Business Finance). (9 hrs)

Unit – V: Marketing Environment for Entrepreneurs: Basic Concepts of Marketing – Research, Segmentation, and Strategies – Product Life Cycle – Problems and Challenges of Small Scale Units – Promotion – Factors – Advertising – Personal Selling. (9 hrs)



[Signature]
Registrar
St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai - 600 054

AEOT3601	GENDER, CULTURE AND DEVELOPMENT STUDIES	L	T	P	C
		4	0	0	3

Course Objectives:

1. This course enables the students to understand the concept of Gender and Development in global and Indian scenario.
2. To understand Gender related polices, programmes ,role of NGOs in gender development ,women development programmes and Networking and advocacy of the subject concerned.

Unit 1: Introduction

Conceptual Analysis of Development - Theoretical Perspectives of Gender and Development - Measures of Development; HDI, GDI - Gender Disparity: Global and Indian Scenario

Unit 2: Gender Development

Gender Development: National Policies, Programs and Role of NGO's - Feminist Standpoint of Development Policy - Gender Analysis of Development Policy - Critical Review of Women Development Programs in India - Role of NGOs – Development Initiatives - Role of Women's Organizations –Mobilizing, Networking & Advocacy

Unit 3: Unorganized Sector

Globalization and its Impact on Gender - Concentration of Women in Informal Sector and Feminization of Occupations - Working Conditions in Unorganized Sector - Gender and Wage Differentials - Working conditions in unorganised sector - Issues of wage discrimination and exploitation

Unit 4: Gender and Economy

Segmented Labour Market and Occupational Segregation - Gender Issues in Informal Sector - Gender Inequality in Labour Market - Gendered jobs and Social Inequality - Sex Segregation at Work Place

Unit 5: Women's Studies and Gender Studies

From Women's Studies to Gender Studies: A Paradigm Shift - Women's Studies v/s Gender Studies - Changing Studies on Men and Masculinities

Book References:

1. Women , Gender and crime – Stacy L.Mallicoat
2. The Social life of gender – Rake Ray, Jennifer Carlson
3. Key concepts in gender studies- Jane pilcher, imelder, whelehan
4. Gender and society in India –R.Indira
5. Women,culture and Development :A Study of Human capabilities –Jonathan Glover

Course Outcomes:

1. Understand gender and development in India and global contacts.
2. To know the government policies, programmes and women's organisation in mobilisations and networking the gender development.
3. To deliver the outcome relating a globalization and its impact on gender related issues , especially in different sectors(agricultural, industry and services) of the economy.
4. To know widely on gender and economy in terms of:
 - a) Segmented labour market and occupational segregation and
 - b) Gender inequality in labour market.
5. To understand how women's studies in particular development gender equality in the present changing circumstances.



Gate
Registrar
St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai - 600 054

616UBBT01	BUSINESS ENVIRONMENT	L	T	P	C
		5	0	0	5

616UBBT01 - BUSINESS ENVIRONMENT

Course Objectives:

- The expected outcome after learning this course is that the student will be able to:
- Understand the various environment, culture and society.
- To know the differences between the business and Government.
- Contextualize the concepts of public sector in India.

UNIT I

The concept of Business Environment -Its nature and significance -Brief overview of political -Cultural -Legal -Economic and social environments and their impact on business and strategic decisions.

UNIT II

Political Environment -Government and Business relationship in India.

UNIT III

Social environment -Cultural heritage -Social attitudes -Castes and communities -Joint family systems -linguistic and religious groups -Types of social organization.

UNIT IV

Economic Environment -Economic systems and their impact of business -Fiscal deficit -Plan investment -Five Year Planning.

UNIT V

Financial Environment -Financial system -Commercial bank Financial Institutions -RBI Stock Exchange -IDBI -Non Banking Financial Companies NBFCs .



(Handwritten Signature)
 Registrar
 St. Peter's Institute of Higher Education and Research
 (Deemed to be University U/S 3 of the UGC Act, 1956)
 Avadi, Chennai-600 054

RECOMMENDED BOOKS:

1. Francis Cherunilam, 2000, Business environment, Himalaya Publishing House, 11th Revised Edition, India.
2. Dr.S.Sankaran , Business Environment, Margham Publications.
3. K Aswathappa , 1997, Essentials of Business Environment, Himalaya Publishing House, 6th Edition, India.
4. Joshi Rosy Kapoor Sangam, Business Environment, Kalyani Publishers, Ludhiana

COURSE OUTCOMES

- CO1** Demonstrate and develop conceptual framework of business environment by performing environment analysis for the organization
- CO2** Analyse the economic environment for strategic decision making and predict its impact in business
- CO3** Evaluate political and legal environment in India and its influence in managerial decisions.
- CO4** Understand the socio cultural environment and technological environment and its influence on the business to create, evaluate and assess a range of business options.
- CO5** Determine the impact of global environment and globalization to Indian Business and understand the challenges of international business and foreign capital in Indian business.



Lak
Registrar

St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai-600 054



St.PETER'S INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Deemed to be University U/S 3 of the UGC Act, 1956)
AVADI, Chennai – 600054.TamilNadu.

Phone:044-26558080-84
E-mail:registrar@spiher.ac.in
Website:www.spiher.ac.in

IGNITE • INSPIRE • INNOVATE

NEW COURSES FOR THE ACADEMIC YEAR 2021-2022

BACHELOR OF BUSINESS ADMINISTRATION

S.No	Programme Code	Programme Name	Course Code	Name of the Course
1	CMU	Bachelor of Business Administration	AMAT1628	OPERATIONS RESEARCH
2	BAU	Bachelor of Business Administration	ABAT2606	MARKETING MANAGEMENT
3	BAU	Bachelor of Business Administration	ABAT2607	MANAGEMENT ACCOUNTING
4	BAU	Bachelor of Business Administration	ABAT2608	BUSINESS ENVIRONMENT
5	BAU	Bachelor of Business Administration	ABAP2609	INTERNSHIP- II
6	BAU	Bachelor of Business Administration	ABAT2610	HUMAN RESOURCE MANAGEMENT
7	BAU	Bachelor of Business Administration	ABAT2611	ORGANISATIONAL BEHAVIOUR
8	BAU	Bachelor of Business Administration	ABAT2612	FINANCIAL SERVICES
9	BAU	Bachelor of Business Administration	ABAP2613	INTERNSHIP- III
10	BAU	Bachelor of Business Administration	AITT3119	PRACTICAL APPROACH TO DATA MINING AND ANALYTICS
11	BAU	Bachelor of Business Administration	AHMT4103	WORK ETHICS, CORPORATE SOCIAL RESPONSIBILITY AND GOVERNANCE
12	BAU	Bachelor of Business Administration	AHMT4102	STATE,NATION BUILDING AND POLITICS
13	BAU	Bachelor of Business Administration	AEOT3101	GENDER, CULTURE AND DEVELOPMENT STUDIES



Registrar

St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai-600 054

HEAD OF DEPARTMENT
School of Commerce &
Management Studies
SPIHER, Chennai

St. PETER'S INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Deemed to be University U/S 3 of the UGC Act, 1956)
AVADI, CHENNAI – 600 054.

**MINUTES OF THE 11th MEETING OF THE BOARD OF STUDIES IN
CHEMISTRY**

Held on 8th September, 2021

Members Present

- | | |
|---|-----------------|
| (1) Dr. Sayeeda Sultana, Professor & Head | Chairperson |
| (2) Dr. S. Ramabadran, Professor | Internal Member |
| (3) Dr. S. Dhandayuthapani, Associate Prof., | Internal Member |
| (4) Dr. M. Priya, Assistant Professor | Internal Member |
| (5) Ms. P. Shyamalavathy, Assistant Professor | Internal Member |
| (6) Dr. U.P. Senthil Kumar, Senior Vice President
R&D Centre, Orchid Chemicals and
Pharmaceuticals Ltd., 476/14, Old
Mahabalipuram Road, Chennai | External Member |
| (7) Dr. Helan P Kavitha, M.Sc.,PhD., Professor & Head,
Department of Chemistry, SRM Institute of Science
and Technology, Ramapuram, Chennai | External Member |

11.1	Considered the minutes of the 10 th meeting of Board of Studies in Chemistry held on 23.02.2021. RESOLVED that the minutes of the 10 th meeting of Board of Studies in Chemistry held on 23.02.2021 be confirmed.
11.2	Reviewed the syllabi of Chemistry prescribed for Engineering and Technology programmes under the Regulations 2018. RESOLVED that the syllabi of Chemistry prescribed for Engineering and Technology programmes under the Regulations 2018 be continued
11.3	Reviewed the syllabi of Chemistry prescribed for Engineering and Technology programmes under the Regulations 2020. RESOLVED that the syllabi of Chemistry prescribed for Engineering and Technology programmes under the Regulations 2020 be continued
11.4	Reviewed the Regulation & Syllabi of B.Sc Chemistry programme under the Regulations 2018. RESOLVED that the Regulation & Syllabi of B.Sc Chemistry programme under the Regulations 2018 be continued.
11.5	Reviewed the Regulation & Syllabi of B.Sc Chemistry programme under the Regulations 2020. RESOLVED that the Regulation & Syllabi of B.Sc Chemistry programme under the Regulations 2020 be continue with end assessment of 100 marks for each of Soft Skills I-V. (Semester II-VI) and extension activity (Semcster VI)- Appendix I and II.



Handwritten signature
Registrar

St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai - 600 054

11.6	Reviewed the Regulation & Syllabi of I and II semester of M.Sc Chemistry programme under the Regulations 2019. RESOLVED that the Regulation & Syllabi of I and II semester of M.Sc Chemistry programme under the Regulations 2019 be continued.
11.7	Reviewed and considered the curriculum feedback analysis and action taken report collected from stake holders. NOTED the curriculum feedback analysis and action taken report collected from stake holders be included in the appropriate place in the syllabi. (Appendix -III)

Date:08.09.2021

Sayed Sultan
Chairperson
DR. SAYEEDA SULTANA
PROFESSOR AND HEAD
DEPARTMENT OF CHEMISTRY
St. Peter's Institute of Higher Education and Research
(Deemed to be University, U/S 3 of the UGC Act. 1956)
Avadi, Chennai - 600 054

Santhosh
Registrar

St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act. 1956)
Avadi, Chennai - 600 054




St. Peter's Institute of Higher Education and Research
Avadi, Chennai -600 054

Regulation 2020- Common to all UG -Arts , Science & Management Studies Programme

Semester/ Year	Subject Code	Subject Name	Contents
II /I	ASSL1601	Soft skills –I	Personality Skills: 1. Self confidence 2. Self-disclosure 3. Dress code 4. Body Language
III/II	ASSL2602	Soft skills –II	Communication Skills: 1. Listening 2. Speaking 3. Reading 4. Writing and Different Modes of Writing 5. Digital Literacy 6. Effective Use of Social Media 7. Non-Verbal Communication
IV/II	ASSL2603	Soft skills – III	Universal Human Values: 1. Love and Compassion 2. Truth 3. Non-Violence 4. Righteousness 5. Peace 6. Service 7. Renunciation (Sacrifice) Tyag
V /III	ASSL3604	Soft skills – IV	Professional Skills A. Career Skills 1. Resume Skills 2. Interview Skills 3. Group Discussion Skills 4. Exploring Career Opportunities Skills B. Team Skills 1. Presentation Skills 2. Trust and Collaboration 3. Listening as a Team Skill 4. Brainstorming 5. Social and Cultural Etiquettes 6. Internal Communication




 Registrar
 St. Peter's Institute of Higher Education and Research
 (Deemed to be University U/S 3 of the UGC Act. 1956)
 Avadi, Chennai -600 054

VI Semester

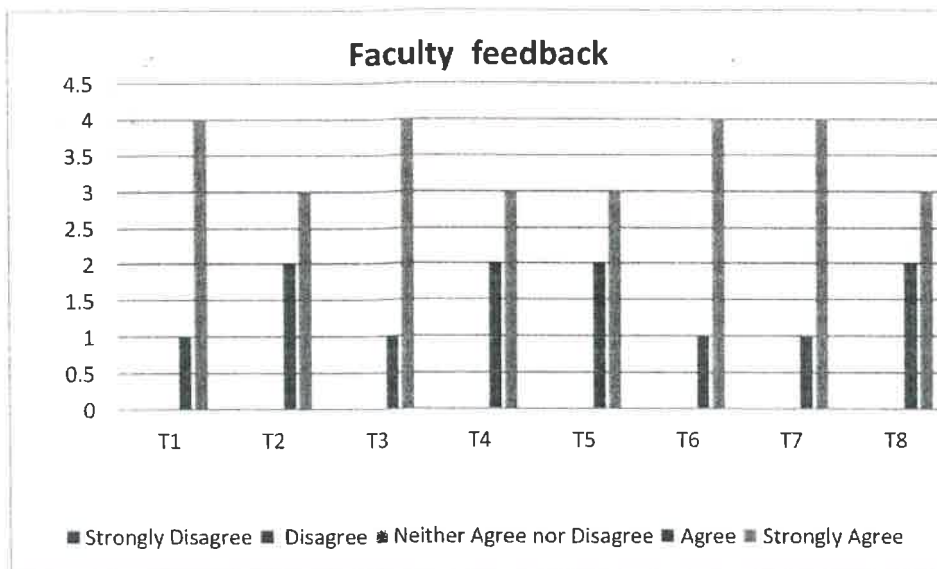
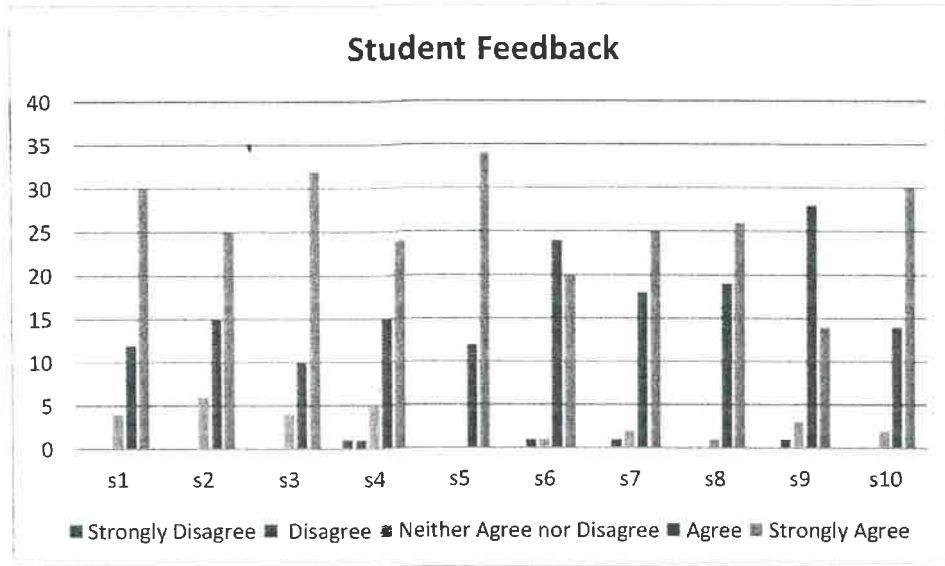
Course Code	Course Title	L T P C
AEAL3601	Extension Activity	0 0 0 1
Prerequisites :		
Course Objectives:		
<ol style="list-style-type: none"> 1. To make the students to be competent in community life and to render them fit for the challenges of their personal and professional lives. 2. To provide a practical and vocational orientation 3. To provide extra-curricular opportunities that facilitates maximum student- teacher interaction in the form of sports and games, clubs and societies, cultural and literary activities. 4. To strengthen the residential system, providing maximum opportunities for out of the class interaction 		
<ul style="list-style-type: none"> • A candidate shall be awarded a maximum of 1 Credit for Compulsory Extension Service in Sixth semester provided the student have to enrol in any NSS /NCC/ NSO (Sports & Games) Rotract/ Youth Red crossor any other service organizations in the Institution in the first yearand active participation in any semesterhave to be made as a report and to be submitted to the department in the Sixth Semester 		
Expected Course Outcomes:		
<p>CO1: Students will be able to make education more relevant to the present situation to meet the felt needs of the communities and supplement the education of Institution by bringing them face to face with the community situation.</p> <p>CO2:Students will be able to play their due roles in the implementation of various developmentprogrammes by planning and executing development projects, which not only helps in creating durable community assets in rural areas and slums but also result in improvement of the condition of weaker sections of the communities.</p> <p>CO3: Students will be able to work along with the adults in rural areas, thereby developing their character, social consciousness and commitment, discipline and healthy and helpful attitude towards the community.</p> <p>CO4: Students will be able toemphasize the dignity of labour and self-help and the need for combining physical work with intellectual pursuits.</p> <p>CO5:Students will be able toparticipate enthusiastically in the process of national development, and promote National integration through democratic living and cooperative action</p>		




 Registrar
 St. Peter's Institute of Higher Education and Research
 (Deemed to be University U/S 3 of the UGC Act. 1956)
 Avadi, Chennai - 600 054

Appendix III

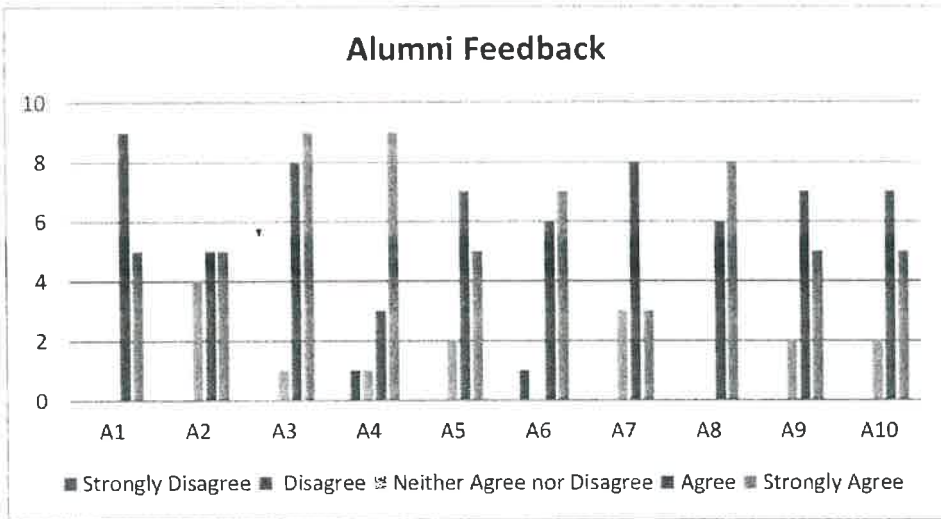
FEEDBACK ANALYSIS (2020-21)



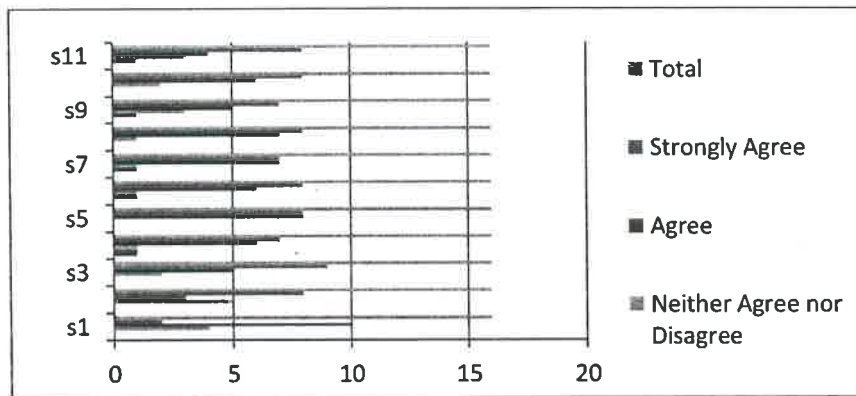
[Handwritten Signature]
Registrar

St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act. 1956)
Avadi, Chennai-600 054

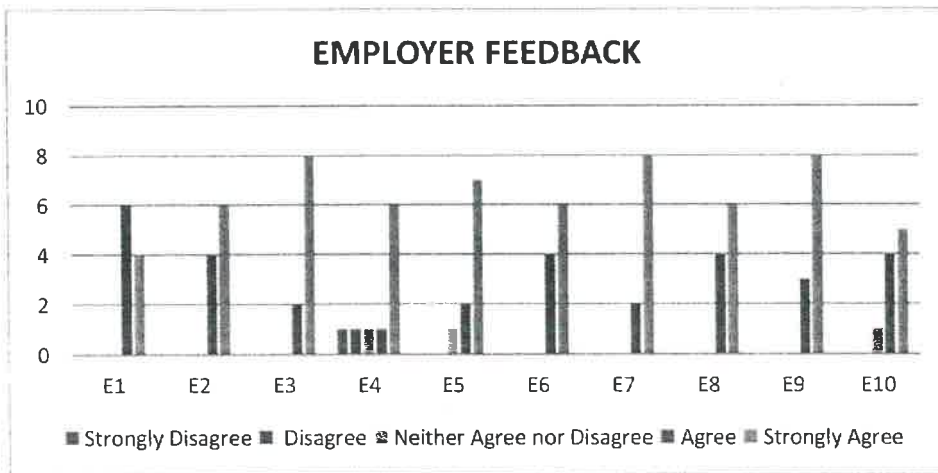
Alumni Feedback



Parents Feedback



EMPLOYER FEEDBACK



Date:08.09.2021



[Signature]
Registrar

St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act. 1956)
Avadi, Chennai - 600 054

[Signature]
Dr. SAYEEDA SULTANA
Chairperson
PROFESSOR AND HEAD
DEPARTMENT OF CHEMISTRY
St. Peter's Institute of Higher Education and Research
Deemed to be University, U/S 3 of the UGC Act. 1956
Avadi, Chennai - 600 054

St. PETER'S UNIVERSITY

St. PETER'S INSTITUTE OF HIGHER EDUCATION AND RESEARCH

(Declared under Section 3 of the UGC Act. 1956)
AVADI, CHENNAI - 600 054.

MINUTES OF THE 23rd MEETING OF THE BOARD OF STUDIES IN COMPUTER SCIENCE & APPLICATIONS

Held on 06.09.2021

Members Present

S.No	Name	Designation	Member	Signature
1.	Dr. R.Latha	Professor & Head	Chairperson	
2.	Dr. D. Kavitha	Assoc. Professor	Internal Member	
3.	Mrs. S. Brindha	Assoc. Professor	Internal Member	
4.	Mr. M.C. Babu	Assoc. Professor	Internal Member	
5.	Mrs. R. Subhashni	Assistant Professor	Internal Member	
6.	Dr. S. Sasikala	Professor	External Member	
7.	Mr. M.E. Thyagarajan	Co-Founder of Radiare software solutions, Ch.	External Member	




Registrar

St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai-600 054.


Chairperson

23.1	<p>Considered the minutes of the 22nd meeting of Board of Studies in Computer Applications and Computer Science held on 25.02.2021.</p> <p>RESOLVED that the minutes of the 18th meeting of Board of Studies in Computer Applications held on 13.03.2019 to be confirmed</p>
23.2	<p>Considered the provision for the students of B.CA and B.Sc(CS) to have private study for the Non – Tamil and Non –English languages.</p> <p>RESOLVED that the the provision for the students of B.CA and B.Sc(CS), to have private study for the Non – Tamil and Non –English languages be approved.</p>
23.3	<p>Reviewed the Regulation & Syllabi of B.C.A and B.Sc(CS) programme under the Regulations 2020 with Choice Based Credit System (CBCS).</p> <p>RESOLVED that the Syllabi of B.C.A B.C.A and B.Sc(CS) programme under the Regulations 2020 with Choice Based Credit System (CBCS) to be continued.</p>
23.4	<p>Reviewed the Syllabi and course structure of M.Sc(CS) programmes under the Regulations 2020 with Choice Based Credit System (CBCS).</p> <p>RESOLVED that the Syllabi and course structure of M.Sc(CS) programmes under the Regulations 2020 with Choice Based Credit System (CBCS) be continued taking into consideration of the suggestions and remarks given by the members to include following new courses. (Appendix - I)</p>
23.5	<p>Reviewed the curricula developed having relevance to the local/national/regional/global developmental needs with learning objectives including programme outcomes, program specific outcomes and course outcomes of all the programmes.</p> <p>RESOLVED that the syllabi of B.C.A programme under the Regulations 2020,B.Sc(CS) progrmmme Under the Regulations 2020 and M.Sc(CS) programme under the Regulations 2020 developed having relevance to the local/national/regional/global developmental needs with learning objectives including programme outcomes, program specific outcomes and course outcomes of all the programmes be approved.</p>
23.6	<p>Considered to include courses having focus on employability/ entrepreneurship /skill development in the syllabi of B.C.A under the Regulations 2020, B.Sc(CS) under the Regulations 2020, M.Sc(CS) under the Regulations 2020.</p> <p>RESOLVED that the courses having focus on employability/ entrepreneurship /skill development year wise in the syllabi of B.C.A, B.Sc(CS),M.Sc(CS) under the Regulations 2020 to be approved.</p>





Registrar

St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)

Chennai-600 054.

23.7	<p>Considered to include value added courses imparting transferable and life skills offered beyond the curriculum in the syllabi of BC.A, B.Sc(CS), M.Sc(CS).</p> <p>RESOLVED that the value added courses imparting transferable and life skills offered beyond the curriculum such as course on "Office Automation" be approved for the upcoming semester (2021-2022 Odd semester).</p>
23.8	<p>Reviewed and considered the curriculum feedback analysis and action taken report based on the suggestions given by the stake holders.</p> <p>Resolved that the curriculum feedback analysis and action taken report based on the suggestions given by the stake holders to be approved. (Appendix - III)</p>

Date: 06.09.2021

Chairperson



Registrar

St. Peter's Institute of Higher Education and Research
 (Deemed to be University U/S 3 of the UGC Act, 1956)
 Avadi, Chennai-600 054.

St. PETER'S INSTITUTE OF HIGHER EDUCATION AND RESEARCH

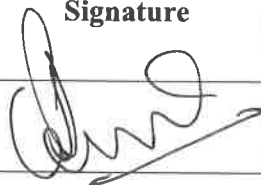

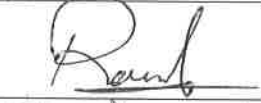

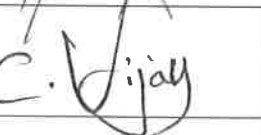
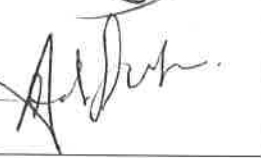
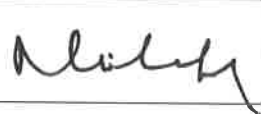
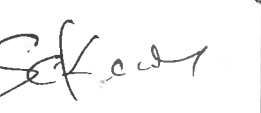
(Deemed to be University U/S 3 of the UGC Act, 1956)

AVADI, CHENNAI – 600 054.

**MINUTES OF THE 11th MEETING OF THE BOARD OF STUDIES IN
DEPARTMENT OF COMMERCE**

Held on 13-09-2021

Members Present

S. No	Name	Designation	Member	Signature
1	Dr.S. Panneer Selvam	Professor & Head	Chairman	
2	Dr. A.Manorselvi	Associate Professor	Member	
3	Dr. K. Ramesh	Associate Professor	Member	
4	Dr. S. Smillee Bose	Associate Professor	Member	
5	Dr.C.Vijai	Assistant Professor	Member	
6	Dr. Arul Suresh	Associate Professor, Department of Commerce, Loyola College	Academic Expert Member	
7	Mr. Michel Wagner	Vice President, Miles Foundation	Industry Expert Member	
8	Dr. K. Sekar	Manager, HR, KMF Automotive India Private Ltd., Thiruvallur	Industry Expert Member	


Chairman



Dr.S.PANNEERSELVAM

M.Com, MSA, M.Phil., Ph.D
HOD / Commerce

St. Peter's Institute of Higher Education & Research
St. Peter's University, Chennai-600 054.


Registrar

St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)

Avadi, Chennai-600 054

- 11.1 Considered the minutes of the 10th meeting of Board of Studies in B.Com.(Commerce), B.Com (Corporate Secretary ship) B.Com (Accounting & Finance) and B.Com(Bank Management) under the Regulations 2020 with Choice Based Credit System (CBCS) held on 26.02.2021.

RESOLVED that the minutes of the 10th meeting of Board of Studies in B.Com.(Commerce), B.Com (Corporate Secretary ship) B.Com (Accounting & Finance) and B.Com(Bank Management) held on 26.02.2021 be confirmed.

- 11.2 Reviewed the Regulation and Syllabi of B.Com.(Commerce), B.Com (Corporate Secretary ship) B.Com (Accounting & Finance) and B.Com(Bank Management) under the Regulations 2026 & 2020.

RESOLVED that the Regulation and Syllabi of B.Com.(Commerce), B.Com (Corporate Secretary ship) B.Com (Accounting & Finance) and B.Com(Bank Management) under the Regulations 2016 & 2020 with Choice based credit system (CBCS) to be continued.

- 11.3 Reviewed the Regulation and Syllabi of all semester and IV semester of B.Com.(Commerce), all semester and IV semester of B.Com (Corporate Secretary ship), IV th semester B.Com (Accounting & Finance) and VI semester of B.Com(Bank Management) under the Regulations 2016 & 2020 with choice based credit system (CBCS).

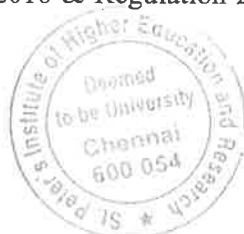
RESOLVED that the Regulation and Syllabi of all semester and IV semester of B.Com.(Commerce), all semester and IV semester of B.Com (Corporate Secretary ship), IV th semester B.Com (Accounting & Finance) and VI semester of B.Com(Bank Management) under the Regulations 2016 & 2020 with choice based credit system (CBCS) to be approved.

- 11.4 Considered the Regulation and Syllabi of M.Com programme from the batch of students to be admitted from 2021-22 under the Regulations 2016.

RESOLVED that the Regulation and Syllabi of M.Com programme from the batch of students to be admitted from 2021-22 under the Regulations 2016 to be continued.

- 11.5 Considered to include courses having focus on employability/ entrepreneurship /skill development in the syllabi of B.Com.(Commerce), B.Com (Corporate Secretary ship) B.Com (Accounting & Finance) and B.Com(Bank Management) under the Regulations 2016 & Regulation 2020 and M.Com under the Regulations 2021.

RESOLVED that the courses having focus on employability/ entrepreneurship /skill development year wise in the syllabi of B.Com.(Commerce), B.Com (Corporate Secretary ship) B.Com (Accounting & Finance) and B.Com(Bank Management) under the Regulations 2016 & Regulation 2020 and M.Com under the Regulations 2016 to be approved.




Registrar
St. Peter's Institute of Higher Education and Research
(Deemed to be University) WIS # of the UGC Act, 1956
Avadi, Chennai.-600 054

- 11.6 Reviewed the curricula developed having relevance to the local/national/regional/global developmental needs with learning objectives including programme outcomes, program specific outcomes and course outcomes of all the programmes.

RESOLVED that the syllabi of B.Com.(Commerce), B.Com (Corporate Secretary ship) B.Com (Accounting & Finance) and B.Com(Bank Management) programme under the Regulations 2016 & 2020 and M.Com under the Regulations 2016 developed having relevance to the local/national/regional/global developmental needs with learning objectives including programme outcomes, program specific outcomes and course outcomes of all the programmes be approved

- 11.7 Considered to include value added courses imparting transferable and life skills offered beyond the curriculum in the syllabi of B.Com.(Commerce), B.Com (Corporate Secretary ship) B.Com (Accounting & Finance) and B.Com(Bank Management) under the Regulations 2016 & 2020 and M.Com (communication Systems) under the Regulations 2016.

RESOLVED that the value added courses imparting transferable and life skills offered beyond the curriculum such as course on “Employability Skill Set Training”, Online Trading and Business Trading Analysis, Basics of Marketing and Venture Capital to be approved for the upcoming semester (2021-22 – Even semester)

- 11.8 Reviewed and considered the curriculum feedback analysis and action taken report based on the suggestions given by the stake holders.

Resolved that the curriculum feedback analysis and action taken report based on the suggestions given by the stake holders to be approved. (Appendix – I)

Date: 13.09.2021



Chairman

Dr.S.PANNEERSELVAM

M.Com, MBA, M.Phil., Ph.D

HOD / Commerce

St. Peter's Institute of Higher Education & Research
St. Peter's University, Chennai-600 054.



Registrar

St. Peter's Institute of Higher Education and Research
(Deemed to be University) (U/S) of the UGC Act, 1956
Avadi, Chennai-600 054

St. PETER'S INSTITUTE OF HIGHER EDUCATION AND RESEARCH

(Deemed to be University U/S 3 of the UGC Act, 1956)
AVADI, CHENNAI – 600 054.

**MINUTES OF THE 9th MEETING OF THE BOARD OF STUDIES IN
ECONOMICS**

**Held on 8th September, 2021
Members Present**

- (1) Mrs. R. Anuradha, Asst. Professor & Head - Chairperson
- (2) Dr. M. Sudhakar, Assistant Professor - Internal Member
- (3) Mrs. R. Kanimozhi, Asst. Professor - Internal member
- (4) Dr. J. P Jaideep Associate Professor, - External Member
Dept. of Economics, DG Vaishnav College Chennai.
- (5) Mr. Peter Sahayaraj, - External Member
Director, Jayam Academic, Chennai

9.1	Considered the minutes of the 8 th meeting of the Board of Studies in Economics held on 1 st March 2021. Resolved that the minutes of the 8 th meeting of the Board of Studies in Economics held on 1 st March 2021 be confirmed.
9.2	Reviewed the syllabi of B. A. Economics programme under regulations 2020. Resolved the syllabi of B. A. Economics under regulations 2020 be continued and with the additions of soft skills syllabus and modification of course contents of extension activities from the batch of 2020-21. (Appendix I)
9.3	Reviewed the Syllabi of Economics prescribed for Commerce and Management Studies programmes under the Regulations 2020. RESOLVED the syllabi of Economics prescribed for Commerce and Management Studies programmes under the Regulations 2020 be continued.
9.3	Resolved the syllabi of B. A. Economics under regulations 2020 be continued with the modification of the contents of 61.9UIBET01- extension activity in VI semester from the batch of 2019-20. (Appendix II)

Date: 08.09.2021



Registrar

St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai-600 054
Registrar

Chairperson

Department of Economics
St. Peter's Institute of Higher Education and Research
Avadi, Chennai - 600 054, Tamil Nadu
Ph : 044 - 2655 8080
website : www.stpetersuniversity.org

St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai-600 054.

(Appendix I)

St. PETER'S INSTITUTE OF HIGHER EDUCATION AND RESEARCH(Deemed to be University U/S 3 of the UGC Act, 1956)
AVADI, CHENNAI – 600 054.**SOFT SKILLS SYLLABUS**

SL.NO	YEAR / SEMSTER	COURSE CODE	Course Name
1	I / II	ASSL1601	Soft skills -1
2	II / III	ASSL2602	Soft skills -2
3	II/IV	ASSL2603	Soft skills -3
4	III/V	ASSL3604	Soft skills -4
5	III/VI	ASSL3605	Soft skills -5
6	III/VI	AEAL3601	Extension Activity

9.2 To review the Syllabi of M.A. Economics programme under the Regulations 2020.

RESOLVED the Syllabi of M.A. Economics programme under the Regulations 2020 be continued with the additions of Soft skills syllabus courses from the batch of 2020-21.

9.3 To include self-study topics in Unit – 5 of all courses in B.A. Economics and M.A. Economics Programmes.

S. No	Year / Semester	Course Code	Course Name
1	I / II	ASSL1901	Soft Skills – I
2	II / III	ASSL2902	Soft Skills – II
3	II / IV	ASSL2903	Soft Skills – III



Date: 08.09.2021

[Signature]
Registrar
St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai-600 054.

[Signature]
(R. ANURADHA)
Chairperson

[Signature]
Registrar
St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai-600 054.

Department of Economics
St. Peter's Institute of Higher Education and Research
Avadi, Chennai - 600 054, Tamil Nadu
Ph : 044 - 2655 8080
website : www.stpetersuniversity.org

(Appendix II)

Course Code	Course Title	L	T	P	C
AEAL3601	Extension Activity	0	0	0	1
Prerequisites :					
Course Objectives:					
<ol style="list-style-type: none"> 1. To make the students to be competent in community life and to render them fit for the challenges of their personal and professional lives. 2. To provide a practical and vocational orientation 3. To provide extra-curricular opportunities that facilitates maximum student- teacher interaction in the form of sports and games, clubs and societies, cultural and literary activities. 4. To strengthen the residential system, providing maximum opportunities for out of the class interaction. 					
<ul style="list-style-type: none"> • A candidate shall be awarded a maximum of 1 Credit for Compulsory Extension Service in Sixth semester provided the student have to enroll in any NSS /NCC/ NSO (Sports & Games) Rotract/ Youth Red cross or any other service organizations in the Institution in the first year and active participation in any semester have to be made as a report and to be submitted to the department in the Sixth Semester which will be evaluated for 100 marks. 					
Expected Course Outcomes:					
<p>CO1: Students will be able to make education more relevant to the present situation to meet the felt needs of the communities and supplement the education of Institution by bringing them face to face with the community situation.</p> <p>CO2: Students will be able to play their due roles in the implementation of various development programmes by planning and executing development projects, which not only helps in creating durable community assets in rural areas and slums but also result in improvement of the condition of weaker sections of the communities.</p> <p>CO3: Students will be able to work along with the adults in rural areas, thereby developing their character, social consciousness and commitment, discipline and healthy and helpful attitude towards the community.</p> <p>CO4: Students will be able to emphasize the dignity of labour and self-help and the need for combining physical work with intellectual pursuits.</p> <p>CO5: Students will be able to participate enthusiastically in the process of national development, and promote National integration through democratic living and cooperative action.</p>					

Date: 08.09.2023



Registrar
St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai-600 054.

Registrar

St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai-600 054.

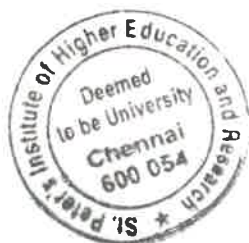
(R. ANURADHA)
Chairperson

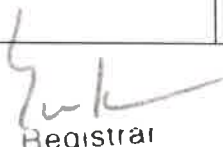
Department of Economics
St. Peter's Institute of Higher Education and Research
Avadi, Chennai - 600 054, Tamil Nadu
Ph : 044 - 2655 8060
website : www.stpetersuniversity.org

St. Peter's Institute of Higher Education and Research
Avadi, Chennai -600 054


Regulations 2020- Common to all UG -Arts, Science & Management Studies Programme

Semester/ Year	Subject Code	Subject Name	Contents
II /I	ASSL1601	Soft skills –I	Personality Skills: <ol style="list-style-type: none"> 1. Self confidence 2. Self-disclosure 3. Dress code 4. Body Language
III/II	ASSL2602	Soft skills –II	Communication Skills: <ol style="list-style-type: none"> 1. Listening 2. Speaking 3. Reading 4. Writing and Different Modes of Writing 5. Digital Literacy 6. Effective Use of Social Media 7. Non-Verbal Communication
IV/II	ASSL2603	Soft skills –III	Universal Human Values: <ol style="list-style-type: none"> 1. Love and Compassion 2. Truth 3. Non-Violence 4. Righteousness 5. Peace 6. Service 7. Renunciation (Sacrifice) Tyag
V /III	ASSL3604	Soft skills –IV	Professional Skills <ol style="list-style-type: none"> A. Career Skills <ol style="list-style-type: none"> 1. Resume Skills 2. Interview Skills 3. Group Discussion Skills 4. Exploring Career Opportunities Skills B. Team Skills <ol style="list-style-type: none"> 1. Presentation Skills 2. Trust and Collaboration 3. Listening as a Team Skill 4. Brainstorming 5. Social and Cultural Etiquettes 6. Internal Communication
VI/III	ASSL3605	Soft skills –V	Leadership and Management Skills <ol style="list-style-type: none"> 1. Leadership Skills 2. Managerial Skills 3. Entrepreneurship 4. Innovative Leadership and Design Thinking 5. Ethics and Integrity




 Registrar
 St. Peter's Institute of Higher Education and Research
 (Deemed to be University U/S 3 of the UGC Act, 1956)
 Avadi, Chennai-600 054




 Registrar
 St. Peter's Institute of Higher Education and Research
 (Deemed to be University U/S 3 of the UGC Act, 1956)
 Avadi, Chennai-600 054.

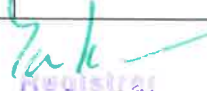
**St. Peter's Institute of Higher Education and Research
Avadi, Chennai -600 054**

Regulations 2020- Common to all PG -Arts, Science & Management Studies Programme

Semester/ Year	Subject Code	Subject Name	Contents
II /I	ASSL1901	Soft skills –I	Personality Skills: <ol style="list-style-type: none"> 1. Self confidence 2. Self-disclosure 3. Dress code 4. Body Language
III/II	ASSL2902	Soft skills –II	Communication Skills: <ol style="list-style-type: none"> 1. Listening 2. Speaking 3. Reading 4. Writing and Different Modes of Writing 5. Digital Literacy 6. Effective Use of Social Media 7. Non-Verbal Communication Universal Human Values: <ol style="list-style-type: none"> 1. Love and Compassion 2. Truth 3. Non-Violence 4. Righteousness 5. Peace 6. Service 7. Renunciation (Sacrifice) Tyag
IV/II	ASSL2903	Soft skills –III	Professional Skills <ol style="list-style-type: none"> A. Career Skills <ol style="list-style-type: none"> 1. Resume Skills 2. Interview Skills 3. Group Discussion Skills 4. Exploring Career Opportunities Skills B. Team Skills <ol style="list-style-type: none"> 7. Presentation Skills 8. Trust and Collaboration 9. Listening as a Team Skill 10. Brainstorming 11. Social and Cultural Etiquettes 12. Internal Communication Leadership and Management Skills <ol style="list-style-type: none"> 1. Leadership Skills 2. Managerial Skills 3. Entrepreneurship 4. Innovative Leadership and Design Thinking 5. Ethics and Integrity

Date: 08.09.2021




 Registrar
 St. Peter's Institute of Higher Education and Research
 (Deemed to be University U/S 3 of the UGC Act, 1956)
 Avadi, Chennai-600 054.

St. Peter's Institute of Higher Education and Research
 (Deemed to be University U/S 3 of the UGC Act, 1956)
 Avadi, Chennai-600 054.


 Chairperson
 Department of Economics
 St. Peter's Institute of Higher Education and Research
 Avadi, Chennai - 600 054, Tamil Nadu
 Ph : 044 - 2655 8080
 website : www.stpetersuniversity.org



St. PETER'S INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Deemed to be University U/S 3 of the UGC Act, 1956)
AVADI, Chennai - 600 054, Tamil Nadu.

Phone: 044-26558080-84
E-mail: registrar@spiher.ac.in
Website: www.spiher.ac.in

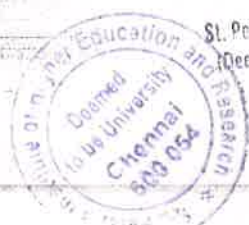
**MINUTES OF THE 11th MEETING OF THE BOARD OF STUDIES IN
MATHEMATICS
HELD ON 07.09.2021**

Members Present

S. No	Name of the Member	Designation	Member
1.	Dr. N. Srinivasan	Professor & Head, Department of Mathematics, SPIHER	Chairman
2.	Dr. M. Kavitha	Associate Professor, Department of Mathematics, SPIHER	Member
3.	Mrs. S. Cynthiya Margaret Indrani	Assistant Professor, Department of Mathematics, SPIHER	Member
4.	Mrs. D.L. Yamini Latha	Assistant Professor, Department of Mathematics, SPIHER	Member
5.	Mr. M.V. Suresh	Assistant Professor, Department of Mathematics, SPIHER	Member
6.	Dr B. Baskaran	Professor & HOD of Mathematics SRMIST, Vadapalani, Chennai.	Academic Expert Member
7.	Dr. B. J. Balamurugan	Assistant Professor (Senior Grade) School of Advanced Sciences, VIT University, Chennai.	Academic Expert Member

Yak

Yak
Registrar

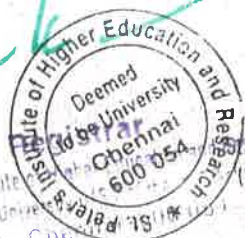


St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai - 600 054

**MINUTES OF THE 11th MEETING OF THE BOARD OF STUDIES IN
MATHEMATICS
HELD ON 07.09.2021**

Members Present

S. No	Name of the Member	Designation	Signature
1.	Dr. N. Srinivasan	Professor & Head, Department of Mathematics, SPIHER	<i>N. Srinivasan</i>
2.	Dr. M. Kavitha	Associate Professor, Department of Mathematics, SPIHER	<i>M. Kavitha</i>
3.	Mrs. S. Cynthiya Margaret Indrani	Assistant Professor, Department of Mathematics, SPIHER	<i>S. Cynthiya</i>
4.	Mrs. D.L. Yamini Latha	Assistant Professor, Department of Mathematics, SPIHER	<i>D.L. Yamini Latha</i>
5.	Mr. M.V. Suresh	Assistant Professor, Department of Mathematics, SPIHER	<i>M.V. Suresh</i> 7/9/21
6.	Dr B. Baskaran	Professor & HOD of Mathematics SRMIST, Vadapalani, Chennai.	<i>B. Baskaran</i>
7.	Dr. B. J. Balamurugan	Assistant Professor (Senior Grade) School of Advanced Sciences, VIT University, Chennai.	<i>B.J. Balamurugan</i> 7/9/21



[Signature]
Registrar

St. Peter's Institute of Higher Education and Research
(Deemed to be University) U/S 3 of the UGC Act, 1956
Avadi, Chennai - 600 054

11.1 Considered the minutes of the 10th meeting of Board of Studies in mathematics held on 01.03.21.

RESOLVED that the minutes of the 10th meeting of Board of Studies in Mathematics held on 01.03.21 be confirmed.

11.2 Reviewed the Regulation & Syllabi of B.Sc. Mathematics programme and curricula developed having relevance to the local/national/regional/global developmental needs with learning objectives including program out comes, program specific outcomes and course outcomes of all the programmes under the Regulations 2020 with Choice Based Credit System (CBCS).

RESOLVED that the Syllabi of B.Sc. Mathematics programme under the Regulations 2020 with Choice Based Credit System (CBCS) to be continued having relevance to the local/national/regional/global developmental needs with learning objectives including program out comes, program specific outcomes and course outcomes of all the programmes under the Regulations 2020 with Choice Based Credit System (CBCS) be approved.

RESOLVED that the Syllabi of B.Sc. Mathematics programme under the Regulation 2020 with Choice Based Credit System (CBCS) to be continued with minor additions of the core papers (**Annexure – D**).

(i) AMATI601-Algebra

(ii)AMAT1602-Differential Calculus from the batch of 2021-2022

11.3 Reviewed the syllabi of Mathematics paper for BCA, BBA, BA. (Economics), B.Com., B.Sc., (Physics, Chemistry, Computer Science, Cyber Security & Aeronautical) under Regulations 2020 with Choice Based Credit System (CBCS).

RESOLVED that the syllabi of Mathematics paper for BCA, BBA, BA(Economics), B.Com, B.Sc (Physics, Chemistry, Computer Science, Cyber Security & Aeronautical) under Regulations 2020 with Choice Based Credit System(CBCS) to be continued.



[Handwritten Signature]
Registrar

St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act. 1956)
Avadi, Chennai - 600 054



[Handwritten Signature]
Registrar
St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act. 1956)
Avadi, Chennai - 600 054

11.4 Reviewed the Regulation & Syllabi of M.Sc (Mathematics) and Curricula developed having relevance to the local/national/regional/global developmental needs with learning objectives including program out comes, program specific outcomes and course outcomes of all the programmes under the Regulations 2020 with Choice Based Credit System (CBCS).

RESOLVED that the Syllabi of M.Sc. Mathematics programme under the Regulation 2020 with Choice Based Credit System (CBCS) to be continued having relevance to the local/national/regional/global developmental needs with learning objectives including program out comes, program specific outcomes and course outcomes of all the programmes under the Regulation 2020 with Choice Based Credit System (CBCS) to be continued with minor modifications of the content of the core paper. Course AMAT2908– Complex Analysis II from the batch of 2020-2021

(Annexure II)

11.5 Reviewed the syllabi of Mathematics for MBA (Statistics for Management and Applied Operations Research) and M.Sc(CS) (Resource Management Technique) under Regulations 2020 with Choice Based Credit System (CBCS).

RESOLVED that the syllabi of Mathematics for MBA (Statistics for Management and Applied Operations Research) and M.Sc(CS) (Resource Management Technique) under Regulations 2020 with Choice Based Credit System(CBCS) to be continued.

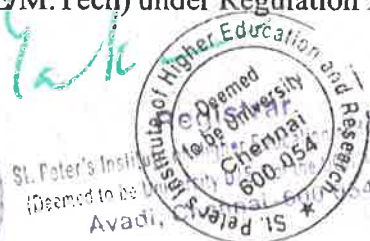
11.6 Reviewed the syllabi of Mathematics prescribed for Engineering and Technology UG Programmes under Regulation 2020 with Choice Based Credit System (CBCS).

RESOLVED that the Syllabi of Mathematics prescribed for Engineering and Technology UG Programmes under Regulation 2020 with Choice Based Credit System (CBCS) be confirmed with minor additions in the syllabus of the courses AMAT1101 – Mathematics – I and AMAT1102 – Mathematics – II from the batch of 2021 – 2022 be continued.

(Annexure III)

11.7 Reviewed the syllabi of Mathematics prescribed for Engineering and Technology PG Programmes (ME/M.Tech) under Regulation 2018 with Choice Based Credit System (CBCS).

RESOLVED that the syllabi of Mathematics prescribed for Engineering and technology PG Programmes (ME/M.Tech) under Regulation 2018 be continued.



Registrar
St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai-600 054

REVIEWED the syllabi of Mathematics prescribed for Engineering and Technology PG Programmes (ME/M.Tech) under Regulation 2021 with effective from the batch of students admitted in 2021 - 2022.

RESOLVED that the syllabi of Mathematics prescribed for Engineering and technology PG Programmes (ME/M.Tech) under Regulation 2021 with effective from the batch of students admitted in 2021 – 2022 to be continued.

11.8 Considered the skill development courses in professional domains and branch specific areas to promote employment and competency among learners/necessary certification courses/Internship training.

Resolved that the skill development courses in professional domains and branch specific areas to promote employment and competency among learners/necessary certification courses/Internship training be continued. Value added courses to be conducted on

(i) Mathematics for Competitive Examinations.

With course duration of 33 hours for developing their skills

(Annexure – IV).

11.9 Reviewed and considered the feedback analysis of curriculum and action taken report collected from the stake holders.

RESOLVED that the curriculum feedback analysis and action taken report collected from the stake holders to be approved. **(Annexure – V)**

Date: 07.9.2021

N. Suresh Kumar
Chairman



[Signature]
Registrar

St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act. 1956)
Avadi, Chennai - 600 054



[Signature]
Registrar
St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act. 1956)
Avadi, Chennai - 600 054

St. Peter's Institute of Higher Education and Research
AVADI, Chennai -600 054

B. Sc Mathematics

AMAT1601	ALGEBRA	L	T	P	C	Total Marks
		6	1	0	6	100

Prerequisites: None

COURSE OBJECTIVES:

- To find the solution of the polynomial equations both in explicit term and in-terms of abstract algebraic structures
- To solve simultaneous equations with determinants
- To apply the concepts of matrix in solving a system of linear equations
- To be familiar with the characteristics roots and vectors
- To be exposed to basic concepts of theory of numbers.

UNIT-1: Theory of Equations

18

Introduction – **Remainder Theorem**-Relation between roots and coefficients – **Sum of the powers of the roots of an equations**-**Newton's Theorem on the sum of the powers of the roots**-Symmetric functions of roots in terms of coefficients - Transformations of equations - Reciprocal equations - increase or decrease the roots of the given equation - Removal of term - Descarte's rule of signs - Approximate solutions of roots of polynomials by Horner's method - Cardan's method of solution of a cubic polynomials.

UNIT-2: Determinants

18

General definition – rule of signs – expansion of determinants – multiplication of determinants – reciprocal of determinants – minors of reciprocal – symmetrical – skew symmetrical determinants – Cramer's rule – consistency of equations.

UNIT-3: Matrices

18

Special type of matrices – scalar multiplication of matrices – **Equality of Matrices - Rank of matrices – Solving simultaneous equations - Symmetric – Skew Symmetric - Hermitian - Skew Hermitian** – multiplication of matrices – inverse of a matrices.

UNIT-4: Characteristics of Equations

18

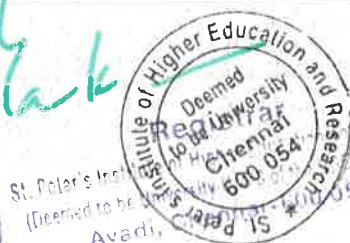
Eigen values - Eigen Vectors - Cayley - Hamilton Theorem - Similar matrices - Orthogonal Matrices – properties - Diagonalization of a matrix.

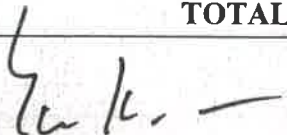
UNIT-5: Theory of Number

18

Prime number; Composite number; decomposition of a composite number as a product of primes uniquely; divisors of a positive integer n; Euler function - Congruence modulo n; highest power of a prime number p contained in n! ; Fermat's and Wilson's theorems.

TOTAL HOURS :90




 Registrar
 St. Peter's Institute of Higher Education and Research
 (Deemed to be University) U/S 3 of the UGC Act, 1956
 Avadi, Chennai-600 054

Annexure V



FEEDBACK ANALYSIS REPORT DEPARTMENT OF MATHEMATICS 2021-2022

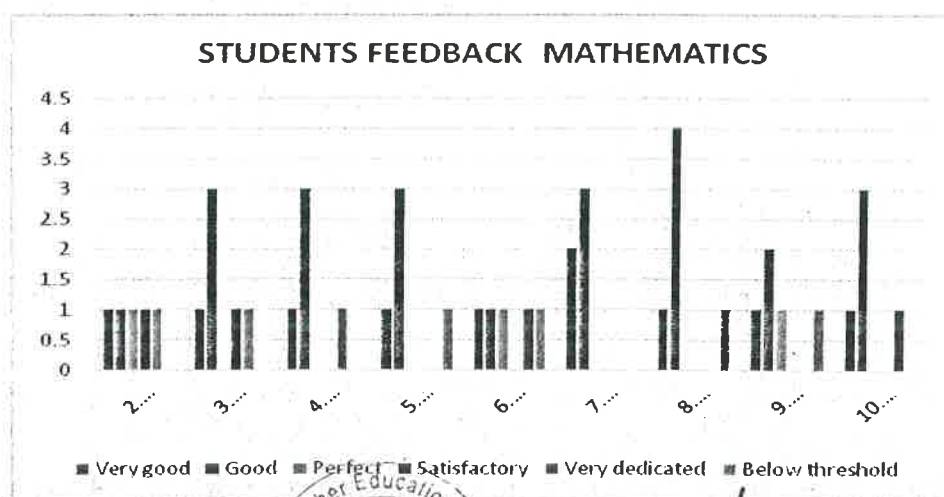
1. ANALYSIS OF STUDENT FEEDBACK

TOTAL NO: 8

RECEIVED:4

Structured feedback on curriculum was collected from the students on the following areas

S1	Institute current Curriculum of Programme is relevant for employability
S2	Curriculum caters the need of industry and helps in building efficiency and effectiveness of organisation.
S3	Current curriculum has application-based courses which cater the needs of industry in terms of knowledge, skills, attitude and innovation.
S4	The curriculum has enrich content which fulfils required orientation human resources.
S5	Current syllabus offers need based and meets to the expectations of industry.
S6	Curriculum helps in building entrepreneurial motives which help to the students for starting their ventures.
S7	Curriculum bridges the gap between Industry & Academic.
S8	Curriculum design is takes in to account the feedback from vide by stakeholders and the Board of Studies is responsive to feedback
S9	The curriculum helps me to acquire skills and competencies along with the necessary knowledge
S10	The curriculum is enriched with courses that are of relevance to interdisciplinary and cross cutting in nature



St. Peter's Institute of Higher Education and Research
 (Deemed to be University U/S 3 of the UGC Act 1956)
 Avadi, Chennai - 600 054

Registrar
 St. Peter's Institute of Higher Education and Research
 (Deemed to be University U/S 3 of the UGC Act 1956)
 Avadi, Chennai - 600 054

COURSE OUTCOMES:

At the end of this course, students will be able to:

CO 1: Apply the knowledge of polynomial equations, irrational roots, Symmetric roots.

CO 2: Understand how matrices and determinants are used as mathematical tool in Quantitative Aptitude.

CO 3: Know how the Matrices, Eigen values and Eigen Vectors Reduce to Diagonalization.

CO 4: Effectively express the concepts and results of numbers

TEXT / REFERENCE BOOKS:

1. Algebra Volume I by T. K. Manicavachagam Pillay, T. Natarajan, K.S. Ganapathy, Viswanathan Publication, 2007.
2. Algebra Volume II by T. K. Manicavachagam Pillay, T. Natarajan, K.S. Ganapathy, Viswanathan Publication 2008.
3. Algebra: by S. Arumugam (New Gama publishing house, Palayamkottai).
4. Matrices by A.R. Vasishtha, A.K. Vasishtha, Krishna prakashan Media private limited, 2015
5. Higher Algebra by, S. Barnard and J.M. Child, Arihant publications, 2016.

Mapping with Programme Outcomes

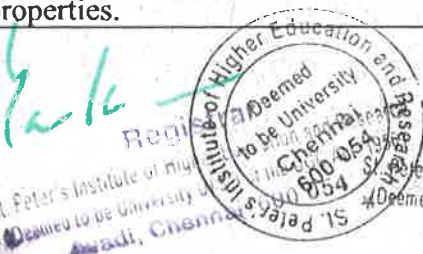
CO's\PO's\PSO's	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	2	2	-	-	2	2	2	-	1	2	2
CO2	2	2	2	-	2	2	1	1	-	2	2
CO3	2	2	-	-	2	1	1	2	-	2	2
CO4	-	2	2	-	1	-	2	-	-	1	1

Strong – 3; Medium – 2; Low – 1.

Course Outcomes

On the successful completion of the course, students will be able to

CO Number	CO Statement	Knowledge Level
CO1	Apply the knowledge of polynomial equations, irrational roots, Symmetric roots.	K1, K2, K3, K5
CO2	Develop the skills in roots of the equations and summation of series.	K1, K2, K3, K4, K5
CO3	Define and work with concepts of various types of matrices.	K1, K2, K3, K4, K5
CO4	Apply the knowledge of real numbers, their operations and basic properties.	K1, K2, K3



Registrar
St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai - 600 054

AMAT1602	DIFFERENTIAL CALCULUS	L	T	P	C	Total Marks
		6	1	0	6	100

Prerequisites: None

COURSE OBJECTIVES:

- To understand the concepts of derivatives and its applications
- To gain the knowledge of Partial differential equations for several variables
- To learn about application of differentiation
- To extend the application of polar coordinates
- To Find the solution of rectilinear asymptotes.

UNIT-1: Differentiation

18

Limits - differentiation - Successive differentiation - n^{th} derivative- standard results in trigonometric - transformation - formation of equations using derivatives - Leibnitz's theorem and its applications.

UNIT-2: Functions of Several Variables

18

Partial derivatives of a function of two functions - Euler's theorems - problems - Total differential of a function - implicit functions - - Maxima and Minima of functions of two variables- Lagrange's method of undetermined multipliers.

UNIT-3: Application of Differentiation

18

Curvature - circle of curvature - radius and centre of curvature - Cartesian and polar co-ordinates for radius of curvature - **Chord of curvature** - evolute and involute - Envelopes - method of finding envelopes -p-r equation.

UNIT-4: Applications of Polar Coordinates

18

Angle between the radius vector and the tangent - slope of the tangent in the polar coordinates - the angle of intersection of two curves in polar coordinates- polar sub tangent and polar sub normal - the length of arc in polar coordinates.

UNIT-5:Asymptotes

18

Definition-Rule - Rectilinear asymptotes - another method for finding asymptotes - asymptotes by inspection - intersection of a curve with an asymptote.

Total Hours:90 Hours

COURSE OUTCOME

At the end of this course, students will be able to:

CO 1:Work with the function represented in various ways and also understand the meaning of derivatives.

CO 2:Exposed the concepts of Partial derivatives and its applications in examining the extremely val of the function.

CO 3:Analyze about Curvature, evolutes and Involutes in terms of derivatives.

CO 4:Calculate the length of an arc of a curve when whose equations are given in parametric and po form.

CO 5:Conceive the concept of asymptotes and obtain their equations and learn about envelopes.



Registrar
St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai - 600 054

TEXT / REFERENCE BOOKS

1. Calculus Vol- 1 by S. Narayanan and T.K. Manicavachagompillay - S. Viswanathan publishers – 2006.
2. A textbook of differential calculus, Ashanakter and sabiha Ahsan, Second edition 2009.
3. Calculus of Finite Differences and Numerical Analysis by Gupta and Malik, Krishna Prakashan Media private Limited, 2014.
4. A textbook of calculus, shanthinarayanan and J.N.Kapoor, S.Chand and co 2014.

Mapping with Programme Outcomes

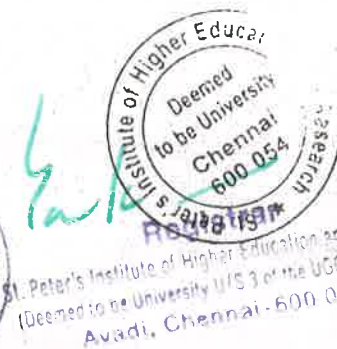
CO's\PO's\PSO's	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	2	2	1	-	2	2	2	-	-	2	1
CO2	2	2	2	-	2	2	1	1	-	2	2
CO3	2	2	1	-	2	1	1	2	-	2	2
CO4	2	1	1	-	2	2	2	-	-	2	2
CO5	2	2	2	1	2	2	2	-	1	2	2

Strong – 3; Medium – 2; Low – 1.

Course Outcomes

On the successful completion of the course, students will be able to

CO Number	CO Statement	Knowledge Level
CO1	Understand the rules of differentiation and computing the derivatives of given functions.	K2, K4, K5
CO2	Uses of Partial derivatives and its applications in examining the extremely values of the function.	K1, K2, K3, K4
CO3	Analyses about Curvature, evolutes and Involutes in terms of derivatives.	K1, K5
CO4	Calculate the length of an arc of a curve when whose equations are given in parametric and polar form	K3, K5
CO5	Conceive the concept of asymptotes and obtain their equations, and learn about envelopes	K2, K5



Registrar
St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai - 600 054

Annexure – II
St. Peter's Institute of Higher Education and Research
AVADI, Chennai -600 054
M. Sc Mathematics

AMAT2908	COMPLEX ANALYSIS – II	L	T	P	C	Total Marks
		6	1	0	6	100

Prerequisites: AMAT2901

COURSE OBJECTIVES:

➤ To study Riemann Theta Function and normal families, Riemann mapping theorem, Conformal mapping of polygons, harmonic functions, elliptic functions and Weierstrass Theory of analytic continuation.

UNIT-I: Riemann Zeta Function and Normal Families: 18

Product development – Extension of $\zeta(s)$ to the whole plane – The zeros of zeta function – Equicontinuity – Normality and compactness – Arzela's theorem – Families of analytic functions – The Classical Definition.

Chapter 5: Sections 2.1 to 2.4, Sections 3.1 and 3.2

Chapter 5: Sections 4.1 to 4.4, Sections 5.1 to 5.5

UNIT-II: Riemann mapping Theorem 18

Statement and Proof – Boundary Behavior – Use of the Reflection Principle. Conformal mappings of polygons: Behavior at an angle Schwarz-Christoffel formula – Mapping of a rectangle.

Chapter 6: Sections 1.1 to 1.3, Sections 2.1 to 2.3.

UNIT-III: Analytic Continuation 18

The Weierstrass Theory – Germs and Sheaves – Sections and Riemann surfaces – Analytic continuation along Arcs – Homotopic curves – The Monodromic Theorem – Branch points.

Chapter 8: Sections 1.1 to 1.7

UNIT-IV: Algebraic Functions – The resultant of two polynomials – Definition and properties of Algebraic functions – Behavior at the critical points - Picard's Theorem – Lacunary points.

18

Chapter 8: Sections 2.1 to 2.3 & 3.1

UNIT-V: Linear Differential Equations -Ordinary points-regular scalar points-solution at infinity-Hyper Geometric Differential Equations-Riemann's point of view.

Chapter 8: Sections 4.1 to 4.5 18

TOTAL HOURS :90



G.K. —
Registrar
 St. Peter's Institute of Higher Education and Research
 (Deemed to be University U/S 3 of the UGC Act, 1956)
 Avadi, Chennai - 600 054

COURSE OUTCOMES

On the successful completion of the course, students will be able to

- CO 1: Understand the zeros of zeta function and Arzela's theorem.
- CO 2: Learn about the Riemann mapping Theorem.
- CO 3: Get the knowledge of Analytic continuations.
- CO 4: To understand about Picard's Theorem.
- CO 5: Get the knowledge of Linear Differential equation

REFERENCE BOOKS:

1. Lars V.Ahlfors, Complex Analysis, (3rd Edition) McGraw Hill Book Company, New York, 2013.
2. H.A. Priestly, Introduction to Complex Analysis, Clarendon Press, Oxford, 2008.
3. T.W Gamelin, Complex Analysis, Springer International Edition, 2006.
4. D.Sarason, Notes on Complex function Theory, Hindustan Book Agency, 2008.

Mapping with Programme Outcomes

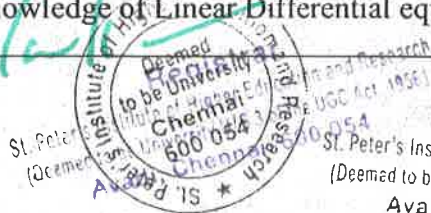
CO's\PO's\PSO's	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2
CO1	2	-	1	2	2	2	-	2	1	2
CO2	1	2	2	2	1	2	2	-	2	2
CO3	-	1	-	1	2	2	-	2	2	1
CO4	2	-	2	2	-	2	-	-	2	2
CO5	1	2	2	-	2	2	-	1	-	2

Strong – 3; Medium – 2; Low – 1.

Course Outcomes

On the successful completion of the course, students will be able to

CO Number	CO Statement	Knowledge Level
CO1	Understand the zeros of zeta function and Arzela's theorem.	K1, K2 ,K3,
CO2	Learn about the Riemann mapping Theorem.	K1, K2,K3,K4
CO3	Get the knowledge of Analytic continuations	K1, K2,K3
CO4	To understand about Picard's Theorem.	K1,K2,K3
CO5	Get the knowledge of Linear Differential equation.	K1,K2,K3



Registrar
St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act. 1956)
Avadi, Chennai - 600 054

(Annexure III)

B.E/B. Tech Programs

AMAT1101	MATHEMATICS – I	L	T	P	C	Total Marks
		3	1	0	4	100

COURSE OBJECTIVES:

- Application of Matrices in problems of Science and Engineering.
- Application of Sequences and Series.
- To apply the concepts of radius of curvature, evolute, envelope and asymptotes.
- To apply the concept of Taylor series, Maxima minima, composite function and Jacobians.
- To gain knowledge in evaluation of Double and triple Integrals and its applications.

UNIT 1 MATRICES

12 Hrs.

Introduction – Rank of Matrix – Solution of a system of Linear Equations - Non Homogenous and Homogenous equations - Symmetric-Skew Symmetric Matrices-Hermitian and Skew Hermitian Matrices- Characteristic equation-Eigen values of a real matrix-Eigen vectors of a real matrix-Properties of Eigen values-Cayley – Hamilton theorem- finding A inverse using Cayley Hamilton theorem- Finding higher powers of A using Cayley – Hamilton theorem-orthogonal reduction of a symmetric matrix to diagonal form-Reduction of Quadratic form to canonical by orthogonal transformations-Orthogonal matrices-Applications of Matrices in Engineering.

UNIT 2 SEQUENCE AND SERIES

12 Hrs.

Sequences – Definition and Examples- Types of Convergence- Series of Positive terms – Test of Convergence- Comparison test – Integral test- D’Alemberts Ratio test- Raabe’s root test- Covergent of Exponential Series- Cauchy’s Root test- Log test- Alternating Series: Leibnitz test- Series of positive and Negative terms- Absolute Convergence- Conditional Convergence- Simple Applications Convergence of series in engineering.

UNIT 3 APPLICATIONS OF DIFFERENTIAL CALCULUS

12 Hrs.

Rolls and Mean Value Theorem-Maxima and Minima of one variable-Radius of Curvature – Cartesian and polar coordinates - Circle of curvature- Applications of Radius of curvature in engineering- Evolute – Involute -Asymptotes - Envelope of standard curves-Evolute as the envelop of normals- Beta Gamma Functions and their Properties.

UNIT 4 DIFFERENTIAL CALCULUS OF SEVERAL VARIABLES

12 Hrs.

Function of two variables – Partial derivatives-Eulers Theorems- Total differentials- Taylor’s expansion with two variables up to third order terms- Maxima and Minima- Constrained Maxima and Minima by Lagrangian Multiplier method- Jacobians - Properties of Jacobians.

UNIT 5 INTEGRAL CALCULUS

12 Hrs.

Evaluation of double integration in Cartesian and polar coordinates-Evaluation of double integral by changing of order of integration-Area as a double integral using Cartesian and polar- - Conversion from Cartesian to polar in double integrals- Triple integration in Cartesian coordinates and its applications.



K.K. Max. 60 Hrs.
Registrar

St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai-600 054

At the end of this course, students will be able to:

- CO1: Know how the Matrices, Eigen values and Eigen Vectors Reduce to Quadratics form.
- CO2: Attain the skills of convergence and divergence of series using different test and apply sequences and Series in the problems.
- CO3: Understand the concepts of envelope and Circle of curvature and apply them in the problems.
- CO4: Obtain the knowledge of Maxima and Minima, Jacobian, and Taylor series.
- CO5: Understand the evaluation of multiple integrals using change of variables and its applications.
- CO6: Develop the canonical form of a quadratic form. Construct evolutes and envelope of family of curves

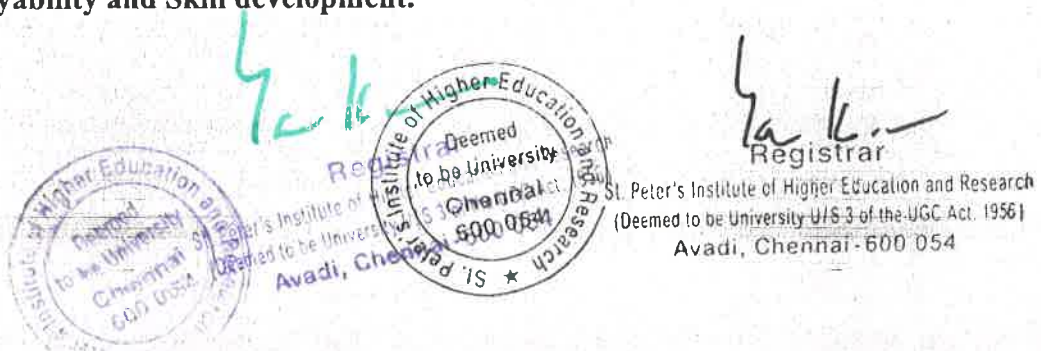
TEXT BOOKS

1. B.S. Grewal, Higher Engineering Mathematics, Khanna Publishers, 36th Edition, 2010.
2. Veerarajan T., Engineering Mathematics for first year, Tata McGraw-Hill, New Delhi, 2008.
3. N.P. Bali and Manish Goyal, A text book of Engineering Mathematics, Laxmi Publications, Reprint, 2008.
4. Erwin kreyszig, Advanced Engineering Mathematics, 9th Edition, John Wiley & Sons, 2006.
5. Dr.M.K.Venkatraman, Engineering Mathematics volume-1, The National Publishing company, 4th Edition.

CO PO Matrices:

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12
CO1	2	2	-	-	-	-	-	-	-	-	-	2
CO2	2	2	-	-	2	-	-	-	-	-	-	2
CO3	2	2	-	-	2	-	-	-	-	-	-	3
CO4	2	2	2	-	-	-	-	-	-	-	-	2
CO5	2	2	2	-	1	-	-	-	-	-	-	1
AVERAGE	2	2	2		1.66							2

Since it is mapped with PO1, PO2, PO3, PO5 and PO12 this subject is considered for Employability and Skill development.



CO No.		
CO1	Know how the Matrices, Eigen values and Eigen Vectors Reduce to Quadratics	K2
CO2	Attain the skills of convergence and divergence of series using different test and apply sequences and Series in the problems.	K5
CO3	Understand the concepts of envelope and Circle of curvature and apply them in the problems.	K3
CO4	Obtain the knowledge of Maxima and Minima, Jacobian, and Taylor series.	K5
CO5	Understand the evaluation of multiple integrals using change of variables and its applications.	K5



Lakshmi
 Registrar
 St. Peter's Institute of Higher Education and Research
 (Deemed to be University U/S 3 of the UGC Act. 1956)
 Avadi, Chennai - 600 054



Lakshmi
 Registrar
 St. Peter's Institute of Higher Education and Research
 (Deemed to be University U/S 3 of the UGC Act. 1956)
 Avadi, Chennai - 600 054

COURSE OBJECTIVES:

- To Apply the concept of Differential Equations in problems of Engineering
- To gain knowledge in evaluation of Line, Surface and Volume Integrals
- To know the techniques of Laplace Transforms and inverse transform and apply them in the problems of Science and Engineering.
- To know the properties of Analytic functions and its applications
- To gain knowledge of evaluation of improper integrals involving complex functions using Residue theorem and apply them in Engineering fields.

UNIT 1 ORDINARY DIFFERENTIAL EQUATIONS**12 Hrs.**

Introduction-Linear equations of second order with constant coefficients-Linear equations of second order variable coefficients- Homogeneous equation of Euler type- Homogeneous equation of Legendre's Type- Homogenous equation of Cauchy's type-Equations reducible to homogeneous form- Variation of parameters- Simultaneous first order with constant coefficient.- Applications of Differential Equation in engineering

UNIT 2 VECTOR CALCULUS**12 Hrs.**

Introduction to vectors – Derivative of a vector function with respect to a scalar -General rules for differentiation (without proof)-Derivative of a constant vector-Derivative of a vector functions in terms of its components-Gradient-divergence- curl – Solenoidal- Irrotational fields- Vector identities (without proof) –Directional derivatives- Line integrals- Surface integrals- Volume Integrals- Green's theorem (without proof)- Gauss divergence theorem (without proof),verification- Stoke's theorems (without proof) –Verification.

UNIT 3 LAPLACE TRANSFORMS**12 Hrs.**

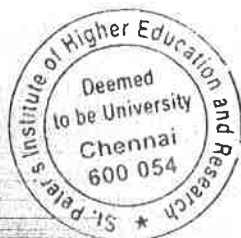
Laplace Transforms of standard functions- Transforms properties- Transforms of Derivatives and Integrals- Initial value and Final value theorems and verification of simple problems- periodic functions - Inverse Laplace transforms using partial fractions- shifting theorem- Convolution theorem- Applications of Laplace transforms for solving linear ordinary differential equations up to second order with constant coefficient - Solution of Integral equation and integral equation involving convolution type- Application of Laplace Transform in engineering.

UNIT 4 ANALYTIC FUNCTIONS**12 Hrs.**

Definition of Analytic Function –Cauchy Riemann equations- Cauchy Riemann equations- Properties of analytic function- Determination of analytic function using – Milne-Thomson's method- Conformal mappings :magnification ,rotation, inversion, reflection- bilinear transformation- Cauchy's integral theorem (without proof)- Cauchy's integral theorem applications.

UNIT 5 COMPLEX INTEGRATION**12 Hrs.**

Cauchy's integral formulae- Taylor's expansions with simple problems- Laurent's expansions with simple problems- Singularities- Types of Poles and Residues- Cauchy's residue theorem - Contour integration :Unit circle.- Contour integration :semicircular..

Max. 60 Hrs.

Lakshmi
Registrar
St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act. 1956)
Avadi, Chennai - 600 054



Lakshmi
Registrar
St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act. 1956)
Avadi, Chennai - 600 054

At the end of this course, students will be able to:

- CO1: Solve the Differential Equations and Its applications in engineering problems.
 CO2: Apply the techniques of vector calculus.
 CO3: Solving ODE Many Engineering problems can be transformed in to problems involving ODE nd integrals. Laplace transforms method and complex analytic methods can be used for solving theorem.
 CO4: Know the fundamentals of complex analytic functions and its properties.
 CO5: Gain knowledge in evaluating improper integrals using Residue theorem.
 CO6: Understand Cauchy's integral formulae and Taylor's expansions with simple problems explain etc.

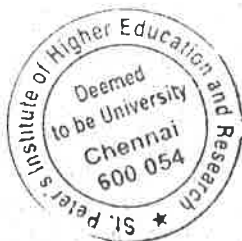
TEXT BOOKS

1. B.S. Grewal, Higher Engineering Mathematics, Khanna Publishers, 36th Edition, 2010.
2. Veerarajan T., Engineering Mathematics for first year, Tata McGraw-Hill, New Delhi,2008.
3. N.P. Bali and Manish Goyal, A text book of Engineering Mathematics, Laxmi Publications, Reprint, 2008.
4. Erwin kreyszig, Advanced Engineering Mathematics, 9th Edition, John Wiley & Sons,2006.
5. Dr.M.K.Venkatraman, Engineering Mathematics volume-2,The National Publishing company,4th Edition

CO PO Matrices:

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12
CO1	2	2	-	-	-	-	-	-	-	-	-	2
CO2	2	2	-	-	2	-	-	-	-	-	-	2
CO3	2	2	-	-	2	-	-	-	-	-	-	3
CO4	2	2	2	-	-	-	-	-	-	-	-	2
CO5	2	2	2	-	1	-	-	-	-	-	-	1
AVERAGE	2	2	2		1.66							2

Since it is mapped with PO1, PO2, PO3, PO5 and PO12 this subject is considered for Employability and Skill development.



Registrar
 St. Peter's Institute of Higher Education and Research
 (Deemed to be University U/S 3 of the UGC Act, 1956)
 Avadi, Chennai - 600 054



Registrar
 St. Peter's Institute of Higher Education and Research
 (Deemed to be University U/S 3 of the UGC Act, 1956)
 Avadi, Chennai - 600 054

No.		
CO1	Solve the Differential Equations and Its applications in Engineering problems	K2
CO2	Apply the techniques of vector calculus	K5
CO3	Solving ODE Many Engineering problems can be transformed in to problems involving ODE and integrals.	K3
CO4	Know the fundamentals of complex analytic functions and its properties	K5
CO5	Gain knowledge in evaluating improper integrals using Residue theorem	K5



h k.
Registrar

St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act. 1956)
Avadi, Chennai - 600 054



h k.

Registrar

St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act. 1956)
Avadi, Chennai - 600 054

VACMM038 – Mathematics for a Competitive Exam (2021-22)

Total time:33 hours

Course objectives:

- (i) The basic mathematics to the students.
- (ii) It assumes that the students have minimal knowledge to the subject.
- (iii) To help them acquire skills in solving quantitative aptitude by simple methods (mainly based on demonstration).

Unit: I Ratio and Proportion

6

Probability Ratios Solvency Ratios-Direct Proportion-Inverse Proportion-Continued Proportion.

Unit: II Profit and Loss

7

Sales-Cost of Goods Sold (or Cost of Sales)-Selling, General & Administrative (SG&A) Expenses-Interest Expense

UNIT: III Percentage

4

Basic Concepts-Comparing Two Percentages-Fraction and Ratios-Types of Problems.

UNIT: IV Height and distance

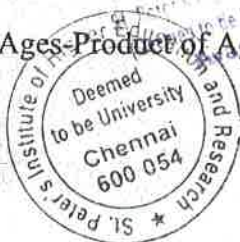
8

Line of Sight-Angle of Elevation-Angle of Depression-Determining the Distance of The Shore from The Sea.

UNIT: V Problems on ages :

8

Ratio And Sum of Ages-Product of Ages, Ratio of Present and Future Ages-Given Ratio of Past and Present Ages.



Registrar
St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai - 600 054



St. PETER'S INSTITUTE OF HIGHER EDUCATION & RESEARCH

(Deemed to be University U/S 3 of the UGC Act 1956)
AICTE Approval No. ISO 9001:2015 Certified


IGNITE · INSPIRE · INNOVATE

ACTION TAKEN REPORT ON STAKEHOLDERS FEEDBACK ON CURRICULAM DEPARTMENT OF MATHEMATCS

ACADAMIC YEAR 2020-2021

Annexure - V

Stakeholder	Feedback	Recommendation	Action Taken Report
Student feedback	Students suggested that overall curriculum design was good and some courses were reported to be difficult to understand	Teachers are insisted to allot more time with more explanation so that students can understand	The difficult course teachers have been advised to spend more time on topics deemed to be tough
Faculty Feedback	There is a need for training teachers for greater use of ICT in teaching learning process.	Faculty members are insisted to attend workshops/Seminars on ICT tools	IQAC has planned a workshop for ICT training of teachers in forth coming academic year.
Parents Feedback	Parents feedback analysis clearly shows that the curriculum has the capability to enhance students' competency in critical thinking ,problem solving and creativity	Parents are satisfied with the curriculum	From the analysis of parents feedback on curriculum design and implementation it can be inferred that parents have favorable opinion about university curriculum design
Alumni feedback	Participation in inter college competition has to be improved	Faculty members are asked to arrange the inter college competitions	HOD and Mentos are encouraged and motivated the students to participate in intercollege competitions.
Employer feedback	All are satisfied with the present syllabus	Recommended to maintain the same	HOD appreciated the faculty members

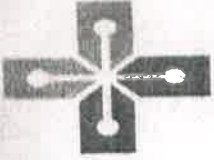

Principal
St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai - 600 054




HOD MATHS

HEAD

St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai - 600 054



IGNITE • INSPIRE • INNOVATE

St.PETER'S INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Deemed to be University U/S 3 of the UGC Act, 1956)
AVADI, Chennai – 600054, TamilNadu.

Phone:044-26558080-84
E-mail:registrar@spiher.ac.in
Website:www.spiher.ac.in

NEW COURSES FOR THE ACADEMIC YEAR 2021-2022

M.Sc. – MATHEMATICS

S.No	Programme Code	Programme Name	Course Code	Name of the Course
1	MAP	M.Sc. - Mathematics	AMAT1911	MATHAMETICAL PROGRAMMING

N. Srinivasan

HEAD

DEPARTMENT OF MATHS
St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai - 600 054

[Signature]

Registrar

St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai - 600 054



[Signature]

Registrar

St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai - 600 054





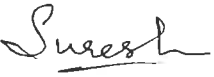

St. PETER'S INSTITUTE OF HIGHER EDUCATION AND RESEARCH

(Deemed to be University U/S 3 of the UGC Act, 1956)
AVADI, CHENNAI – 600 054.

MINUTES OF THE 10th MEETING OF THE BOARD OF STUDIES IN MICROBIOLOGY

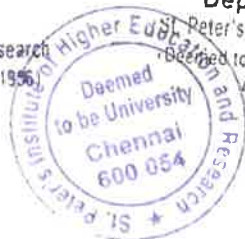
Held on 20.10.2021 (Online Mode)

Members Present

S. No	Name	Designation	Member	Signature
1	Dr. S. Sangeetha	Assistant Professor & Head	Chairman	
2	Dr. N. Radhakrishnan	Professor	Internal Member	
3	Dr.S. Ganesh Kumar	Associate professor	Internal Member	
3	Ms. T. R. Jabila Mary	Assistant Professor	Internal Member	
4	Dr. A. Suresh Kumar	Scientist, Microbiology & Biotech Division, CSIR – CLRI, Chennai	External Member	
5	Dr. Balu Ranganathan	Director, M/S Palmsconnect Solution Pvt. Ltd, Chennai	External Member	


Registrar

St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai - 600 054




Chairman

Professor and Head
Department of Microbiology
St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi Chennai-600

10.1 Considered the minutes of the 9th meeting of Board of Studies in Microbiology held on 26.02.2021.

RESOLVED that the minutes of the 9th meeting of Board of Studies in Microbiology held on 26.02.2021 be confirmed

10.2 Reviewed the Regulation and Syllabi of B.Sc. (Microbiology) under the Regulations 2020 with Choice Based Credit System (CBCS).

RESOLVED that the Syllabi of I to IV semester of B.Sc. (Microbiology) under the Regulations 2020 with Choice Based Credit System (CBCS) from the batch of students to be admitted from 2020-21 to be continued

10.3 Reviewed the Regulation and Syllabi of M.Sc. (Microbiology) under the Regulations 2020 with Choice Based Credit System (CBCS).

RESOLVED that the Syllabi of I to IV semester of M.Sc. (Microbiology) under the Regulations 2020 with Choice Based Credit System (CBCS) from the batch of students to be admitted from 2020-21 to be continued

10.4 Considered to include value added courses imparting transferable and life skills offered beyond the curriculum in the syllabi of Regulations 2020 and B.Sc (Microbiology) under the Regulations 2020

RESOLVED that the value added courses imparting transferable and life skills offered beyond the curriculum such as course on "Trends in Nanobiotechnology" be approved for the upcoming semester (2021-22 Even semester).

Date: 20.10.2021



S. Sangeetha
Registrar

St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the U.A. Act, 1956)
Avadi, Chennai-600 054

S. Sangeetha
Chairman



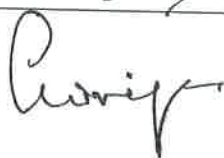



Professor and Head
Department of Microbiology
St. Peter's Institute of Higher Education & Research
(Deemed to be University U/S 3 of the U.A. Act, 1956)
Avadi Chennai - 600

21-22

St. PETER'S INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Deemed to be University U/S 3 of the UGC Act, 1956)
AVADI, CHENNAI - 600 054.


**MINUTES OF THE 11th MEETING OF THE BOARD OF STUDIES IN
PHYSICS**

Held on 7th September 2021
Members Present

S. No	Name of the Member	Designation	Member	Signature
1.	Dr. S. Stella Mary	Professor & Head Department of Physics SPIHER	Chairperson	
2.	Dr. S. Gunasekaran	Professor Department of Physics SPIHER	Member	
3.	Dr. R. G. S. Jayaraj	Professor Department of Physics SPIHER	Member	
4.	Mrs. R. Ramalakshmi	Assistant Professor Department of Physics SPIHER	Member	
5.	Dr G. Anbalagan	Professor Department of Nuclear Physics University of Madras, Guindy Chennai	Academic Expert Member	
6.	Mr. S. L. Balaji	Mr. S. L. Balaji Mobtron Enterprizes, Kilpauk Chennai	Industry Expert Member	



Registrar
St. Peter's Institute of Higher Education and Research,
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai - 600 054


Chairperson

Dr. S. STELLA MARY, M.Sc., M.Phil., Ph.D.
Professor & Head, (Research Supervisor)
Department of Physics
St. Peter's Institute of Higher Education and Research
Avadi, Chennai - 600 054.

12.1	<p>Considered the minutes of the 11th meeting of Board of Studies in Physics held on 07.09.2021.</p> <p>RESOLVED that the minutes of the 8th meeting of Board of Studies in Physics held on 07.09.2021 be confirmed.</p>
12.2	<p>Reviewed Syllabi of Engineering Physics prescribed for Engineering and Technology programmes under the Regulations 2013, 2015 and 2017.</p> <p>RESOLVED that the Syllabi of Engineering Physics prescribed for Engineering and Technology programmes under the Regulations 2013 2015 and 2017 to be continued.</p>
12.3	<p>Reviewed Syllabi of Engineering Physics prescribed for Engineering and Technology programmes under the Regulations 2018.</p> <p>RESOLVED that the Syllabi of Engineering Physics prescribed for Engineering and Technology programmes under the Regulations 2018 be continued.</p>
12.4	<p>Reviewed Syllabi of Engineering Physics prescribed for Engineering and Technology programmes under the Regulations 2020 for the batch of students admitted in 2020-21.</p> <p>RESOLVED that the Syllabi of Engineering Physics prescribed for Engineering and Technology programmes under the Regulations 2020 for the batch of students admitted in 2020-21 be continued.</p>
12.5	<p>Reviewed the Regulation & Syllabi of B.Sc Physics programme under the Regulations 2016.</p> <p>RESOLVED that the Regulation & Syllabi of B.Sc Physics programme under the Regulations 2016 be continued.</p>
12.6	<p>Reviewed the Regulation & Syllabi of B.Sc Physics programme under the Regulations 2020.</p> <p>RESOLVED that the Regulation & Syllabi of B.Sc Physics programme under the Regulations 2020 be continued.</p>
12.7	<p>Reviewed the Syllabi of Allied Physics I and II prescribed for B,Sc Computer Science, Mathematics and Chemistry programme under the Regulations 2016.</p> <p>RESOLVED that the Syllabi of Allied Physics I and II prescribed for B,Sc Computer Science, Mathematics and Chemistry programme under the Regulations 2016 be continued.</p>
12.8	<p>Reviewed the Syllabi of Allied Physics I and II prescribed for B,Sc Computer Science, Mathematics and Chemistry programme under the Regulations 2020 for the batch of students admitted in 2020-21.</p> <p>RESOLVED that the Syllabi of Allied Physics I and II prescribed for B,Sc Computer Science, Mathematics and Chemistry programme under the Regulations 2020 for the batch of students admitted in 2020-21 be continued.</p>
12.9	<p>Reviewed the Regulation & Syllabi of M.Sc Physics programme under the Regulations 2018.</p> <p>RESOLVED that the Regulation & Syllabi of M.Sc Physics programme under the Regulations 2018 be continued.</p>
12.10	<p>Reviewed the Regulation & Syllabi of M.Sc Physics programme for III & IV semesters under the Regulations 2020 for the batch of students admitted in 2020-21.</p> <p>RESOLVED that the Regulation & Syllabi of M.Sc Physics programme for III & IV semesters under the Regulations 2020 for the batch of students admitted in 2020-21 be approved.</p>



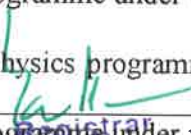
Registrar

St. Peter's Institute of Engineering and Research
 Avadi, Chennai-600 034

11.1	<p>Considered the minutes of the 10th meeting of Board of Studies in Physics held on 01.03.2021.</p> <p>RESOLVED that the minutes of the 8th meeting of Board of Studies in Physics held on 01.03.2021 be confirmed.</p>
11.2	<p>Reviewed Syllabi of Engineering Physics prescribed for Engineering and Technology programmes under the Regulations 2013, 2015 and 2017.</p> <p>RESOLVED that the Syllabi of Engineering Physics prescribed for Engineering and Technology programmes under the Regulations 2013 2015 and 2017 to be continued.</p>
11.3	<p>Reviewed Syllabi of Engineering Physics prescribed for Engineering and Technology programmes under the Regulations 2018.</p> <p>RESOLVED that the Syllabi of Engineering Physics prescribed for Engineering and Technology programmes under the Regulations 2018 be continued.</p>
11.4	<p>Reviewed Syllabi of Engineering Physics prescribed for Engineering and Technology programmes under the Regulations 2020 for the batch of students admitted in 2020-21.</p> <p>RESOLVED that the Syllabi of Engineering Physics prescribed for Engineering and Technology programmes under the Regulations 2020 for the batch of students admitted in 2020-21 be continued.</p>
11.5	<p>Reviewed the Regulation & Syllabi of B.Sc Physics programme under the Regulations 2016.</p> <p>RESOLVED that the Regulation & Syllabi of B.Sc Physics programme under the Regulations 2016 be continued.</p>
11.6	<p>Reviewed the Regulation & Syllabi of B.Sc Physics programme for V & VI semester under the Regulations 2020.</p> <p>RESOLVED that the Regulation & Syllabi of B.Sc Physics programme for V & VI semester under the Regulations 2020 be continued with the addition of new courses be approved.</p> <p>(Appendix I)</p>
11.7	<p>Reviewed the Syllabi of Allied Physics I and II prescribed for B,Sc Computer Science, Mathematics and Chemistry programme under the Regulations 2016.</p> <p>RESOLVED that the Syllabi of Allied Physics I and II prescribed for B,Sc Computer Science, Mathematics and Chemistry programme under the Regulations 2016 be continued.</p>
11.8	<p>Reviewed the Syllabi of Allied Physics I and II prescribed for B,Sc Computer Science, Mathematics and Chemistry programme under the Regulations 2020 for the batch of students admitted in 2020-21.</p> <p>RESOLVED that the Syllabi of Allied Physics I and II prescribed for B,Sc Computer Science, Mathematics and Chemistry programme under the Regulations 2020 for the batch of students admitted in 2020-21 be continued.</p>
11.9	<p>Reviewed the Regulation & Syllabi of M.Sc Physics programme under the Regulations 2018.</p> <p>RESOLVED that the Regulation & Syllabi of M.Sc Physics programme under the Regulations 2018 be continued.</p>
11.10	<p>Reviewed the Regulation & Syllabi of M.Sc Physics programme under the Regulations 2020.</p> <p>RESOLVED that the Regulation & Syllabi of M.Sc Physics programme under the Regulations be continued.</p>

Date: 07.09.2021




Chairperson
 Dr. S. STELLA, M.A., M.Phil., Ph.D.,
 Professor & Head (Research Supervisor)
 Department of Physics
 St. Peter's Institute of Higher Education and Research
 Avadi, Chennai - 600 054

V Semester

CodeNo.	CourseTitle	L	T	P	Credit	Marks		
						CA	EA	Total
APHT3605	Atomic Physics	5	0	0	4	40	60	100
APHT365-	Program Elective-I	5	0	0	4	40	60	100
APHT365-	Program Elective-II	5	1	0	6	40	60	100
-----	Institute Elective-I	4	0	0	3	40	60	100
APHL3605	Electronics lab	0	0	4	2	40	60	100
APHL365-	Program Elective Lab -I	0	0	4	2	40	60	100
ASSL3604	Soft Skills-IV	0	0	2	1	100	-	100
APHI3603	Internship-III	0	0	0	1	100	-	100
Total		19	1	10	23	440	360	800

VI Semester

CodeNo.	CourseTitle	L	T	P	Credit	Marks		
						CA	EA	Total
APHT3606	Solid State Physics	5	0	0	4	40	60	100
APHT365-	Program Elective-III	5	1	0	6	40	60	100
-----	Institute Elective-II	4	0	0	3	40	60	100
APHL3607	Electronics and Communication lab	0	0	4	2	40	60	100
APHP3601	Project Work	0	0	6	6	40	60	100
ASSL3605	Soft Skills- V	0	0	2	1	100	-	100
AEAL3601	Extension Activity	0	0	0	1	100	-	100
Total		14	1	15	23	400	300	700

TOTAL CREDITS: 135




 Registrar
 St. Peter's Institute of Higher Education and Research
 (Deemed to be University U/S 3 of the UGC Act 1956)
 Avadi, Chennai - 600 054.



St.PETER'S INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Deemed to be University U/S 3 of the UGC Act, 1956)
AVADI, Chennai – 600054.TamilNadu.

Phone:044-26558080-84
E-mail:registrar@spiher.ac.in
Website:www.spiher.ac.in

IGNITE • INSPIRE • INNOVATE

NEW COURSES FOR THE ACADEMIC YEAR 2021-2022

B.Sc. - PHYSICS

S.No	Programme Code	Programme Name	Course Code	Name of the Course
1	PHU	B.Sc. - Physics	APHT2603	MAJOR PRACTICAL III
2	PHU	B.Sc. - Physics	ACYT2607	ALLIED - CHEMISTRY I
3	PHU	B.Sc. - Physics	ACYL2607	ALLIED CHEMISTRY PRACTICAL I
4	PHU	B.Sc. - Physics	ATMT2604	LANGUAGE IV (TAMIL/FRENCH/HINDI/TELUGU)
5	PHU	B.Sc. - Physics	ACYT2608	ALLIED - CHEMISTRY II
6	PHU	B.Sc. - Physics	APHT2604	ELECTRICITY AND ELECTROMAGNETISM
7	PHU	B.Sc. - Physics	ACYL2608	ALLIED CHEMISTRY PRACTICAL II
8	PHU	B.Sc. - Physics	APHL2604	ELECTROMAGNETISM LAB
9	PHU	B.Sc. - Physics	APHI2602	INTERNSHIP –II
10	PHU	B.Sc. - Physics	516UPHT01	ELECTRICITY & ELECTROMAGNETISM
11	PHU	B.Sc. - Physics	APHT3659	DIGITAL ELECTRONICS
12	PHU	B.Sc. - Physics	APHT3660	MATERIALS SCIENCE
13	PHU	B.Sc. - Physics	APHT2610	ALLIED–III - PHYSICS –I
14	PHU	B.Sc. - Physics	APHL2610	ALLIED LAB–III - PHYSICS –I LAB
15	PHU	B.Sc. - Physics	APHT2611	ALLIED –IV - PHYSICS –II
16	PHU	B.Sc. - Physics	APHL2611	ALLIED LAB –IV - PHYSICS –II LAB



Registrar

St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai-600 054



St.PETER'S INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Deemed to be University U/S 3 of the UGC Act, 1956)
AVADI, Chennai – 600054.TamilNadu.

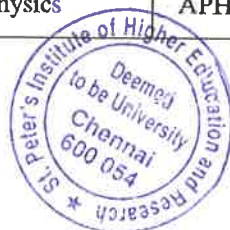
Phone:044-26558080-84
E-mail:registrar@spiher.ac.in
Website:www.spiher.ac.in

IGNITE • INSPIRE • INNOVATE

NEW COURSES FOR THE ACADEMIC YEAR 2021-2022

M.Sc. – PHYSICS



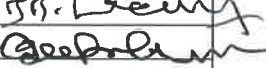
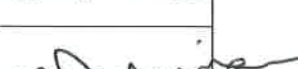
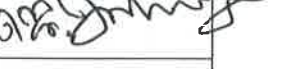

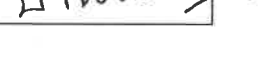
S.No	Programme Code	Programme Name	Course Code	Name of the Course
1	PHP	M.Sc. - Physics	APHT2901	ELECTROMAGNETIC THEORY & PLASMA PHYSICS
2	PHP	M.Sc. - Physics	APHT2902	NUCLEAR & PARTICLE PHYSICS
3	PHP	M.Sc. - Physics	APHT2903	COMPUTATIONAL METHODS & PROGRAMMING
4	PHP	M.Sc. - Physics	APHT2954	PROGRAM ELECTIVE III- LASER AND ITS APPLICATIONS
5	PHP	M.Sc. - Physics	APHT2955	PROGRAM ELECTIVE IV-8051 MICROCONTROLLER AND INTERGRATED TECHNIQUES
6	PHP	M.Sc. - Physics	APHS2903	SOFTSKILL III
7	PHP	M.Sc. - Physics	APHL2903	ADVANCED PHYSICS AND COMPUTATIONAL METHODS
8	PHP	M.Sc. - Physics	APHI2902	INTERNSHIP II
9	PHP	M.Sc. - Physics	APHT2904	CONDENSED MATTER PHYSICS
10	PHP	M.Sc. - Physics	APHT2959	PROGRAM ELECTIVE V- NANO SCIENCE
11	PHP	M.Sc. - Physics	APHT2961_	PROGRAM ELECTIVE VI- ENERGY PHYSICS
12	PHP	M.Sc. - Physics	APHT2962	INSTRUMENTAL METHODS OF ANALYSIS
13	PHP	M.Sc. - Physics	APHL2904	ADVANCED PHYSICS AND MICROCONTROLLER
14	PHP	M.Sc. - Physics	APHP2901	PROJECT PLUS VIVA VOCE
15	PHP	M.Sc. - Physics	APHT2964	PLASMA PHYSICS
16	PHP	M.Sc. - Physics	APHT2965	ELECTRONICS AND INSTRUMENTATION



Registrar

St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai - 600 054

St.PETERS INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Deemed to be University U/S 3 of the UGC Act, 1956)
AVADI, CHENNAI-600054
MINUTES OF THE 6th MEETING OF THE BOARD OF STUDIES IN
TAMIL
Held on 11th September, 2021
Members Present

S.No	Name	Designation	Member	Signature
1.	K. Jayaseelan	Assistant Professor	Chairman	
2.	M.Ravichandran	Assistant Professor	Internal Member	
3	R.Priya	Assistant Professor	Internal Member	
4	I.Michel raj	Assistant Professor	Internal Member	
5	V.E.Manigandan	Assistant Professor	Internal Member	
6	Dr.J.Radhakrishnan	Associate Professor Department of Tamil , sri Shankara arts and college	External Member	
7	Dr.K.Amudha	Professor,Tamil ,Chennai National arts and science	External Member	

6.1	Considered the minutes of the 5 th meeting of Board of Studies in Tamil held on 23.02.2021. RESOLVED that the minutes of the 5 th meeting of Board of Studies in Tamil held on 23.02.2021 be confirmed.
6.2	Reviewed the syllabi of Tamil under the Regulations 2018. RESOLVED that the syllabi of asyllabi of Tamil under the Regulations 2018 be continued
6.3	Reviewed the syllabi of Tamil under the Regulations 2020. RESOLVED that the syllabi of Tamil under the Regulations 2020 be continued
6.4	Considered to include the value added courses imparting transferable and life skills offered beyond the curriculum in the syllabi of B. A. Tamil. RESOLVED that the value added courses imparting transferable and life skills offered beyond the curriculum such as course on “ <u>workshop on street play/drama</u> ” be approved for the upcoming semester (2021-22-ODDsemester).

Date: 11-09-2021


Registrar
St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai-600 054.


Chairman

தமிழ்த்துறைத் தலைவர்
முனித பீட்டர் உயர்கல்வி மற்றும் ஆராய்ச்சி நிறுவனம்
ஆவடி, சென்னை-600 054.

St.PETERS INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Deemed to be University U/S 3 of the UGC Act, 1956)
AVADI, CHENNAI-600054

**MINUTES OF THE 9th MEETING OF THE BOARD OF STUDIES IN
VISUAL COMMUNICATION**
Held on 08-08-2021

Members Present

S.No	Name	Designation	Member	Signature
1.	Mr.V.Saravana Ragavan	Professor & Head	Chairman	
2.	Mr.S. Kanthaswami	Assistant Professor	Internal Member	
3.	Mr.D.Vickram	Assistant Professor	Internal Member	
4.	Ms.M.Nithiya	Assistant Professor	Internal Member	
5.	Mrs.M.Usha Rani	Assistant Professor	Internal Member	
6.	Mr.K.JayaSurya	Assistant Professor	Internal Member	
7.	Mr.B.Aswin	Assistant Professor	Internal Member	
8.	Ms.K.Swapna	Assistant Professor	Internal Member	
9.	MR.R.SathyaNarayanan	Assistant Professor	Internal Member	
10.	Ms.T.Sai Devika	Assistant Professor	Internal Member	
11.	Mr.S.Ganesh	Assistant Professor	Internal Member	
12.	Dr. R.Ramani	Associate Professor, Department of Visual communication, Sindhi Arts and Science College, Chennai	External Member	
13.	Mr. S. Kalaiselvan	Assistant Professor and Head Department of Visual Communication, Vels Institute of Science, Technology and Advanced Studies, Chennai	External Member	



Registrar
 St. Peter's Institute of Higher Education and Research
 Deemed to be University U/S 3 of the UGC Act, 1956
 Avadi, Chennai-600 054.

9.1	<p>Considered the minutes of the 8th meeting of Board of Studies in Visual Communication held on 08-02-2021</p> <p>RESOLVED that the minutes of the 8th meeting of Board of Studies in Visual Communication held on 08-02-2021 be confirmed.</p>
9.2	<p>Reviewed the Syllabi of B.Sc Visual Communication programme under the Regulations 2020 with Choice Based Credit System (CBCS).</p> <p>RESOLVED that the Syllabi of B.Sc Visual Communication programme under the Regulations 2020 with Choice Based Credit System (CBCS) be continued.</p>
9.3	<p>Reviewed the Syllabi of V & VI Semester of B.Sc Visual Communication programme under the Regulations 2020 with Choice Based Credit System (CBCS).</p> <p>RESOLVED that the Syllabi of V & VI Semester of B.Sc Visual Communication programme under the Regulations 2020 with Choice Based Credit System (CBCS) be approved.(Appendix-I)</p>
9.4	<p>Considered to include Value Added Course imparting transferrable/ local needs / employability / entrepreneurship /skill development and life skills offered beyond the curriculum in the syllabi of B.Sc Visual Communication</p> <p>RESOLVED that the Value Added Course imparting transferrable/ local needs / employability / entrepreneurship /skill development and life skills offered beyond the curriculum</p>

Date: 08-02-2021

Chairman
HOD

Dept of Visual Communication
St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai-600 054



[Handwritten Signature]
Registrar
St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai-600 054.



[Handwritten Signature]
Registrar
St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai-600 054.

St.PETERS INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Deemed to be University U/S 3 of the UGC Act, 1956)
AVADI, CHENNAI-600054

Appendix-I

V Semester

Code No.	Course Title		Credit	Marks		
				CA	EA	Total
AVCT3601	Core Sub:	Media, Culture and Society	5	40	60	100
AVCT3602		Television Production	5	40	60	100
AVCP3601		Web Publishing [Practical]	5	40	60	100
AVCP3602		Advertising Photography [Practical]	5	40	60	100
520UVET01	Part IV : Value Education		2	40	60	100
520UVCP03	Project [Phase 1]		5	-	-	-
Total			27	200	300	500

VI Semester

Code No.	Course Title		Credit	Marks		
				CA	EA	Total
AVCT3603	Core Subject:	Media Organization	4	40	60	100
AVCP3604		TV Production Practice [Practical]	4	V.40	R.60	100
AVCP3605		3 D Animation [Practical]	4	V.40	R.60	100
620UVCP04	Project [Phase 2]		5	-	-	-
620UVCP05	Project [Phase 3]		5	-	-	100
620UEAT01	Extension Activity		1	-	-	-
Total			23	120	180	400



Registrar

St. Peter's Institute of Higher Education and Research
(Deemed to be University U/S 3 of the UGC Act, 1956)
Avadi, Chennai-600 054.