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

Avadi, Chennai - 600 054.



Academic Council

22nd meeting on 02.03.2020

AGENDA

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



Academic Council

23rd meeting on 10.07.2020

AGENDA

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

Avadi, Chennai - 600 054.



Academic Council

24th meeting on 25.09.2020

AGENDA



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

Avadi, Chennai - 600 054. Tamil Nadu.

Phone: 044-26558080-84/26558090 Fax. 044-26555430 E-mail: registrar@spiher.ac.in

Website: www.spiher.ac.in

Dr. L. Mahesh Kumar Registrar

SPIHER /REG/F009/AC-22/2020

04.02.2020

To

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

Sir/Madam,

Sub: Academic Council – 22nd meeting on 02.03.2020 – Meeting notice - Reg.

The 22nd meeting of the Academic Council is scheduled to be held on 02.03.2020 (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,

Registrar

Copy to:

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

For information:

- 1. The Chancellor
- 2. The Vice Chancellor

Avadi, Chennai - 600 054. Tamil Nadu.

ACADEMIC COUNCIL (Effective from 02.01.2019)

Reconstitution of Academic Council as per the MoA/Rules effective from 26.12.2018 based on UGC (Institutions Deemed to be Universities) Regulations 2016.

S.No.	Category	Members	
1.	Vice Chancellor (Ex officio)	Vice Chancellor - Chairman	
2.	Pro Vice Chancellor (Ex officio)		
3.	Dean(s) of Faculties (Ex officio)	All the Deans	
4.	Heads of the Departments (Ex officio)	All the HoDs	
5.	All Professors other than the Heads of the Departments (Ex officio)	All Professors other than HoDs	
6.	Two Associate professors from the Departments other than the Heads of the Departments by rotation of seniority (Two years)	Dr. A. Manorselvi, Commerce Dr. K. Balaji, Electrical and Electronics Engineering	
7.	Two Assistant professors from the Departments by rotation of seniority (Two years)	Dr. C. Vijay, Commerce Mrs. R. Gomathi, Electronics and Communication Engineering	
8.	Three persons from amongst educationists of repute or persons from any other field related to the activities of the University, nominated by the Vice-Chancellor (Two years)	 Dr. P. Natarajan, Academic Director, Kovai Kalaimagal Group of Institutions, Thondamuthur, Coimbatore. Dr. K.A. Chinnaraju, Director, Coimbatore Institute of Engineering and Technology, Coimbatore. Dr. Anbuchezhian, Principal RMD College, Chennai. 	
9.	Three persons who are not members of the teaching staff, co-opted by the Academic Council for their specialized knowledge. (Two years)	1. Dr. R. Parvathi, M.B.B.S.(Physician) 2. Mr. S. Ramamurthy (Economist) 3. Mr. S. Balakrishnan, (Industrialist)	
10.	The Registrar, who shall be the Secretary of the Academic Council. (Ex officio)	Registrar - Secretary	

Note: The representation of different categories shall be only through rotation and not through election. It may also be ensured that no particular faculty dominates the membership of the Council.

Term of Membership: The term of members other than the ex-officio members shall be two years from 02.01.2019.

Date: 04.02.2020

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.

22nd Meeting of the Academic Council

Date: 02.03.2020 at 11.00 a.m.

Agenda

- **22.1** To confirm the minutes of the 21st meeting of the Academic Council held on 04.10.2019. **(Appendix-I)**
- 22.2 To report on the action taken on the minutes of the 21st meeting of the academic council. (Appendix-II)
- 22.3 To consider the minutes of the 2^{nd} / 3^{rd} / 4^{th} / 15^{th} / 21^{st} / 22^{nd} meetings of the various Boards of Studies held from 17^{th} to 24^{th} February, 2020. (Appendix-III)

22.4 Any other.

Date: 26.02.2020

ac K. _ Registrar

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

Minutes of the 21st Meeting of the Academic Council Date: 04.10.2019 at 11.00 a.m.

Members Present (List enclosed)

21.1 Considered the minutes of the 20th meeting of the Academic Council held on 21.03.2019.

RESOLVED the minutes of the 20th meeting of the Academic Council held on 21.03.2019 be confirmed. (**Appendix-I**)

21.2 Considered the report on the action taken on the minutes of the 20^{th} meeting of the Academic Council.

NOTED the action taken on the minutes of the 20th meeting of the Academic Council. **(Appendix-II)**

21.3 Considered the minutes of the 1^{st} / 2^{nd} / 3^{rd} / 14^{th} / 20^{th} / 21^{st} meetings of the various Boards of Studies held from 16^{th} to 20^{th} September 2019.

RESOLVED that the minutes of the 1^{st} / 2^{nd} / 3^{rd} / 14^{th} / 20^{th} / 21^{st} meetings of the various Boards of Studies held from 16^{th} to 20^{th} September 2019 be approved with the following recommendations to the concerned Board of Studies. **(Appendix-III)**

- i) Internships be considered for introduction in the 4th and 6th Semester Under graduate of Engineering Programmes without mentioning any specific area.
- Project work be considered for inclusion in the UG Engineering programme in the last two semesters of their course on condition that pass in Phase I be considered for doing Phase II.
- Professional Ethics be considered for inclusion in all the UG Programmes.
- The cotal credits for all UG Engineering Programme be considered in the range of 160 to 170 in the proposed new regulations.

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

22nd Meeting of the Academic Council Date: 02.03.2020

Action Taken on the Minutes of the 21st meeting of Academic Council held on 04.10.2019

Item	Action taken
21.1	Noted.
21.2	Noted.
21.3	Informed the concerned HoDs for implementation of the recommendation of the Boards of Studies.

Date: 26.02.2020



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

Avadi, Chennai – 600 054. Tamil Nadu. Phone: 044-26558080-84/26558090 Fax. 044-26555430

E-mail: registrar@spiher.ac.in

Website: www.spiher.ac.in

Dr. L. Mahesh Kumar Registrar

SPIHER /REG/F009/AC-23/2020

08.07.2020

To

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

Sir/Madam,

Sub: Academic Council – 23rd meeting on 10.07.2020 – Meeting notice – Reg.

The $23^{\rm rd}$ meeting of the Academic Council is scheduled to be held on 10.07.2020 at 11.00 a.m. through Google meet. All the members are requested to attend the meeting.

Agenda will be sent later.

Yours faithfully,

Registrar

Copy to:

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

For information:

- 1. The Chancellor
- 2. The Vice Chancellor

Avadi, Chennal - 600 054, Tamil Nadu.

ACADEMIC COUNCIL (Effective from 02.01.2019)

Reconstitution of Academic Council as per the MoA/Rules effective from 26.12.2018 based on UGC (Institutions Deemed to be Universities) Regulations 2016.

S.No.	Category	Members	
1.	Vice Chancellor (Ex officio)	Vice Chancellor - Chairman	
2.	Pro Vice Chancellor (Ex officio)		
3.	Dean(s) of Faculties (Ex officio)	All the Deans	
4.	Heads of the Departments (Ex officio)	All the HoDs	
5.	All Professors other than the Heads of the Departments (Ex officio)	All Professors other than HoDs	
6.	Two Associate professors from the Departments other than the Heads of the Departments by rotation of seniority (Two years)	Dr. A. Manorselvi, Commerce Dr. K. Balaji, Electrical and Electronics Engineering	
7.	Two Assistant professors from the Departments by rotation of seniority (Two years)	Dr. C. Vijay, Commerce Mrs. R. Gomathi, Electronics and Communication Engineering	
8.	Three persons from amongst educationists of repute or persons from any other field related to the activities of the University, nominated by the Vice-Chancellor (Two years)	Dr. P. Natarajan, Academic Director, Kovai Kalaimagal Group of Institutions, Thondamuthur, Coimbatore . Dr. K.A. Chinnaraju, Director, Coimbatore Institute of Engineering and Technology, Coimbatore. Dr. Anbuchezhian, Principal RMD College, Chennai.	
9.	Three persons who are not members of the teaching staff, co-opted by the Academic Council for their specialized knowledge. (Two years)	Dr. R. Parvathi, M.B.B.S.(Physician) Mr. S. Ramamurthy (Economist) Mr. S. Balakrishnan, (Industrialist)	
10.	The Registrar, who shall be the Secretary of the Academic Council. (Ex officio)	Registrar - Secretary	

Note: The representation of different categories shall be only through rotation and not through election. It may also be ensured that no particular faculty dominates the membership of the Council.

Term of Membership: The term of members other than the ex-officio members shall be two years from 02.01.2019.

Date: 04.02.2020

Tar k -

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.

23rd Meeting of the Academic Council

Date: 10.07.2020 at 11.00 a.m.

Agenda

- **23.1** To confirm the minutes of the 22nd meeting of the Academic Council held on 02.03.2020. **(Appendix-I)**
- 23.2 To report on the action taken on the minutes of the 22nd meeting of the academic council. (Appendix-II)
- 23.3 To report that the Institute has submitted an application for the conduct of B.Voc courses in Fashion Design, Media and Entertainment, Retail Operations and Banking and Financial Services.
- 23.4 To report the UGC revised guidelines on Examinations and Academic calendar for the Universities in view of COVID-19 Pandemic dated 06.07.2020. (Appendix-III)
- **23.5** To report the UGC standard operating procedure (SOP) for conduct of examinations dated 08.07.2020. **(Appendix-IV)**
- **23.6** To report the AICTE Revised Academic Calendar for the academic year 2020-2021 dated 07-07-2020. **(Appendix-V)**
- 23.7 To ratify the Constitution of a committee of academicians and administrators to draft a plan of action to conduct examinations for the even semester of 2019-2020 as per the UGC guidelines dated 06-07-2020.
- 23.8 To consider the proposal to admit candidates in B.E./B.Tech programmes on the basis of their marks in Higher Secondary Examination or an examination equivalent there to in the academic year 2020-21 in view of the COVID-19 Pandemic.
- 23.9 To consider the conduct of online classes for the Academic year 2020-2021.

23.10 Any other.

Date: 08.07.2020

lae K

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.

22nd Meeting of the Academic Council

Date: 02.03.2020 at 11.00 a.m.

Minutes of the Academic Council

22.1 Considered the minutes of the 21st meeting of the Academic Council held on 04.10.2019.

Resolved the minutes of the 21st meeting of the Academic Council held on 04.10.2019. (Appendix-I)

22.2 Considered the report on the action taken on the minutes of the 21st meeting of the academic council.

Noted the action taken on the minutes of the 21st meeting of the academic council. (Appendix-II)

22.3 Considered the minutes of the 2^{nd} / 3^{rd} / 4^{th} / 15^{th} / 21^{st} / 22^{nd} meetings of the various Boards of Studies held from 17^{th} to 24^{th} February, 2020.

Resolved that the minutes of the 2^{nd} / 3^{rd} / 4^{th} / 15^{th} / 21^{st} / 22^{nd} meetings of the various Boards of Studies held from 17^{th} to 24^{th} February, 2020 be approved. (Appendix-III)

Vice Chancello

· K ...

Registrar

Date: 05.03.2020

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

23rd Meeting of the Academic Council Date: 10.07.2020

Action Taken on the Minutes of the 22nd meeting of Academic Council held on 02.03.2020

Action Taken
Noted
Noted
Noted

Date: 08.07.2020

lack Régistrar



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@stpetersuniversity.org Website: www.stpetersuniversity.org

Dr. L. Mahesh Kumar Registrar

SPIHER /REG/F009/AC-24/2020

23.09.2020

To

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

Sir/Madam,

Sub: Academic Council – 24th meeting on 25.09.2020 – Meeting notice - Reg.

The 24^{th} meeting of the Academic Council is scheduled to be held on 25.09.2020 at 04.30 p.m. through Zoom meet. All the members are requested to attend the meeting.

Agenda will be sent later.

Deemed to be University Chennai 600 054

Copy to:

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

Yours faithfully,

Registrar

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

Avadi, Chennal-600 054.

For information:

- 1. The Chancellor
- 2. The Vice Chancellor

Avadi, Chennai - 600 054. Tamil Nadu.

ACADEMIC COUNCIL (Effective from 02.01.2019)

Reconstitution of Academic Council as per the MoA/Rules effective from 26.12.2018 based on UGC (Institutions Deemed to be Universities) Regulations 2016.

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2.	Pro Vice Chancellor (Ex officio)			
3.	Dean(s) of Faculties (Ex officio)	All the Deans		
4.	Heads of the Departments (Ex officio)	All the HoDs		
5.	All Professors other than the Heads of the Departments (Ex officio)	All Professors other than HoDs		
6.	Two Associate professors from the Departments other than the Heads of the Departments by rotation of seniority (Two years)	Dr. A. Manorselvi, Commerce Dr. K. Balaji, Electrical and Electronics Engineering		
7.	Two Assistant professors from the Departments by rotation of seniority (Two years)	Dr. C. Vijay, Commerce Mrs. R. Gomathi, Electronics and Communication Engineering		
8.	Three persons from amongst educationists of repute or persons from any other field related to the activities of the University, nominated by the Vice-Chancellor (Two years)	Dr. P. Natarajan, Academic Director, Kovai Kalaimagal Group of Institutions, Thondamuthur, Coimbatore . Dr. K.A. Chinnaraju, Director, Coimbatore Institute of Engineering and Technology, Coimbatore. Dr. Anbuchezhian, Principal RMD College, Chennai.		
9.	Three persons who are not members of the teaching staff, co-opted by the Academic Council for their specialized knowledge. (Two years)	1. Dr. R. Parvathi, M.B.B.S.(Physician) 2. Mr. S. Ramamurthy (Economist) 3. Mr. S. Balakrishnan, (Industrialist)		
10.	The Registrar, who shall be the Secretary of the Academic Council. (Ex officio)	Registrar - Secretary		

Note: The representation of different categories shall be only through rotation and not through election. It may also be ensured that no particular faculty dominates the membership of the Council.

Term of Membership: The term of members other than the ex-officio members shall be two years from 02.01.2019.

Date: 23.09.2020

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.

24th Meeting of the Academic Council

Date: 25.09.2020 at 04.30 p.m.

Agenda

- **24.1** To confirm the minutes of the 23rd meeting of the Academic Council held on 10.07.2020. **(Appendix-I)**
- 24.2 To report on the action taken on the minutes of the 23rd meeting of the Academic council. (Appendix-II)
- 24.3 To report the Tamil Nadu Government letter (4D)No.4/MCA-2/2020 dated 10-07-2020 on Essentiality Certificate to SPIHER Trust for the establishment of St. Peter's Medical College, Hospital and Research Institute at S.F. No. 278, Moranapalli and Chennathur Villages, NH 44, Near AERI Campus, Dr. MGR Nagar, Hosur-635 130, Hosur Taluk, Krishnagiri District, Tamil Nadu as Constituent/Affiliated Institute of St. Peter's Institute of Higher Education and Research, Chennai-600 054, Tamil Nadu. (Appendix-III)
- 24.4 To consider the minutes of the adhoc Board of studies in Medical and Health Sciences held on 17.09.2020. (Appendix-IV)
- 24.5 To report the UGC letter F.No.4-1/2020(NSQF) dated 22-09-2020 on approval of B.Voc Degree Programmes in Fashion Design, Media and Entertainment, Retail Operations and Banking and Financial Services for institution in the academic year 2020-'21. (Appendix-V)
- 24.6 To report UGC letter D.O. No.F.1-2/2020(Secy) dated 22-09-2020 regarding the guidelines on Academic calendar for the first year of Under graduate and Post graduate students of the universities for the session 2020-21 in view of COVID-19 Pandemic. (Appendix-VI)
- **24.7** To report that the results of the online examinations held in August 2020 in respect of the Academic Year 2019-'20 in view of COVID-19 Pandemic have been released.

24.8 Any other.

Date: 23.09.2020

Tank.

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.

23rd Meeting of the Academic Council

Date: 10.07.2020 at 11.00 a.m.

Minutes of the Academic Council

23.1 Considered the minutes of the 22^{nd} meeting of the Academic Council held on 02.03.2020.

RESOLVED that the minutes of the 22nd meeting of the Academic Council held on 02.03.2020 be confirmed. **(Appendix-I)**

23.2 Considered the action taken report on the minutes of the 22^{nd} meeting of the academic council.

NOTED the action taken on the minutes of the 22^{nd} meeting of the academic council held on 02.03.2020. (Appendix-II)

23.3 Considered the report that the Institute has submitted an application for the conduct of B.Voc courses in Fashion Design, Media and Entertainment, Retail Operations and Banking and Financial Services from the academic year 2020-21.

NOTED that the Institute has submitted an application for the conduct of B.Voc courses in Fashion Design, Media and Entertainment, Retail Operations and Banking and Financial Services from the academic year 2020-21.

23.4 Considered the UGC revised guidelines on Examinations and Academic calendar for the Universities in view of COVID-19 Pandemic dated 06.07.2020.

RESOLVED to adopt and implement the UGC revised guidelines on Examinations and Academic calendar for the Universities in view of COVID-19 Pandemic dated 06.07.2020. (Appendix-III)

23.5 Considered UGC standard operating procedure (SOP) for conduct of examinations

dated 08.07.2020.

RESOLVED to adopt and follow the UGC standard operating procedure (SOP) for

conduct of examinations dated 08.07.2020. (Appendix-IV)

23.6 Considered the AICTE Revised Academic Calendar for the academic year 2020-2021

dated 07-07-2020.

RESOLVED to adopt and implement the AICTE Revised Academic Calendar for the

academic year 2020-2021 dated 07-07-2020 for Engineering and Technology

programmes. (Appendix-V)

23.7 Considered the Constitution of the committee of academicians and administrators to

draft a plan of action to conduct examinations for the even semester of 2019-2020

as per the UGC guidelines dated 06-07-2020 .

RESOLVED to approve the Constitution of a committee of academicians and

administrators to draft a plan of action to conduct examinations for the even

semester of 2019-2020 as per the UGC guidelines dated 06-07-2020 in view of

COVID-19 pandemic.

23.8 Considered the proposal to admit candidates in B.E./ B.Tech programmes on the

basis of their marks in Higher Secondary Examination or an examination equivalent

there to in the academic year 2020-21 in view of the COVID-19 Pandemic.

RESOLVED to approve the proposal to admit candidates in B.E./ B.Tech

programmes on the basis of their marks in Higher Secondary Examination or an

examination equivalent there to in the academic year 2020-21 in view of the

COVID-19 Pandemic.

23.9 Considered the proposal to conduct online classes for the Academic year 2020-2021.

RESOLVED to approve the proposal to conduct online classes for the Academic year

2020-2021.

Date: 11.07.2020

Vice Chancellor

IZA+1

Registrar

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

24th Meeting of the Academic Council Date: 25.09.2020

Action Taken on the Minutes of the 23rd meeting of Academic Council held on 10.07.2020

Item	Action Taken
23.1	Noted
23.1	Noteu
23.2	Noted
23.3	Noted that the approval for B.Voc courses has been received from the UGC.
23.4	Examinations have been conducted as per the UGC revised guidelines on Examinations.
23.5	Noted.
23.6	Noted.
23.7	Noted.
23.8	Noted.
23.9	Noted.

Date: 23.09.2020

Registrar

.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

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

MINUTES OF THE 15th MEETING OF THE BOARD OF STUDIES IN

B.ARCH

Held on 21.02.2020

Members Present

S.No	Name	Designation	Member	Signature
1.	Ar Vasudevan T J	Professor and Director	Chairman	Carrelaterity
2.	Ar P.Kanimozhi	Professor	Member	1. SonOby
3.	Ar Ashwini Hebsur	AssociateProfessor	Member	18hurini
4.	Ar D.Mugundhan	Assistant Professor	Member	Dil
5.	Ar V.Raghuram	Assistant Professor	Member	V. Zm.
6.	Ar Mushtaq Ahmed	Practicing Architect	External Member	DA
7.	Dr N.Jothilakshmy	Academician	External Member	Mun

Chairman

(amderon T.)

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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.

15.1	Considered the minutes of the 14 th meeting of Board of Studies in Architecture held on 19.09.2019.
	Resolved that the minutes of the 14 th meeting of Board of Studies in Architecture held on 19.09.2019 be confirmed.
15.2	Reviewed the Regulations and Syllabi of B.Arch. programme under the Regulations 2015 and 2017 and the value added courses proposed.
	RESOLVED that in the Regulations and Syllabi of B.Arch. programme under the Regulations 2015 and 2017, the proposed value added course as in annexure – 1 shall be conducted. The board suggests adding yoga as a value added training especially to the first year students for enhancing their orientation towards disciplined lifestyle.
	RESOLVED that the Course Outcome (CO), Programme Outcome (PO), Programme Specific Outcome (PSO) be continued.
15.3	Reviewed the syllabus of 417ART02-Environmental science for the Built environment under regulations 2017
	RESOLVED that along with existing landmark case studies of erstwhile famous architects, the latest work of young architects working on slum development, local case studies with vernacular character and case studies with focus on eco-living shall be added for effective experiential learning.
15.4	Reviewed the syllabus of 917ART02-Professional practice and ethics under regulations 2017
	RESOLVED that in the syllabus of 917ART02 – Professional Practice and Ethics under the regulation 2017, to be conducted in the IX semester of the Fifth year B.Arch Programme under the regulation 2017,shall comprise of the proposed units on digital marketing and Service Marketing with respect to the feedback received from the Alumni suggesting an exposure to marketing techniques to procure good value projects for Architecture Students.



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.

15.5

Reviewed the Vision and Mission statement of the department

RESOLVED that Vision statement shall be continued and the mission statement had been categorized into 6 objective statements based on the advice of the external member as follows.

VISION

Empowering individuals to become internationally acclaimed architects through a holistic approach to Architecture thereby creating professionals with a social conscience & responsibility and environmental sensibility.

MISSION

 To nurture and equip young minds endowed with intellectual discipline, social and professional ethics.

2. To develop creative and competent architects through problem solving approach with well integrated technical and theoretical knowledge.

3. To educate and instigate design that responds to climate, context and the changing needs and aspirations of the society.

4. To infuse interdisciplinary approach through study of mechanics and design of structures, and building services.

5. To inculcate an aspiration for creating Sustainable Built Environment

6. To imbibe efficient marketing skills and project management of design projects through effective planning and resource management

Reviewed the introduction of proposed new regulation and syllabi 2020 for five year B. Arch Degree Programme based on the model curriculum specified by the Council of Architecture in the latest Minimum standards for Architectural Education 2017.

RESOLVED that the proposed new regulation and syllabi 2020 for 5 year B.Arch. Degree Programme shall be introduced as per the norms of Council of Architecture with credits ranging from 260 to maximum of 300 credits with weightage for 1 hour of design course as 1.5 credits instead of 1 credit per 2 hours of design.

RESOLVED that the weightage of Continuous assessment (CA): End Assessment (EA) shall be as follows.

Type of Course	CA	EA	Total Marks	Credits	
Theory Courses 40 6		60	100	1 credit for every 1 effective theory hour	
Theory cum Studio Courses	50	50	100	1 credit for every 1 effective theory hour and 1 credit for every 2 effective studio hours	
Studio Courses	60	40	100	1.5 credit for every 1 effective studio hour.	



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 History of Architecture and Culture courses in the proposed regulation and syllabi 2020 shall be, based on regional classification starting from Architecture of Indian sub-continent and then, the History of Architecture and Culture of the rest of the world as suggested by the External member

RESOLVED that the Building Materials and Construction courses in the proposed regulation and syllabi 2020 shall be, based on the materials and components followed by the finishes as suggested by the External member.

RESOLVED that the Professional elective courses in the proposed regulation and syllabi 2020 shall be, based on more practical career oriented modules and research based, approach based on the feedback received from the stakeholders.

RESOLVED that the Human Settlements and Planning course proposed in IX semester shall be conducted in V semester and Urban Housing course proposed in IX semester shall be conducted as Housing course (including both rural and urban housing) in the VI semester.

RESOLVED that the Professional Practice and Ethics course proposed regulation and syllabi 2020 shall be, based on more practical carrier oriented modules and research based approach based on the feedback received from the stack holders.

RESOLVED that the Human settlements and planning courses proposed in IX semester shall be conducted in V semester and Urban housing courses proposed in IX semester shall be conducted as Housing course (including both Rural and Urban housing) in the VI semester with respect to the views expressed by both the external housing) in the VI semester with respect to the views expressed by both the external and internal members of the 15th board of studies in the department of Architecture.

RESOLVED that the Professional Practice and Ethics course proposed to be conducted in the IX semester of the five year B.Arch programme shall comprise of the proposed units on Digital marketing and Service marketing with respect to the feedback proposed from the students suggesting an exposure to marketing techniques to grab good value projects.

RESOLVED that the proposed syllabus for the first and second semester of the proposed regulation 2020 shall be confirmed with change in the syllabus of Mathematics for Architects course and communication skill for Architects course as discussed in the 15th meeting of Board of studies in Department of Architecture. The syllabus of the remaining semesters shall be submitted for perusal and approval in the 16th Board of studies meeting.

Registrar

Deemed

600 054

Date: 21.02.2020

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Chairman

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MINUTES OF THE 21st MEETING OF THE BOARD OF STUDIES IN BIO MEDICAL ENGINEERING

Held on 18.02.2020

Members Present

S.No	Name & Designation	Internal/External Member	Signature
1	Dr.G.R.Suresh, Professor & Head Biomedical Engineering	Chairperson	Surcell
2	Dr. Varshini Karthik HOD In charge Department of Biomedical Engineering SRM Institute of Science and Technology Kattankulathur	External Member	Varshir
3	Dr.Balu Ranganathan Technology — Director Palms Connect LLC Chennai	External Member	Baland
4	Dr. K. Kantharaj Professor	Internal Member	Centy
5	Ms. A. Vanitha Assistant Professor	Internal Member	Varidia
6	Ms. K. Shruthi Assistant Professor	Internal Member	Stuffi

Registral

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Considered the minutes of the 20th meeting of Board of Studies in Biomedical Engineering held on 20.09.2019.

RESOLVED that the minutes of the 20th meeting of Board of Studies in Biomedical Engineering held on 20.09.2019 be confirmed.

To review vision, Mission, Program Outcomes and Program specific Outcomes (PSOs) statements for B.E. (Biomedical Engineering)
Programme.

Reviewed vision, Mission, Program Outcomes and Program specific Outcomes (PSOs) statements for B.E. (Biomedical Engineering) Programme.

Approval of Course Outcomes(CO) - Program Outcomes(PO) - Program Specific Outcomes(PSOs) mapping for outcome based B.E (Biomedical Engineering) courses.

RESOLVED the Course Outcomes(CO) - Program Outcomes(PO) - Program Specific Outcomes(PSOs) mapping for outcome based B.E. (Biomedical Engineering) course in the form of course articulation (Biomedical Engineering) course in the form of course articulation matrix and program articulation matrix has been approved without change.

Course competencies - Program Outcomes(PO) - Program Specific Outcomes(PSOs) mapping Competency based B.E. (Biomedical Engineering) course.

RESOLVED the Course competencies - Program outcome(PO) - Program Specific Outcomes(PSOs) mapping Competency based B.E. (Biomedical Engineering) in the form of course articulation matrix and program articulation matrix has been approved without change.

Expected Proficiency level and Expected attainment level of course outcomes for all the courses of B.E. (Biomedical Engineering) programme.

RESOLVED the Expected Proficiency level and Expected attainment level of course outcomes for all the courses of B.E. (Biomedical Engineering) programme and attainment level of program Engineering) – Program Specific Outcome(PSOs) has been approved outcome(PO) – Program Specific Outcome(PSOs)

Reviewed the Syllabus of B.E. (Biomedical Engineering) under the Regulations 2018.

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

21.7 Reviewed the syllabus of M.E. (Biomedical Engineering) programme under the Regulation 2018.

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

Considered the new regulations and syllabi of B.E. (Biomedical Engineering) from the batch of students to be admitted from 2020-2021 under the Regulation 2020

RESOLVED that the new regulations and syllabi of B.E. (Biomedical Engineering) from the batch of students to be admitted from 2020-2021 under the Regulation 2020 has been approved.

21.9 Reviewed the new syllabus of M.E. (Biomedical Engineering) programme under the Regulation 2018.

RESOLVED that the Syllabus of M.E. (Biomedical Engineering) under the Regulations 2018 be approved for the students admitted in 2021.

Date: 18.02.2020

Chairman

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MINUTES OF 21st MEETING OF THE BOARD OF STUDIES OF **CIVIL ENGINEERING**HELD ON 17.02.2020

Members Present

S No	Name	Designation	Role in Board
		Prof. & Head	
1	Dr. V.B.M. Sayana	Dept. of Civil Engineering	Chair Person
		SPIHER	
		Professor	
2	Dr.P.Asha	Dept. of Civil Engineering	Internal Member
		SPIHER	
		Assistant Professor	
3	Mr.Babu Kamaraj.P	Dept. of Civil Engineering	Internal Member
		SPIHER	
		Assistant Professor	
4	Mr.P.Sampath	Dept. of Civil Engineering	Internal Member
		SPIHER	
		Professor	
5	Dr. S. Senthil Selvan	Dept. of Civil Engineering	External Member
	31. S. Sentini Scivan	S.R.M University	Academics
		Chennai	
6	Mr. B. Saravana	HOD/Structures	External Member
0	Kumar	Ramboll Oil& Gas	Industry

17.02.2020

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Avadi, Chennai-600 054.

Chairman

Dr. V.B.M. SAYANA, M.E., Ph.D.,
Professor & Head
Department of Civil Engg.
St. Peter's Institute of Higher Education and Research
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Avadi, Chennai-600 054.

21.1 Considered the minutes of 20th Board of Studies in Civil Engineering held on

Resolved that the 20th Board of Studies in Civil Engineering held on 16.09.2019

21.2 Reviewed the syllabus of B.E. Civil Engineering under regulation 2013.

RESOLVED that the Regulation and Syllabi of B.E (Civil Engineering) programme under the Regulations 2013 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 courses (Appendix - I). 1

- 713CET07 WATER RESOURCES SYSTEMS ANALYSIS 2
- 713CET10 INDUSTRIAL WASTEMANAGEMENT
- 813CET03 STORAGE STRUCTURES
- 4 **EARTHQUAKE** 813CET12 GEOTECHNICAL ENGINEERING
- 21.3 Reviewed the Regulation and Syllabi of V & VI semester of B.E. (Civil Engineering) under the Regulations 2018 with Choice Based Credit System (CBCS).

RESOLVED that the Syllabi of V & VI semester of B.E. (Civil Engineering) under the Regulations 2018 with Choice Based Credit System (CBCS) from the batch of students to be admitted from 2020-21 to be approved.(Appendix - II)

21.4 Considered the new regulation and syllabi of B.E. Civil Engineering on the pattern of AICTE curriculum from the batch of students to be admitted from 2020-21 under regulation 2020

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RESOLVED that the new Regulation and Syllabi of B.E (Civil Engineering) on the pattern of AICTE curriculum from the batch of students to be admitted from 2020-21 under the Regulations 2020 with Choice Based Credit System (CBCS) for I and II semester be approved. (Appendix - III).

21.5 Reviewed the syllabus of M.E. Structural Engineering under regulation 2018.

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

21.6 Considered to include courses having focus on employability/ entrepreneurship /skill development in the syllabi of B.E (CIVIL) under the Regulations 2018 & Regulation 2020 and M.E (STRUCTURAL ENGINEERING) under the Regulations 2021.

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

21.7Reviewed 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 & 2020 and M.E (STRUCTURAL 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.



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21.8 Considered to include value added courses imparting transferable and life skills offered beyond the curriculum in the syllabi of B.E (CIVIL) under the Regulations 2018 & 2020 and M.E (STRUCTURAL ENGINEERING) under the Regulations 2021.

RESOLVED that the value added courses imparting transferable and life skills offered beyond the curriculum.

21.9 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. (Appendix – II)

17.02.2020

Chairman

Dr. V.B.M. SAYANA, M.E., Ph.D., Professor & Head Department of Civil Engg. St. Peter's Institute of Higher Education and Research

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APPENDIX - I

713CET07 - WATER RESOURCES SYSTEMS ANALYSIS

OBJECTIVES:

- To introduce the student to the concept of Mathematical approaches for managing the water resources system.
- To make the students apply an appropriate system approach to optimally operate a water resource system.

UNIT I SYSTEM APPROACH

Philosophy of modelling – Goals and Objectives – Basics of system analysis concept – scopes and steps in systems engineering.

UNIT II PHYSICAL AND SOCIO - ECONOMIC DATA

Collection, evaluation and processing – project appraisal – public involvement, masterComprehensive and integrated planning of water resources project.

UNIT III LINEAR PROGRAMMING

Operation research - introduction - Problem Formulation-graphical solution- Simplex method - Sensitivity analysis - simple applications

UNIT IV DYNAMIC PROGRAMMING

Optimality criteria Stage coach problem – Bellman's optimality criteria Problem formulation and Solution - simple applications

UNIT V SIMULATION

Basic principles – Methodology and Philosophy – Model development – input and outputs – Deterministic simulation - simple applications

OUTCOMES:

- The students will be exposed to the economical aspects and analysis of water resources systems by which they will get an idea of comprehensive and integrated planning of a water resources project.
- The students will develop skills in solving problems in operations research through LP, DP and Simulation techniques.

TEXT BOOK:

1. Vedula, S., and Majumdar, P.P. "Water Resources Systems" – Modeling Techniques and Analysis Tata McGraw Hill, 5th reprint, New Delhi, 2010.

REFERENCES:

- Hall Warren, A. and John A. Dracup., "Water Resources System Engineering", Tata McGraw Hill Publishing Company Ltd., New Delhi, 1998
- 2. Chadurvedi M.C., "Water resource Systems Planning and Management", Tata McGrawHill inc., New Delhi, 1997
- 3. Taha H.A., "Operation Research", McMillan Publication Co., New York, 1995.
- 4. Maass A., Husfchimidt M.M., ,Dorfman R., Thomas HA., Marglin S.A and Fair G. M., "Design of Water Resources System", Hardward University Press, Cambridge

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713CET10 - INDUSTRIAL WASTE MANAGEMENT

OBJECTIVES:

 To impart knowledge on sources and characteristics of various industrial wastes and strategies for its prevention and control

UNIT I INTRODUCTION

Types of industries and industrial pollution – Characteristics of industrial wastes – Population equivalent – Bioassay studies – effects of industrial effluents on streams, sewer, land, sewage treatment plants and human health – Environmental legislations related to prevention and control of industrial effluents and hazardous wastes

UNIT II CLEANER PRODUCTION

Waste management Approach – Waste Audit – Volume and strength reduction – Material and process modifications – Recycle, reuse and byproduct recovery – Applications.

UNIT III POLLUTION FROM MAJOR INDUSTRIES

Sources, Characteristics, waste treatment flow sheets for selected industries such as Textiles, Tanneries, Pharmaceuticals, Electroplating industries, Dairy, Sugar, Paper, distilleries, Steel plants, Refineries, fertilizer, thermal power plants – Wastewater reclamation concepts

UNIT IV TREATMENT TECHNOLOGIES

Equalisation – Neutralisation – Removal of suspended and dissolved organic solids - Chemical oxidation – Adsorption - Removal of dissolved inorganics – Combined treatment of industrial and municipal wastes – Residue management – Dewatering – Disposal

UNIT V HAZARDOUS WASTE MANAGEMENT

Hazardous wastes - Physico chemical treatment - solidification - incineration - Secure land fills

OUTCOMES:

The students completing the course will have

- an insight into the pollution from major industries including the sources and characteristics of pollutants
- ability to plan minimization of industrial wastes
- ability to design facilities for the processing and reclamation of industrial waste water

TEXT BOOKS:

- 1. Rao M. N. & Dutta A. K., "Wastewater Treatment", Oxford IBH Publication, 1995.
- 2. Eckenfelder W.W. Jr., "Industrial Water Pollution Control", McGraw Hill Book Company, New Delhi, 2000.
- 3. Patwardhan. A.D., Industrial Wastewater Treatment", Prentice Hall of India, New Delhi 2010.

REFERENCES:

1. Shen T.T., "Industrial Pollution Prevention", Springer, 1999.

2. Stephenson R.L. and Blackburn J.B., Jr., "Industrial Wastewater Systems Hand book", Lewis Publisher, New York, 1998

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813CET03 - STORAGE STRUCTURES

OBJECTIVES:

To introduce the student to basic theory and concepts of design of storage structures like UNIT I

STEEL WATER TANKS

Design of rectangular riveted steel water tank – Tee covers – Plates – Stays –Longitudinal and transverse beams – Design of staging – Base plates – Foundation and anchor bolts – Design of pressed steel water tank – Design of stays – Joints – Design of hemispherical bottom water tank - side plates - Bottom plates - joints - Ring girder - Design of staging and foundation. UNIT II

CONCRETE WATER TANKS

Design of Circular tanks – Hinged and fixed at the base – IS method of calculating shear forces and moments - Hoop tension - Design of intze tank - Dome - Ring girders - Conical dome -Staging – Bracings – Raft foundation – Design of rectangular tanks – Approximate methods and IS methods - Design of under ground tanks - Design of base slab and side wall - Check for UNIT III

STEEL BUNKERS AND SILOS

Design of square bunker – Jansen"s and Airy"s theories – IS Codal provisions – Design of side plates - Stiffeners - Hooper - Longitudinal beams - Design of cylindrical silo - Side plates -UNIT IV

CONCRETE BUNKERS AND SILOS

Design of square bunker - Side Walls - Hopper bottom - Top and bottom edge beams -Design of cylindrical silo – Wall portion – Design of conical hopper – Ring beam at junction UNIT V

PRESTRESSED CONCRETE WATER TANKS

Principles of circular prestressing – Design of prestressed concrete circular water tanks

At the end of the course the student shall be able to design concrete and steel material TEXT BOOKS:

- Rajagopalan K., "Storage Structures", Tata McGraw Hill, New Delhi, 1998. 2.
- Krishna Raju N., "Advanced Reinforced Concrete Design", CBS Publishers and Distributors, New Delhi, 1998. REFERENCES:

- Punmia B.C, Ashok Kumar Jain, Arun K.Jain, "R.C.C. Designs Reinforced 1. ConcreteStructures", Laxmi Publications Pvt. Ltd., New Delhi, 2006. 2.
- Gambhir.M.L., "Design of Reinforced Concrete Structures", Prentice Hall of India Private



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813CET12 - EARTHQUAKE GEOTECHNICAL ENGINEERING

OBJECTIVES:

- To understand the dynamics of earth and to estimate dynamic properties of soils
- To develop the site specific design spectrum for design of sub structure and evaluation of liquefaction potential.

UNIT I SEISMOLOGY AND EARTHQUAKES

Internal Structure of the Earth – Continental Drift and Plate Tectonics – Faults – Elastic rebound theory – Different sources of Seismic Activity – Geometric Notation – Location of Earthquakes – Size of Earthquakes.

UNIT II DYNAMIC PROPERTIES OF SOILS

Measurement of Dynamic Properties of soils – Field Tests – Low strain – Seismic Reflection – Seismic Refraction – Horizontal layering – Steady State Vibration – Spectral analysis of surface wave – Seismic cross hole – Down Hole – Up hole – tests – Laboratory tests – Resonance Column Test – Bender Element – Cyclic Tri-axial test.

UNIT III SEISMIC HAZARD ANALYSIS

Identification and Evaluation of Earthquake Sources – Geologic Evidence – Tectonic Evidence – Historical Seismicity – Instrumental Seismicity – Deterministic Seismic Hazard Analysis – Probabilistic Seismic Hazard Analysis.

UNIT IV GROUND RESPONSE ANALYSIS

Ground Response Analysis – One Dimensional Linear – Evaluation of Transfer Function – Uniform undamped soil on rigid rock – Uniform damped soil on Rigid Rock – Uniform damped soil on elastic rock – layered damped soil on elastic rock – Equivalent linear Approximation – Deconvolution

UNIT V LIQUEFACTION ANALYSIS

Liquefaction – Flow liquefaction – Cyclic Mobility – Evaluation of liquefaction Hazards – Liquefaction Susceptibility – Criteria – Historical Geologic – Compositional – State – Evaluation of Initiation of Liquefaction – Cyclic stress approach – Characterization of Liquefaction Resistance – SPT Test – Various correction factor – Factor of Safety.

OUTCOMES:

 Students are able to perform site specific response analysis to develop design spectra andto do detailed liquefaction analysis using SPT data.

TEXT BOOKS:

- 1. Krammer S.L., "Geotechnical Earthquake Engineering", Prentice Hall, International Series, Pearson Education Inc and Donling Kindersley Publishing Inc. 2013
- 2. Roberto Villaverde, "Fundamental Concepts of Earthquake Engineering", CRC Press Taylor & Francis Group, 2009.

REFERENCES:

1. Kameswara Rao, N.S.V., "Dynamics soil tests and applications", Wheeler Publishing - New Delhi, 2000.

2. Kameswara Rao, "Vibration Analysis and Foundation Dynamics", Wheeler Publishing, New Delhi, 1998.

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APPENDIX - II

B.E. (CIVIL ENGINEERING)

REGULATION - 2018

REGULATIONS AND SYLLABI UNDER CHOICE BASED CREDIT SYSTEM (Effective from the Academic Year 2020-2021)

V SEMESTER

Code No.	Course Title	Credit	t	Ma	rks	Pre- requisites	Page no
			CA	A EA	Total		
	The	eory					
518CET01	Structural Analysis I	3	25	75	100	418CET02	60
518CET02	Foundation Engineering	3	25	75	100	418CET05	62
518CET03	Environmental Engineering I	3	25	75	100	NIL	64
518CET04	Design of Reinforced Concrete Elements	3	25	75	100	418CET02	66
518CET05	Water Resources and Irrigation	3	25	75	100	NIL	68
	Professional Elective I	3	25	75	100		
	Prac	tical					
518CEP01	Environmental Engineering Lab	2	25	75	100	518CET03	70
518CEP02	Concrete Technology Laboratory	2	25	75	100	318CET02	72
518CEP03	Survey Camp	2	25	75	100	318CET05	74
	Total	24	225	675	900		
	Professional Elec	tive I - (Offe	red			
518CET08	Total Station And GPS		25	75	100		
518CET07	Housing Planning And Management	ngher Education	25	75	100	/	

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VI SEMESTER

			N	/Iarks		Pre-	Page
Code No.	Course Title	Credit	CA	EA	Total	requisites	no
	The	ory					
618CET01	Advanced Reinforced Concrete Structures	3	25	75	100	518CET04	75
618CET02	Structural Analysis II	3	25	75	100	518CET01	77
618CET03	Design of Steel Structural Elements	3	25	75	100	518CET01	79
618CET04	Environmental Engineering II	3	25	75	100	518CET03	81
618CET05	Highway Engineering	3	25	75	100	NIL	83
	Professional Elective II 3 25 75 100 Practical						
	Practical						
618CEP01	Highway Engineering Laboratory	2	25	75	100	618CET05	85
618CEP02	Professional Communication Laboratory(Soft Skills Lab)	2	25	75	100	NIL	86
618CEP03	Internship 2 (2 weeks)	1	25	75	100	NIL	87
	Total	23	225	675	900		
	Professional Ele	ective I	I - Off	ered			
618CET09	Concrete Technology	3	25	75	100		
618CET07	Ground Water Engineering	3	25	75	100		-



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APPENDIX - III

B.E. (CIVIL ENGINEERING)

REGULATION - 2020

REGULATIONS AND SYLLABI UNDER CHOICE BASED CREDIT SYSTEM (Effective from the Academic Year 2020-2021)

I Semester

		Course Title			Р	Credit		Marks	
S.No.	Sub Code	Course Title	L	T	Р	Credit	CA	EA	Total
1	AELT1101	English	3	0	0	3	40	60	100
2	AMAT1101	Mathematics –I	3	1	0	4	40	60	100
3	ACYT1101	Chemistry	3	0	0	3	40	60	100
4	AEET1101	Basic Electrical and Electronics Engineering	3	0	0	3	40	60	100
5	AMET1101	Engineering Graphics & Design	1	0	4	3	40	60	100
6	ACYL1101	Chemistry Laboratory	0	0	4	2	40	60	100
7	AMEL1101	Engineering Practices Laboratory	0	0	4	2	40	60	100
		Total	13	1	20	20	280	420	700



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MINUTES OF THE 21st MEETING OF THE BOARD OF STUDIES IN

COMPUTER SCIENCE AND ENGINEERING

Held on 24.02.2020

Members Present

S.No	Name	Designation	Member	Signature
1.	Dr. K. Thirunadana Sikamani	Professor& Head	Chairman	marker
2.	Dr.S.Pushpa	Professor	Internal Member	8
3.	Ms. M. Grace Prasanna	Assistant Professor	Internal Member	Mah
4.	Mr. N. Komal Kumar	Assistant Professor	Internal Member	N. KIK
5.	Mr. S. Baskar	General Manager – IT IBM India Bangalore	External Member	Bincar
6.	Dr. K. Suresh Joseph	Professor Dept of CSE Pondicherry University	External Member	Swytjen

Chairman

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PRECISION AND PRESENT AND PRES

21.1 Considered the minutes of the 20th meeting of Board of Studies in Computer Science and Engineering held on 20.09.2019

RESOLVED that the minutes of the 20th meeting of Board of Studies in Computer Science and Engineering held on 20.09.2019 be confirmed

21.2 Reviewed the Regulation and Syllabi of B.E. (Computer Science and Engineering) under the Regulations 2013 with Choice Based Credit System (CBCS).

RESOLVED that the Regulation and Syllabi of B.E. (Computer Science and Engineering) under the Regulations 2013 with Choice Based Credit System (CBCS) be continued.

21.3 Reviewed the Regulation and Syllabi of B.E. (Computer Science and Engineering) under the Regulations 2018 with Choice Based Credit System (CBCS).

RESOLVED that the Syllabi of V & VI semester of B.E. (Computer Science and Engineering) under the Regulations 2018 with Choice Based Credit System (CBCS) from the batch of students to be admitted from 2018-19 to be approved. (Appendix - I)

21.4 Considered the new Regulations and syllabi of I & II semesters of B.E. (Computer Science and Engineering) from the batch of students to be admitted from 2020-21 under the Regulations 2020 with Choice Based Credit System (CBCS).

RESOLVED that the new regulations and syllabi of I & II semesters of B.E. (Computer Science and Engineering) with course outcomes from the batch of students to be admitted from 2020-21 under the Regulations 2020 with Choice Based Credit System (CBCS) be approved.(Appendix – II)

21.5 Reviewed the Regulations and syllabi of III & IV semesters of M.E. (Computer Science and Engineering) under the Regulations 2018 with Choice Based Credit System (CBCS).

RESOLVED that the Syllabi of III & IV of M.E. (Computer Science and Engineering) under the Regulations 2018 with Choice Based Credit System (CBCS) from the batch of students to be admitted from 2018-19 to be approved. (Appendix -III)

Date: 24.02.2020

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NEW COURSES FOR THE ACADEMIC YEAR 2019-2020

B.E. - COMPUTER SCIENCE AND ENGINEERING

S.No	Programme Code	Programme Name	Course Code	Name of the Course
1	CSU	B.E Computer Science and Engineering	318CST01	PROBABILITY AND STATISTICS
2	CSU	B.E Computer Science and Engineering	318CST02	OBJECT ORIENTED PROGRAMMING
3	CSU	B.E Computer Science and Engineering	318CST03	DATA STRUCTURE AND ALGORITHMS
4	CSU B.E Computer Science and Engineering 31		318CST04	ANALOG ELECTRONIC CIRCUITS
5	CSU	B.E Computer Science and Engineering	318CST05	DIGITAL ELECTRONICS
6	CSU	B.E Computer Science and Engineering	318CST06	ENVIRONMENTAL SCIENCE
7	CSU	B.E Computer Science and Engineering	418CST01	DISCRETE MATHEMATICS
8	CSU	B.E Computer Science and Engineering	318CSP01	OBJECT ORIENTED PROGRAMMING LAB
9	CSU	B.E Computer Science and Engineering	418ECT03	MICROPROCESSOR AND MICROCONTROLLER
10	CSU	B.E Computer Science and Engineering	418CST02	OPERATING SYSTEMS
11	CSU	B.E Computer Science and Engineering	318CSP03	ANALOG ELECTRONIC CIRCUITS LAB
12	CSU	B.E Computer Science and Engineering	418CST04	OBJECT ORIENTED SOFTWARE ENGINEERING
13	CSU	B.E Computer Science and Engineering	418CST05	COMPUTER ORGANIZATION AND ARCHITECTURE
14	CSU	B.E Computer Science and Engineering	418CSI01	INTERNSHIP-I (TWO WEEKS)
15	CSU	B.E Computer Science and Engineering	418CSP01	OPERATING SYSTEMS LAB
16	B.E Computer		418CSP03	OBJECT ORIENTED SOFTWARE ENGINEERING LAB
17	CSU	B.E Computer Science and Engineering	219UIBT01	PROGRAMMING IN C++ AND DATA STRUCTURES



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MINUTES OF THE 21st MEETING OF THE BOARD OF STUDIES IN

ELECTRONICS AND COMMUNICATION ENGINEERING (ECE)

Held on 24.02.2020

Members Present

S.No	Name	Designation	Member	Signature
1.	Dr. G.P. Ramesh	Professor& Head	Chairman	
2.	Prof.M.V.V.N. Prasada Rao	Associate Professor	Member	RP
3.	Ms. T. Anne Ramya	Assistant Professor	Member	(Del)
4.	Ms. R. Gomathi	Assistant Professor	Member	R.S
5.	Dr. C. Tharini	Professor& Head B.S.Abdur Rahman Crescent Institute of Science & Technology	Academic Expert Member	Than:
6.	Mr. V. S. Ramesh	Texas Instruments (Industry)	Industry Expert Member	Ramerous

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Registrar
St. Pater's Institute of Higher Education and Research
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Avadi, Chennai 600 054

Chairman HEAD

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

21.1 Considered the minutes of the 20th meeting of Board of Studies in Electronics and Communication Engineering held on 20.09.2019

RESOLVED that the minutes of the 20th meeting of Board of Studies in Electronics and Communication Engineering held on 20.09.2019be confirmed

21.2 Reviewed the Regulation and Syllabi of B.E. (Electronics and Communication Engineering) under the Regulations 2015 with Choice Based Credit System (CBCS).

RESOLVED that the Regulation and Syllabi of B.E. (Electronics and Communication Engineering) under the Regulations 2015 with Choice Based Credit System (CBCS) be continued with inclusion of new elective course Industrial Automation 4.0-713EET17 in VII semester to be approved.(Appendix - I)

21.3 Reviewed the Regulation and Syllabi of B.E. (Electronics and Communication Engineering) under the Regulations 2018 with Choice Based Credit System (CBCS).

RESOLVED that the Syllabi of V & VI semester of B.E. (Electronics and Communication Engineering) under the Regulations 2018 with Choice Based Credit System (CBCS) from the batch of students to be admitted from 2018-19 to be approved. (Appendix - II)

RESOLVED to include the following new elective courses in III semester from the batch of students to be admitted from 2019-20 under the Regulation 2018 to be approved. (Appendix - III)

1. Internet of Things - Overview & its Application / 318ECT07

2. Soft Skills Lab I / 318ECP03

21.4 Considered the new Regulations and syllabi of I & II semesters of B.E. (Electronics and Communication Engineering) from the batch of students to be admitted from 2020-21 under the Regulations 2020 with Choice Based Credit System (CBCS).

RESOLVED that the new regulations and syllabi of I & II semesters of B.E. (Electronics and Communication Engineering) with course outcomes from the batch of students to be admitted from 2020-21 under the Regulations 2020 with Choice Based Credit System (CBCS) be approved.(Appendix - IV)



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Reviewed the Regulations and syllabi of III & IV semesters of M.E. (Communication Systems) under the Regulations 2018 with Choice Based Credit System (CBCS).

RESOLVED that the Syllabi of III & IV of M.E. (Communication Systems) under the Regulations 2018 with Choice Based Credit System (CBCS) from the batch of students to be admitted from 2018-19 to be approved. (Appendix - V)

Date: 24.02.2020

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.

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Ave. Ji. Chennai-600 054

Appendix - II

B.E (Electronics and Communication Engineering) Regulation -2018 CHOICE BASED CREDIT SYSTEM

V SEMESTER

				• •				
Code No.	Course Title							
518ECT01	Digital signal Dro	L	Т	P	С		Mark	76
518ECT02	LICCUIO Magnotic Ti	3	1	0	4	CA	EA	Tota
518ECT03		3	1	0	4	25	75	100
	Analog and Digital Communication	3	0	1		25	75	100
518ECT04	Embedded and Pool Ti		U	0	3	25	75	100
		3	0	0	3	25		100
E .	ProgramElective1 ProgramElective2	3	0			25	75	100
F10-	Digital signal Procession	3	0	0	3	25	75	100
		0	0	2	2	25	75	100
5105050	Communication Lab SoftSkillsLab2	0	0	2	2	25 25	75	100
	Total	0	0	4		23	75	100
		18	2	8	2 26	25	75	100
					20	225	675	900

VI SEMESTER

Cod								
Code No.	Course Title							
618ECT01	Antenna and Wave		Т	Р	С		Mark	S
618ECT02	Propagation VLSI Design	3	0	0	3	CA 25	EA	Total
618MBT04	Principles of manage	3	0	0	2		75	100
	& Professional Ethics ProgramElective3	3	0	0	3	25 25	75	100
618ECP01	OpenElective-1	3	0	0	3		75	100
618ECP02	Embedded Lab VLSI Design Lab	3	0	0	3	25 25	75	100
618ECP03	Internship-2	0	0	2	2	25	75 75	100
	Total	0 15	0	0	2	25 25	75	100
			0	4	21	200	75 600	100 800

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318ECT07	INTERNET OF THINGS- OVERVIEW AND ITS APPLICATIONS	L	T	P	C	Total Marks
	AND ITS APPLICATIONS	3	0	0	3	100

PREREQUISITES: None

COURSE OBJECTIVES

- > Identify and design the new models for market strategic interaction.
- Analyze various protocols for IOT
- ➤ Building state of the art architecture in IOT
- Analyze and design different models for network dynamics
- Analyze applications of IoT in real time scenario.

UNIT 1: FUNDAMENTALS OF IOT

 $Introduction-Characteristics-Physical\ design-Protocols-Logical\ design-Enabling\ technologies-IoT\ Levels$ - Domain Specific IoTs - IoT vs M2M., M2M towards IoT-the global context, A use case example, Differing

UNIT 2: IOT DESIGN METHODOLOGY

IoT systems management - IoT Design Methodology - Specifications Integration and Application Development. IoT-An Architectural Overview- Building an architecture, Main design principles and needed capabilities, An IoT architecture outline, standards considerations. UNIT3: IOT REFERENCE ARCHITECTURE

Introduction, Functional View, Information View, Deployment and Operational View, Other Relevant architectural views. Real-World Design Constraints- Introduction, Technical Design constraints-hardware is popular again, Data representation and visualization, Interaction and remote control. Case study: phase onecommercial building automation today, Case study: phase two-commercial building automation in the future.

IOT Protocols Standards - Effort - M2M and WSN Protocols - SCADA and RFID Protocols - Issues with IoT Standardization - Unified Data Standards - IEEE 802.15.4 - BACNet Protocol, Mod Bus, Zig bee Architecture - Network Layer - APS Layer, Security. **UNIT 5: IOT APPLICATIONS**

The role of the IOT for increased autonomy and agility in collaborative production environments -

Resource management in the IOT. Clustering, synchronization and software agents. Applications - Smart grid

COURSE OUTCOMES

Upon completion of the course, students will be able to:CO1:

Analyze various protocols for IoT

CO2: Develop web services to access/control IoT devices.CO3:

Deploy an IoT application and connect to the cloud

CO4: Analyze applications of IoT in real time scenario

TEXT / REFERENCE BOOKS

- 1. Jan Holler, VlasiosTsiatsis, Catherine Mulligan, Stefan Avesand, Stamatis Karnouskos, David Boyle, "From Machine-to-Machine to the Internet of Things: Introduction to a New Age of Intelligence", 1st Edition, Academic Press, 2014.
- 2. Vijay Madisetti and ArshdeepBahga, "Internet of Things (A Hands-on-Approach)", 1stEdition,
- 3. Francis daCosta, "Rethinking the Internet of Things: A Scalable Approach to Connecting Everything", 1st Edition, Apress Publications, 2013
- 4. Architecting the Internet Of Things Dieter uckelmann, Mark Harrison, Springer 2011
- 5. Internet Of Things: Application to the smart grid and building automation by Olivier Hersent, Omar of Highe

Deemed to be University Chennal Refer's Institute of Higher Education and Research speamed to be University U/S 3 of the UGC 4 REGULATION 2018 Avadi, Chennai-600 054

Appendix -IV

B.E. (Electronics and Communication Engineering) Regulations 2020

CHOICE BASED CREDIT SYSTEM

I SEMESTER

Code No.	Course Title	L	1				Mari	arks	
Theory & Pr	actical		•	P	Credit	CA	EA	Tota	
AELT1101	English								
AMAT1101	Mathematics –I	3	0	0	3	40	60	100	
ACYT1101	Chemistry	3	1	0	4	40	60	100	
AEET1101	Basic Electrical and Electronics	3	0	0	3	40	60	100	
AMET1101	Engineering Graphics and Design	3	0	0	3	40	60	100	
CYL1101	Chemistry Laboratory	1	3	0	4	40	60	100	
MEL1101	Engineering Practices Lab	0	0	4	2	40	60		
		0	0	4	2	40	60	100	
	Total	13	4	8	21	280	420	700	

II SEMESTER

Code No.	Course Title	L	1	ГР	Credit		Marl	(S
Theory & I	Practical				Credit	CA	EA	Total
AMAT1102	Mathematics-II						Y	- oca
APHT1101	Physics	3	1	0	4	40	60	100
ACST1101	Computer Programming	3	0	0	3	40	60	100
ACHT1101	Environmental Science	3	0	0	3	40	60	100
ACST1100	Fundamentals of computing and	3	0	0	3	40	60	100
APHL1101	Communication Physics Laboratory	3	0	0	3	40	60	100
ACSL1101	Computer Programming Laboratory	0	0	4	2	40	60	100
ASSL1101	Soft Skills	0	0	4	2	40	60	100
	Total	0	0	2	1	100	0	100
/erall percen	tage change for B.E (Electronics and Com	15	1	10	21	380	42	800

600 OSA

Overall percentage change for B.E (Electronics and Communication Engineering):55.5 %

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AVADI, Chennai - 600054. Tamil Nadu.

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

NEW COURSES FOR THE ACADEMIC YEAR 2020-2021

B.E. – ELECTRONICS AND COMMUNICATION ENGINEERING

S.No	Programme Code	Programme Name	Course Code	Name of the Course
1	ECU	B.E Electronics and Communication Engineering	318ECT07	INTERNET OF THINGS – OVERVIEW & ITS APPLICATION
2	ECU	B.E Electronics and Communication Engineering	318ECP03	SOFT SKILLS LAB I
3	ECU	B.E Electronics and Communication Engineering	518ECT01	DIGITAL SIGNAL PROCESSING
4	ECU	B.E Electronics and Communication Engineering	518ECT02	ELECTRO MAGNETIC THEORY AND TRANSMISSION LINES
5	ECU	B.E Electronics and Communication Engineering	518ECT03	ANALOG AND DIGITAL COMMUNICATION
6	ECU	B.E Electronics and Communication Engineering	518ECT04	EMBEDDED AND REAL TIME SYSTEMS
7	ECU	B.E Electronics and Communication Engineering	518BMT23	WEARABLE SYSTEM
8	ECU	B.E Electronics and Communication Engineering	518ECT20	IOT APPLICATIONS USING WSN AND CLOUD COMPUTING
9	ECU	B.E Electronics and Communication Engineering	518ECP01	DIGITAL SIGNAL PROCESSING LAB
10	ECU	B.E Electronics and Communication Engineering	518ECP02	ANALOG AND DIGITAL COMMUNICATION LAB
11	ECU	B.E Electronics and Communication Engineering	518ECP03	SOFT SKILLS LAB 2
12	ECU	B.E Electronics and Communication Engineering	618ECT01	ANTENNA AND WAVE PROPAGATION
13	ECU	B.E Electronics and Communication Engineering	618ECT02	VLSI DESIGN
14	ECU	B.E Electronics and Communication Engineering	618MBT04	PRINCIPLES OF MANAGEMENT & PROFESSIONAL ETHICS
15	ECU	B.E Electronics and Communication Engineering	618ECT07	INTRODUCTION TO HDL PROGRAMMING
16	ECU	B.E Electronics and Communication Engineering	618EET02	INDUSTRIAL AUTOMATION
17	ECU	B.E Electronics and Communication Engineering	618ECP01	EMBEDDED SYSTEM LAB
18	ECU	B.E Electronics and Communication Engineering	618ECP02	VLSI DESIGN LAB
19	ECU	B.E Electronics and Communication Engineering	618ECP03	INTERNSHIP -2
20	ECU	B.E Electronics and Communication Engineering	713EET17 S	INDUSTRIAL AUTOMATION 4.0 Programment of F

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Appendix -V

M.E (COMMUNICATION SYSTEMS) Regulations 2018

CHOICE BASED CREDIT SYSTEM

SEMESTER III

COURSE CODE	COURSE TITLE	L	Т	P	C
THEORY					
	ELECTIVE IV				
	ELECTIVE V	3	1	0	4
	ELECTIVE VI	3	1	0	4
PRACTICALS		3	1	0	4
318CEPP01	Project Work - Phase I		70		
TOTAL	Thase I	0	0	12	8
		9	3	12	20

SEMESTER IV

COURSE CODE	COURSE TITLE	8	L	Т	P	С
PRACTICALS 418CEPP01	Project Work – Phase II					
TOTAL	Troject Work – Phase II		0	0	24	15
			0	0	24	15

SEMESTER III Elective List

COURSE CODE	COURSE TITLE	L	T	P	C
	ELECTIVE IV			1	
318CEPT01	Electromagnetic Interference and Compatibility in System Design	3	1	0	4
318CEPT02	Advanced Fiber Optic Technologies				1
318CEPT03	Data Converters	3	1	0	4
318CEPT04	Advanced Mcirowave Communication	3	1	0	4
	[1] - [1] [1] [1] [1] [1] [1] [1] [1] [1] [1]	3	1	0	4
318CEPT05	Network Pouting Alexander				-
318CEPT06	Network Routing Algorithms Mobile Adhoc Networks	3	1	0	4
318CEPT07	Multimedia Communication	3	1	0	4
318CEPT08	Wireless Sensor Networks	3	1	0	4
		3	1	0	4
318CEPT09	ELECTIVE VI				
B18CEPT10	Enterprise Cloud Computing	3	1	0	4
B18CEPT11	Communication Network Security	. 3	1	0	4
	High Speed Switching Architectures	3	1		4
	Higher For	•	-	0	7

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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

NEW COURSES FOR THE ACADEMIC YEAR 2020-2021

M.E. – COMMUNICATION SYSTEM

S.No	Programme Code	Programme Name	Course Code	Name of the Course
1	СОР	M.E Communication System	318CEPT01	ELECTROMAGNETIC INTERFERENCE AND COMPATIBILITY IN SYSTEM DESIGN
2	СОР	M.E Communication System	318CEPT07	MULTIMEDIA COMMUNICATION
3	COP	M.E Communication System	318CEPT04	COMMUNICATION NETWOR SECURITY

HEAD

Department of ECE

St. Peter's Institute of Higher Education and Research (Decreed to be University U/S 3 of the UGC Act, 1986) Avadi, Chennai - 6/10 0/34.

Deemed to be University Chermai 600 054

St. Peter's Institute of Higher Education and Research (Daomas to be University U/S 3 of the UGC Act. 1856) Avadi, Channai-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 $21^{\rm st}$ MEETING OF THE BOARD OF STUDIES IN

ELECTRICAL AND ELECTRONICS ENGINEERING (EEE)

Held on 21.02.2020

Members Present

S.No	Name	Designation	Member	
1.	Dr. R. Rani		Heiliber	Signature
	Hemamalini	Professor & Head	Chairperson	10 10 · 1
2.	Dr. K. Balaji	Associate		4. Hours
		Professor	Member	5
3.	Mr. K. Matthew	Assistant	D4 .	K
4.	Dr. C. Cl	Professor	Member	1246
•	Dr. S. Chandramohan	Professor &	Academic	
		Head, Department of EEE, Anna University- Chennai	Expert	S. (~)
•	Dr. Sithu D Sudarsan	Group Man		
		Group Manager, ABB Corporate Research, Bangalore.	Industrial Expert	cont.

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.

3. Ramithanel

21.1 Considered the minutes of the 20th meeting of Board of Studies in Electrical and Electronics Engineering held on 17.09.2019.

RESOLVED that the minutes of the 20th meeting of Board of Studies in Electrical and Electronics Engineering held on 17.09.2019 be confirmed

Reviewed the Syllabus of B.E. (Electrical and Electronics Engineering)

RESOLVED that the syllabi of B.E. (Electrical and Electronics Engineering) under the Regulations 2013 be continued.

21.3 Reviewed the Syllabus of B.E. (Electrical and Electronics Engineering) under the Regulations 2018.

RESOLVED that the Syllabus of B.E. (Electrical and Electronics Engineering) under the Regulations 2018 with syllabi for 3^{rd} to 8^{th} semesters to be effective from 2018 -19 be approved. (Appendix - I)

21.4 To approve Program Outcomes (POs) and Program Specific Outcomes (PSOs) statements for B.E(Electrical and Electronics Engineering) under the Regulations 2020.

RESOLVED Program Outcomes (POs) and Program Specific Outcomes (PSOs) statements for B.E. (Electrical and Electronics Engineering) under the Regulations 2020.

Considered the new regulations and syllabi of B.E. (Electrical and Electronics Engineering) from the batch of students to be admitted from 2020-21 under the Regulations 2020.

RESOLVED that the new regulations and syllabi of B.E. (Electrical and Electronics Engineering) with course outcomes from the batch of students to be admitted from 2020-21 under the Regulations 2020 be approved. (Appendix - II)

21.6 Reviewed the Syllabus of M.E. (Power Electronics and Drives) under the Regulations 2018.

RESOLVED that the Syllabus of M.E. (Power Electronics and Drives) under the Regulations 2018 to be continued.

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

*21.7 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).

RESOLVED that the value added courses imparting transferable and life skills offered beyond the curriculum such as course on "VACEE043 – POWER AUTOMATION" be approved for the upcoming semester (2020-21 Even semester).

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: 21.02.2020



Chairperson

St. Reservis invillate of Higher Education and Research (Deemed to be University US For the USC Act, 1956) Avadi, Chennal-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. Tamil Nadu.

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

NEW COURSES FOR THE ACADEMIC YEAR 2019-2020

B.E. - ELECTRICAL AND ELECTRONICS ENGINEERING

S.No	Programme Code	Programme Name	Course Code	Name of the Course
1	EEU	B.E Electrical and Electronics Engineering	813EET01	ELECTRIC ENERGY GENERATION, UTILIZATION AND CONSERVATION
2	EEU	B.E Electrical and Electronics Engineering	318EET01	PROBABILITY AND STATISTICS
, 3	EEU	B.E Electrical and Electronics Engineering	318EET03	ANALOG ELECTRONICS
4	EEU	B.E Electrical and Electronics Engineering	318EEP01	ANALOG ELECTRONICS LAB
5	EEU	B.E Electrical and Electronics Engineering	318EET02	ELECTRICAL CIRCUIT ANALYSIS
6	EEU	B.E Electrical and Electronics Engineering	318EET04	ELECTRICAL MACHINES – I
7	EEU	B.E Electrical and Electronics Engineering	318EEP04	ELECTRICAL MACHINES – I
8	EEU	B.E Electrical and Electronics Engineering	318EET05	ELECTROMAGNETIC FIELDS
9	EEU	B.E Electrical and Electronics Engineering	318EET06	ENVIRONMENTAL SCIENCE
10	EEU	B.E Electrical and Electronics Engineering	418EET01	NUMERICAL METHODS AND LAPLACE TRANSFORMS
11	EEU	B.E Electrical and Electronics Engineering	418EET03	DIGITAL SYSTEM DESIGN
12	EEU	B.E Electrical and Electronics Engineering	418EET04	ELECTRICAL MACHINES – II
13	EEU	B.E Electrical and Electronics Engineering	418EEP02	ELECTRICAL MACHINES – II LAB
14	EEU	B.E Electrical and Electronics Engineering	418EET05	POWER ELECTRONICS
15	EEU	B.E Electrical and Electronics Engineering	418EEP01	POWER ELECTRONICS AND DIGITAL SYSTEM DESIGN LAB
16	EEU	B.E Electrical and Electronics Engineering	418EET06	POWER QUALITY IN MODERN POWER SYSTEM



Registrar

St. Peter's Institute of Higher Education and Passarch (Deemed to be University U/S 3 of the UGC As., 1986) Avadi, One final 600 0547

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 21st MEETING OF THE BOARD OF STUDIES IN

MECHANICAL ENGINEERING

Held on 21.02.2020

Members Present

1.	Dr. N. Rajeswari	Chairperson
2.	Dr. P. Periyasamy	Member
3.	Dr. D. Chandramohan	Member
4.	Dr. K. Gurusami	Member
5.	Mrs. K. Sunitha	Member
6.	Mr. S. Dinesh Kumar	Member
7.	Dr. A. Elaya Perumal	Academic Expert Member
8.	Mr. A. Mahibalan	Industry Expert Member

21.1 Considered the minutes of the 20th meeting of Board of Studies in Mechanical Engineering held on 17/09/2019.

RESOLVED that the minutes of the 20th meeting of Board of Studies in Mechanical Engineering held on 17/09/2019 be confirmed.

21.2 Reviewed the Regulation and Syllabi of B.E. (Mechanical Engineering) under the Regulations 2013 with Choice Based Credit System (CBCS).

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RESOLVED that the Regulation and Syllabi of B.E. (Mechanical Engineering) under the Regulations 2013 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 courses "Nanotechnology for Energy Systems".

St. Peter's Institute of Higher Education and Ros (Deemed to be University U/S 3 of the UGC Act, 1955) Avadi, Chennal-600 054. 21.3 Reviewed the Regulation and Syllabi of of V & VI semester of B.E. (Mechanical Engineering) under the Regulations 2018 with Choice Based Credit System (CBCS) from the batch of students to be admitted from 2018-19.

RESOLVED that the Syllabi of V & VI semester of B.E. (Mechanical Engineering) under the Regulations 2018 with Choice Based Credit System (CBCS) for the batch of students to be admitted from 2018-19 to be approved. (Appendix - II)

21.4 Reviewed the Regulation and Syllabi of B.E. (Mechanical Engineering) under the Regulations 2018 with Choice Based Credit System (CBCS) from the batch of students to be admitted from 2018-19.

RESOLVED that the Regulation and Syllabi of B.E. (Mechanical Engineering) under the Regulations 2018 with Choice Based Credit System (CBCS) be continued with the changes and amendments that are made in the curriculum of II Semester to IV Semester. (Appendix- III)

21.5 Considered the new Regulations and syllabi of I & II semesters of B.E. (Mechanical Engineering) from the batch of students to be admitted from 2020-21 under the Regulations 2020 with Choice Based Credit System (CBCS).

RESOLVED that the new regulations and syllabi of I & II semesters of B.E. (Mechanical Engineering) with course outcomes from the batch of students to be admitted from 2020-21 under the Regulations 2020 with Choice Based Credit System (CBCS) be approved. (Appendix-IV)

21.6 Reviewed the Regulations and syllabi of M.E. (Advanced Manufacturing Technology) under the Regulations 2018 with Choice Based Credit System (CBCS).

RESOLVED that the Syllabi of M.E. (Advanced Manufacturing Technology) under the Regulations 2018 with Choice Based Credit System (CBCS) be continued.

21.7 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 – V) of Higher Equation and St. Peter's Institute of Higher Education and

St. Peter's Institute of Higher Education and Security (Deamed to be University U/S 3 of the UGC Act, 1999)

Avadi, Chennai-600 054.

20.1 Considered to include value added courses imparting transferable and life skills offered beyond the curriculum in the syllabi of B.E (Mechanical Engineering) and M.E. (Advanced Manufacturing Technology).

RESOLVED that the value added courses imparting transferable and life skills offered beyond the curriculum such as course on "Non Destructive Testing in Welding" be approved for the upcoming academic year (2020-21).

Date: 21.02.2020

Chairman



St. Peter's Institute of Higher Education and Research (Deemed to be University U/S 3 of the USC Aug. 1992) Avadi, Chennai-600 054.

Appendix-I **B.E** (Mechanical Engineering) Regulation -2013 CHOICE BASED CREDIT SYSTEM

NANOTECHNOLOGY FOR ENERGY SYSTEMS

OBJECTIVES

- The students will acquire sharp knowledge on nanotechnology based alternate source of energy
- The students may work on advanced materials for renewable and green energy
- The students will get a clear understanding of Solar technology
- They will also understand the importance of energy storage techniques
- They will be clear about the role of nanotechnology in improving the efficiency in energy usage

UNIT - I: SOLAR ENERGY TECHNOLOGY

Electromagnetic spectrum - Availability of solar radiation - Photovoltaic devices - Dye sensitized solar cells - Silicon technology for solar cells - First generation, second generation and third generation solar cells - Photoelectrochemical cells for hydrogen production

UNIT - II: NANOTECHNOLOGY IN RENEWABLE ENERGY SYSTEMS

Energy challenges - Development and implementation of renewable energy technologies - Nanotechnology enabled renewable energy technologies - Energy transport, conversion and storage - Nano, micro and meso scale phenomena and devices.

UNIT - III: ENERGY SECTOR PRODUCTS USING NANOMATERIALS

Light emitting diodes - Batteries - Catalytic reactors - Capacitors - Super capacitors -Microfluidic systems - Nano engines - Biogas - Biodiesel.

UNIT - IV: FUEL CELL TECHNOLOGY

Fuel cell technologies - Integration and performance for micro - Fuel cell systems - Thin film and microfabrication methods - Design methodologies - Micro-fuel cell power sources.

UNIT - V: HYDROGEN STORAGE TECHNOLOGY

Hydrogen storage methods - Metal hydrides - Hydrogen storage capacity - Hydrogen reaction kinetics – Carbon-free cycle – Gravimetric and volumetric storage capacities – Hydriding/dehydriding kinetics – High enthalpy of formation – Thermal management during the hydriding reaction - Distinctive chemical and physical properties - Multiple catalytic effects - Degradation of the sorption properties - Hydride storage materials for automotive applications.

REFERENCES

- 1. Twidell. J, Weir. T, "Renewable Energy Resources", E & F N Spon Ltd, 2nd Edition
- 2. Shatwell. R.A, "Fuel Storage on Board Hydrogen Storage in Carbon Nanostructures in Fuel cell technology handbook", CRC Press, 2003.
- 3. Hoogers.G, "Fuel cell technology handbook", CRC Press, 2003.

Registrar St. Peter's Institute of Higher Education and Research (Deamed to be University U/S 3 of the USC Act, 1956) * - " Chennal con sa

Appendix-II B.E (Mechanical Engineering) Regulation -2018 CHOICE BASED CREDIT SYSTEM

SEMESTER -V

Code No.	Course Title	Cat.	L	T	P	Credit		M	larks
							CA	EA	Total Marks
THEORY									
518MET01	Design of Machine Elements	Engg.	3	0	0	3	25	75	100
518MET02	Dynamics of Machines	Engg.	3	0	0	3	25	75	100
518MET03	Gas Dynamics and Jet Propulsion	Engg.	3	0	0	3	25	75	100
518MBT04	Principles of Management & Professional Ethics	Mgt.	3	0	0	3	25	75	100
518MET05	Automobile Engineering and New Generation Vehicles	Engg.	3	0	0	3	25	75	100
	Programme Elective I	Engg	3	0	0	3	25	75	100
PRACTICAL									
518MEP01	Thermal Laboratory- I	Engg.	0	0	4	2	25	75	100
518MEP02	Dynamics and Metrology Laboratory	Engg.	0	0	4	2	25	75	100
518MEP03	Soft Skill Laboratory - II	Hum.	0	0	4	2	25	75	100
	Total		18	0	12	24	225	675	900

SEMESTER -VI

10-111	Course Title	cat.	L	Т	P	Credit		N	1arks
Code No.							CA	EA	Total Marks
THEORY									
618MET01	Design of Transmission Systems	Engg.	3	1	0	4	25	75	100
618MET02	Heat and Mass Transfer	Engg.	3	0	0	3	25	75	100
618MET03	Mechatronics	Engg.	3	0	0	3	25	75	100
	Programme Elective I	Engdid emed	Scall	0	0	3	25	75	100
-	Programme Elective III Che	EKSBY	VEWOO	0	O. St. Pe	3 eter's Institute	725 i of High	si j 5 r er Educa	100 tion and Research
PRACTICAL	0	54 3	•/		(Dea				e UGC Act, 1956)
	3	HOTES				Avadi, (Chenn	1ai-60	0 054.

		Total	15	1	8	20	175	525	700
	NCC / NSS	0	0	0	0				
618MEP02	Internship - II	Engg.	0	0	4	2	25	75	100
618MEP01	Thermal Laboratory- II	Engg.	0	0	4	2	25	75	100

Program Elective Courses

SI. No	Course Code	Course Title	Credit	Prerequisite	
Progra	amme Electiv	e I (Sem V)	- Crount		
1.	518MET06	Design for Manufacturing	3	Design	
2.	518MET07	Design of Heat Exchangers	3	Design	
3.	518MET08	Casting and Welding Processes	3	Manf.	
4.	518MET09	Unconventional Machining Techniques	3	Manf.	
5.	518MET10	Turbo Machinery	3	Thermal	
6.	518MET11	Advanced Internal Combustion Processes	3	Thermal	
7.	518MET12	Powder Metallurgy	3	Engg. Mtl	
Progra	mme Elective	e II (Sem VI)			
1.	618MET04	Computational Techniques for Fluid Dynamics	3	Design	
2.	618MET05	3	Manf.		
3.	618MET06	Computer Integrated manufacturing	3	Manf.	
4.	618MET07	Refrigeration and Air Conditioning	3	Thermal	
5.	618MET08	Gas Dynamics for Space Propulsion	3	Thermal	
6.	618MET09	Mechanical Metallurgy	3	Engg. Mtl	
7.	618MET10	Heat Treatment of Metals and Alloys	3	Engg. Mtl	
Progra	mme Elective	: III (Sem VI)			
1.	618MET11	Dynamics and Control	3	Design	
2.	618MET12	Production and Operations Management	3	Manf.	
3.	618MET13	Solar Energy Technology	3	Thermal	
4.	618MET14	Waste to Energy Conversion	3	Thermal	
5.	618MET15	Composite Materials and Mechanics	3 7	Engg. Mtl	
6.	618MET16	Polymer Science Hinte Engineering		ម្ចាថ្មទ. Mtl	
7.	718MET10	Creep and safigue Rehavior of St. Peter's Materials (Deamed)	Inatitute of High	EmggcaMtland I	
-		Chonnai 3 (Deemed)	vadi, Cheh	m ai-600-05 4.	

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Appendix- III

The changes and amendments that are made in II Semester to IV Semestercurriculum of B.E Mechanical Regulation 2018 are enclosed in this appendix.

- 1. 318MEIP01- Internship- I in III semester is shifted to IV semester and coded as 418MEP06- Internship- I.
- 418MET06- Solid and Fluid Mechanics is dropped from IV semester and replaced by two separate courses as 318MET02 - Strength of Materials and 318MET03-Fluid Mechanics and Machinery in III semester
- 418MET04- Manufacturing Technology is dropped from IV semester and replaced by two separate courses as 318MET05- Manufacturing Technology- I in III semester and 418MET07 Manufacturing Technology-II in IV semester.
- 4. 318MET06- Environmental Science is shifted from III semester to II semester and subject is coded as 218CHT05- Environmental Science.
- 418MET03-Engineering Materials is shifted from IV semester to III semester and subject is coded as 318MET06- Engineering Materials and Metallurgy.
- 6. 418MEP03-Soft Skill Laboratory I is shifted from IV semester to III semester and subject is coded as 318MEP02-Soft Skill Laboratory I
- 7. 318MET03-Computer Aided Design is shifted from III semester to IV semester and subject is coded as 418MET08- Computer Aided Design.
- 8. Computer Aided Design Laboratory shifted from III semester is shifted to IV semester and subject is coded as 418MEP04- Computer Aided Design and Manufacturing Laboratory.

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Appendix-IV B.E (Mechanical Engineering) Regulation -2020 CHOICE BASED CREDIT SYSTEM

		SEMEST	ER 1	L					
SI. No.	Course Code	Course Title	L	т	P	С	CA	EA	TOTAL
1.	AELT1101	English	3	0	0	3	40	60	100
2.	AMAT1101	Mathematics –I	3	1	0	4	40	60	100
3.	ACYT1101	Chemistry	3	0	0	3	40	60	100
4.	AEET1101	Basic Electrical and Electronics Engg.	3	0	0	3	40	60	100
5.	AMET1101	Engg. Graphics & Design	1	0	4	3	40	60	100
6.	ACYL1101	Chemistry Laboratory	0	0	4	2	40	60	100
7.	AMEL1101	Engineering Practices Laboratory	0	0	4	2	40	60	100
		Total	13	1	10	20	280	420	700

		SEMEST	ER	2					
SI. No.	Course Code	Course Title	L	т	P	С	CA	EA	TOTAL
1.	AMAT1102	Mathematics –II	3	1	0	4	40	60	100
2.	APHT1101	Physics	3	0	0	3	40	60	100
3.	ACHT1101	Environmental Science	3	0	0	3	40	60	100
4.	ACST1101	Computer Programming	3	0	0	3	40	60	100
5.	AMET1102	Engineering Mechanics	3	0	0	3	40	60	100
6.	APHL1101	Physics Laboratory	0	0	4	2	40	60	100
7.	ACSL1101	Computer Programming Laboratory /	Olin	Pol	Hig.	Nest	40	60	100
8.	ASSL1101	Soft Skill Laboratory- I	20	ch,	グル	sin	\$ 00	-	100
		TOTAL	93	1	950	21	380	420	Reseora

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Appendix - V

ACTION TAKEN REPORT ON STAKEHOLDERS FEEDBACK DEPARTMENT OF MECHANICAL ENGINEERING

2019-2020

Progra m	Stake holder	Feedback	Recommendatio n	Action taken
B.E. MECH	Student	Students suggested the need for job oriented courses, training for facing interviews during campus selection. They also requested to provide are guidance and experttalks by industrialists.	To offer multilingual program for advancing computer education.	Career guidance programs were given and counselling cell supported the development of soft skills and communicatio n ability.
	Teacher	Teaching methods and teaching aids must be improved	Suggested for advance learning	ICT methods and smart boards were used for effective teaching.
	Alumni	More emphasis should be on theapplications of the opted field of study. Focus more on inter disciplinary activities of many courses.	Suggested for Interdisciplinary f projects.	Inter departmental research initiatives was encouraged.



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Parents	Practical Knowledge to be imparted which will help them to face real life situations.	Encouraged the students to participate in competition.	Mini-Project models and individual presentations by students in the institution were encouraged for participating in competitions organised by other institutions.
Employer	Recruiters suggested that the students are be strong in their aptitude skills, as it is the first level of the interview process	To focus on aptitude training.	Intensive training on aptitude training was planned for the next academic year.



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AVADI, Chennai – 600054. Tamil Nadu.

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

NEW COURSES FOR THE ACADEMIC YEAR 2019-2020

B.E. - MECHANICAL ENGINEERING

S.No	Programme Code	Programme Name	Course Code	Name of the Course
1	MEU	B.E Mechanical Engineering	218WMP03	MANUFACTURING PRACTICES LABORATORY
2	MEU	B.E Mechanical Engineering	318MAT01	PARTIAL DIFFERENTIAL EQUATIONS, PROBABILITY & STATISTICS
3	MEU	B.E Mechanical Engineering	318MET02	RENEWABLE SOURCES OF ENERGY
4	MEU	B.E Mechanical Engineering	318MET03	COMPUTER AIDED DESIGN
5	MEU	B.E Mechanical Engineering	318MET04	BASIC ELECTRONICS ENGINEERING
6	MEU	B.E Mechanical Engineering	318MET05	ENGINEERING THERMODYNAMICS
7	MEU	B.E Mechanical Engineering	318MET06	ENVIRONMENTAL SCIENCE
8	MEU	B.E Mechanical Engineering	318MEP01	COMPUTER AIDED DESIGN LABORATORY
9	MEU	B.E Mechanical Engineering	318MEP02	ENGINEERING THERMODYNAMICS LABORATORY
10	MEU	B.E Mechanical Engineering	318MEP03	INTERNSHIP I
11	MEU	B.E Mechanical Engineering	418MET01	KINEMATICS OF MACHINERY
12	MEU	B.E Mechanical Engineering	418MET02	
13	MEU	B.E Mechanical Engineering	418MET03	AND METABLE
14	MEU	B.E Mechanical Engineering	418MET04	IECTINODOG.
15		B.E Mechanical Engineering	418MET05	MEASOREMETT
16		B.E Mechanical Engineering	418MET00	MILCHARGE
17		B.E Mechanical	418MEP0	VILCIII II II CO ZI
13		B.E Mechanical	418MEP0	2 MANUFACTURING TECHNOLOGY LABORATORY
1		B.E. Mechanical 60Engineering	t. Peter's AISMEPO	gist SOFT SKILL LABORATORY - igher Education and Research y U/S 3 of the UGC Act. 1956)

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MINUTES OF THE $eals^{ ext{th}}$ MEETING OF THE BOARD OF STUDIES IN

BIOCHEMISTRY

Held on 20.02.2020 **Members Present**

S.No	Name Designation		Name Designation Member			Signature
1.	Dr. N. Radhakrishnan	Professor& Head	Chairman	Qadhorb mor		
2.	Dr. P. Vasantha Srinivasan	Professor & Head	Internal Member	4 mg		
3.	Ms.BV.Febiyola Assistant Professor		Internal Member			
4	Dr. A. Suresh Kumar	Scientist, Biochemistry & Biotech Division CSIR-CLRI, Chennai	External Member	ello-Shh		
5	Dr. G. Sriram Prasath	Assistant Professor, Department of Biochemistry	External Member	Sleth.		

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Dadhukuml St. Peter's Institute of Higher Education and Research Vaddi: One That Education and Research Va

Considered the minutes of the Zth meeting of Board of Studies in BIOCHEMISTRY held on 19.09.2019.

RESOLVED that the minutes of the Z^{th} meeting of Board of Studies in BIOCHEMISTRY held on 19.09.2019 be confirmed

Considered the new Regulations and syllabi of I & II semesters of B.Sc. (BIOCHEMISTRY) from the batch of students to be admitted from 2020-21 under the Regulations 2020 with Choice Based Credit System

RESOLVED that the new regulations and syllabi of I & II semesters of B.Sc. (BIOCHEMISTRY) with course outcomes from the batch of students to be admitted from 2020-21 under the Regulations 2020 with Choice Based Credit System (CBCS) be approved.

- 1. ACYT1609- Chemistry II
- 2. ACYT1607- Chemistry -I (Appendix - I)
- Considered the new Regulations and syllabi of I & II semesters of M.Sc. 7.3 (BIOCHEMISTRY) from the batch of students to be admitted from 2020-21 under the Regulations 2020 with Choice Based Credit System

RESOLVED that the new regulations and syllabi of I & II semesters of M.Sc. (BIOCHEMISTRY) with course outcomes from the batch of students to be admitted from 2020-21 under the Regulations 2020 with Choice Based Credit System (CBCS) be approved.(Appendix -II)

Date: 20.02.2020

Chairman

Head of the Department Biochemistry

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DEPARTMENT OF BIOCHEMISTRY

Appendix – I **B.Sc BIOCHEMISTRY- I Semester**

						Marks			
Code No.	Course Title	L	Т	P	Credit	CA	EA	Total	
	Language – I*								
AFRT16	(Tamil/Hindi/Telugu/French)	5	0	0	4	40	60	100	
AENT1638	English - I	5	0	0	4	40	60	100	
AENT1642	English For Communication	3	0	0	2	40	60	100	
ACYT16-	Allied –I**	5	0	0	4	40	60	100	
ABYT1601	Introduction to Biochemistry	5	0	0	4	40	60	100	
ACYL16-	Allied –I Lab	0	0	4	2	40	60	100	
ABYL1601	Introduction to Biochemistry Lab	0	0	4	2	40	60	100	
	Total	23	2	8	22	280	420	700	

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OVERALL PERCENTAGE OF SYLLABUS REVISION FOR B.S.C. 39.1. FOR the ACADAMEIC YEAR 2020-2021

II Semester

							Marks		
Code No.	Course Title	L	Т	P	Cre	di	CA	EA	Tota I
ATLT16/ AHIT16/ ATET16/AFRT16	*Language – II (Tamil/Hindi/Telugu/French)	5	0	0	4	1	40	60	100
		5	0	0		4	40	60	100
AENT1639	English - II	5	C	0		4	40	60	100
ACYT16	**Allied -II	2) (2	40	60	100
AEVT1601	Environmental Science	5				4	40	60	100
ABYT1602	Cell Biology			-	4	2	40) 6	0 100
ACYL16-	Allied -II Lab								
ABYL1602	Cell Biology Lab		0	0	4	2	40		
	Soft Skills – I		2	0	0	1	-	0) 10
ASSL1601			0	0	2	1		- 1	
ASSI1601	Internship-I Total		22	2	10	24		0 28 6 0 0	2 90

M.Sc Biochemistry- I Semester

	M.Sc Biochemistry- I Sem					Marks			
Code No.	Course Title	L	т	P	Credit	CA	EA	Total	
\BYT1901	Structure and Function of Biomolecules	5	0	0	4	40	60	100	
	Analytical Biochemistry	5	0	0	4	40	60	100	
ДВҮТ1902	Institute Core- I*	5	0	0	4	40	60	100	
ABYT190-	Program Elective- I**	5	C) () 4	40	60	100	
ABYT190-	Biomolecules Lab	0	(0 4	1 2	40	60	100	
ABYL1901	Analytical Biochemistry Lab	0		0	4 2	40	60	100	
ABYL1902	Analytical Biochernistry Eds Total Pagistrar	2	20	0	8 20	240	360	600	

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M.Sc Biochemistry- II Semester

	Course Title		т			Marks			
Code No.		L		Р	Credit	CA	EA	Total	
ABYT1909	Enzyme and Enzyme technology	5	0	0	4	40	60	100	
ABYT1910	Intermediary metabolism	5	0	0	4	40	60	100	
ABTT1911	Open Elective- I*	5	0	0	4	40	60	100	
ABYT1912	Program Elective- II**								
	Cellular Biochemistry	5	0	0	4	40	60	100	
ABYL1909	Enzyme and Enzyme technology Lab	0	0	4	2	40	60	100	
ASSL1901	Soft skills – I	2	0	0	1	-	100	100	
ASSI1901	Internship – I/Mini-project	0	0	4	3	40	60	100	
	Total	22	0	8	22	200	400	600	



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DEPARTMENT OF BIOCHEMISTRY **B.Sc BIOCHEMISTRY**

Appendix - I

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Chemistry -I

12

Fundamental particles of nucleus, isobars, isotones and isomers - Differences between chemical UNIT 1: NUCLEAR CHEMISTRY reactions; fusion and fission - Radioactive series, group displacement law - Mass defect, derivation of 1amu = 931 MeV - nuclear binding energy and calculation - Applications of radio isotopes - carbon dating, and medicinal applications.

Fuels- Classification-gaseous fuels like water gas, producer gas, liquefied petroleum gas, gobar gas, **UNIT 2: INDUSTRIAL CHEMISTRY** compressed natural gas - Fertilizers- Classification - urea ,ammonium sulphate, superphosphate, triple super phosphate, potassium nitrate- manufacture and uses - Silicones - Preparation, properties and applications. Hardness of water: temporary and permanent hardness, disadvantages of hard water -Softening of hard water - zeolite process, demineralization process and reverse osmosis - Purification of water for domestic use: use of chlorine, Ozone and UV light - Definition and determinations of BOD and COD.

UNIT 3: FUNDAMENTALS OF ORGANIC CHEMISTRY Classification of organic compounds -Hybridization in methane, ethane, acetylene, benzene classification of reagents - electrophiles, nucleophiles and free radicals - Classification of reactions addition, substitution, elimination, condensation and polymerization - Polar Effects - Inductive effect, resonance, hyper-conjugation, steric effect - Keto-enol tautomerism - electrophilic substitution mechanism in benzene (Nitration and Sulphonation) - Heterocyclic compounds - Preparation, properties and uses of furan, Thiophene, pyrrole and pyridine 12

Definition of Certain terms - system, surrounding, reversible and irreversible process- Limitations of I Law Need for II Law - Different Statements of II. Law - Carnot cycle - Efficiency - Carnot Theorem -Thermodynamic Scale of Temperature - Entropy- Definition, unit and change of entropy for phase transformation -Free energy nature of Process in terms of Free energy and entropy-Statement of Third Law.

Rate of chemical reaction- Differential rate expression - order and molecularity - Integrated rate **UNIT 5: CHEMICAL KINETICS** expression for first, second, and zero order reactions - Half-life period— Effect of temperature on rate -Activation energy . Arrhenius equation - Arrhenius reaction rate theory- homogeneous and

Photochemistry - Statement of Grothuss - Draper Law, Stark-Einstein's Law, Quantum Yield. heterogeneous catalysis. Hydrogenchlorine reaction (elementary idea only) Photosynthesis, Photosensitization, Phosphorescence Fluorescence, Chemiluminescence - Definition with examples. TOTAL HOURS:

60

REFERENCE BOOKS

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- 1. Morrison, R. N. & Boyd, R. N," Organic Chemistry", Dorling Kindersley (India) Pvt.
- 2. Dr. Veeraiyan V., "Text book of Ancillary Chemistry", High mount Publishing house, 2008.
- 3. Vaithyanathan S. "Text book of Ancillary Chemistry" Priya Publications, 2006.
- 4. Puri B.R., Sharma and Pathania, "Text book of Physical Chemistry", Vishal Publishing Co.,

Dara S.S., "Text book of Environmental Chemistry and Pollution Controlls & Chand and Co., New Delhl, (Deemed to be University UIS 3 of the UGC Act. 1956) St. Peter's Institute of Avadi, Chennai-600 054 to be University 2014.5 Chennai

Chemistry II

UNIT 1: CO-ORDINATION CHEMISTRY

Definition of terms - Classification of Ligands - Nomenclature - Chelation - EDTA and the application -Werner's Theory - Effective Atomic Number - Pauling's theory- Postulates - Applications to Ni(CO)4,Ni(CN)4 -Merits and Demerits of Werner's and Pauling's theory - Biological Role of haemoglobin and Chlorophyll (elementary idea only) - Applications of co-ordination compounds in qualitative analysis and quantitative analysis like Separation of copper and cadmium ions- Nickel and cobalt ion- Identification of metal ions like Cu, Fe and Ni. Estimation of Ni using DMG and Al using

UNIT 2: BIOMOLECULES

Classification, preparation and reactions of glucose and fructose. Discussion of open and ring structure of glucose. Mutarotation. Interconversion of glucose to fructose and vice versa - Preparation and properties of sucrose. Properties of starch, cellulose and derivatives of cellulose - Diabetes - causes and control measures RNA and DNA (elementary idea only)

Amino acids: Classification, preparation and properties of alanine -preparation of dipeptide using Bergman method.

12

UNIT 3: PHASE DIAGRAM Phase rule: Definition of terms, application of phase rule to water system - reduced phase rule and its application to Pb-Ag system. Freezing mixture - Completely miscible and partially miscible liquid systems - upper and lower critical solution temperatures

UNIT 4: ELECTROCHEMISTRY

Galvanic cells - emf - standard electrode potential - reference electrodes -electrochemical series and its applications - Determination of pH using electrometric method - Electroplating process -Nickel and Chrome plating - Different type of cells - Primary cell, Secondary cell and fuel cells - Corrosion and methods of prevention, Conductometric titrations. Buffer solution - Henderson's equation. Applications of pH and buffer in biological process and industries - Corrosion and its prevention.

UNIT 5: ANALYTICAL CHEMISTRY

Introduction to Qualitative and Quantitative Analysis - Principle of volumetric analysis - Separation techniques - Extraction - Distillation - Crystallization— Chromatographic separations - Principles and applications of column, paper, thin layer and gas-liquid Chromatography

TOTAL HOURS: 60

REFERENCE BOOKS

- 1. Skoog, D.A. Holler F.J. & Nieman, T.A. "Principles of Instrumental Analysis", Saunders College Pub., 2006.
- 2. Dr. Veeraiyan V., "Text book of Ancillary Chemistry", Highmount Publishing house, 2008.
- 3. Vaithyanathan S. "Text book of Ancillary Chemistry", Priya Publications, 2006.
- 4. Morrison, R. N. & Boyd, R. N," Organic Chemistry", 6th Edn., Dorling Kindersley (India) Pvt. Ltd., Pearson Education, 2016
- Puri B.R., Sharma and Pathania, "Text book of Physical Chemistry", Vishal Publishing Co., New Delhi.2017.
- 6. Purcell, K.F &Kotz, J.C. "Inorganic Chemistry", W.B. Saunders Co, 2012

COURSE OUTCOMES

Upon completion of course the learner will be able to:

CO1: Synthesize inorganic complexes of valuable properties.

CO2: Gain knowledge in chemistry of Biomolecules.

Apply skill learnt in the field of Phase rule and Electrochemistry.

ο αρ4: Execute analytical techniques for the separation and purification of compounds.

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Appendix - II

Course Code:

Course Title:

LTPC

ABYT1907

Biology of Infectious Diseases

5004

Course Objectives:

1. To enable the learner to understand the important of infectious diseases which are

2. To enable the learner to understand the significance of hygiene, sanitation, vaccination in prevention of infectious diseases.

Bacterial diseases Unit I

No. of Hours: 12

Bacterial diseases: classification of bacterial pathogens, virulence factors and host pathogen interaction. Bacterial toxins, enterotoxins and their mode of action, diarrhoea, cholera; Tuberculosis, infection and pathogenicity, diagnostics, therapeutics and vaccines, drug resistance. Other bacterial diseases such as - Typhoid, Diphtheria, Pertussis, Tetanus, Botulism Anthrax and Pneumonia; their virulence factors and host pathogen interactions.

Parasitic diseases Unit II

No. of Hours: 12

Parasitic diseases: Classes of parasites and diseases caused by them, Malaria: causative agents, vectors, etiology, diagnostics, drugs, vaccine development. Leishmaniasis and Amoebiasis, Giardiasis and Trypanosoma infections.

Unit III Fungal diseases

No. of Hours: 12

Fungal diseases: Etiology, characteristics and diagnosis of Candidiasis, Sporotrichosis, Aspergillosis and Ring worm. Role of drugs, vaccines and sanitation in prevention and treatment of infectious diseases.

Viral diseases Unit IV

No. of Hours: 12

Viral diseases: Structure and classification of viruses, viral virulence factors, host pathogen interactions; AIDS: history, causative agent, pathogenesis, diagnostics, drugs; other viral diseases such as Hepatitis, Influenza, Rabies, Dengue and Polio; Chicken Pox, Herpes Virus.

Infectious diseases Unit V

No. of Hours: 12

Infectious diseases: Classification, Nosocomial infections; Past and present emerging and re-emerging infectious diseases and pathogens. Source, reservoir and transmission of pathogens. Safety measures when working with pathogens, biosafety levels, infection and Registrar evasion.

Suggested readings:

- 1. Jawetz, Melnick and Adelbergs Medical Microbiology 27th ed., McGraw Hill Education.
- 2. Klien's Microbiology, 7th edition. Prescott, Harley, Wiley, J.M., Sherwood, L.M., Woolverton, C.J. McGraw Hill International Edition (New York), 2008.
- 3. Sherris Medical Microbiology: An introduction to infectious diseases (2010) Kenneth J. Ryan, C., George Ray, Publisher: McGraw-Hill, (New York), 2010.

Expected Course Outcomes:

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

- CO1: Understand the various classes of microbial infectious agents, their mode of action, biology of the diseases, transmission of diseases, the concepts of treatment, and drug resistance for various antimicrobial agents.
- CO2: Understand the important of infectious diseases such as tuberculosis, AIDS, malaria, filariasis, etc. which are highly prevalent in tropical countries.
- CO3: Understand the significance of hygiene, sanitation, vaccination in prevention of infectious diseases.

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${\bf Appendix-III}$

Program	Stakeholder	Feedback	Recommendation	Action taken
	Students	It was observed that students still required few competent skills to face the industry.	New Teaching pedagogy needs to be incorporated.	Students were asked to present seminar on certain topics & activities like group discussion/quizzes were included
BIOCHEMIS TRY	Teachers	Internal Assessment practices need more improvement to streamline the curriculum taught (especially during First year).	More assessment practices needs to be conducted (apart from regular ones).	Continuous assessment tests & Model Exams were conducted to enhance the follow-up of concepts taught. Along with this online assessment were also conducted.
	Alumni	Improvements on use of online tools were suggested	Faculties were insisted to use more ICT enabled teaching methods and materials like NPTEL	Faculties were suggested to adopt for ICT teaching methods like PPT, online quiz, YouTube videos etc

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MINUTES OF THE 8th MEETING OF THE BOARD OF STUDIES IN

BIOTECHNOLOGY

Held on 20.02.2020

Members Present

S.No	Name	Designation	Member	Signature
1.	Dr. P. Vasantha Srinivasan	Professor& Head	Chairman	Why
2.	Dr. N. Radhakrishnan	Professor & Head	Internal Member	padham
3.	Dr. K. Amala	Assistant Professor	Internal Member	Confee
4.	Ms. P. Yogarajalakshmi	Assistant Professor	Internal Member	PHILIT
5.	Dr. A. Suresh Kumar	Scientist, Biochemistry & Biotech Division CSIR-CLRI, Chennai	External Member	Ehlag
6.	Dr. G. Sriram Prasath	Assistant Professor, Department of Biochemistry D.G Vaishnav College	External Member	Ballagh.

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Chennai
600 054

Registrar
St. Peter's Institute of Higher Education and Research
(Deemed to be University 11100)

Chairman

Head of the Department
Biotechnology
St. Peter's Institute of Higher Education & Research

8.1 Considered the minutes of the 7th meeting of Board of Studies in Biotechnology held on 19.09.2019.

RESOLVED that the minutes of the 7th meeting of Board of Studies in Biotechnology held on 19.09.2019 be confirmed

Considered the new Regulations and syllabi of I & II semesters of B.Sc. 8.2 (Biotechnology) from the batch of students to be admitted from 2020-21 under the Regulations 2020 with Choice Based Credit System

RESOLVED that the new regulations and syllabi of I & II semesters of B.Sc. (Biotechnology) with course outcomes from the batch of students to be admitted from 2020-21 under the Regulations 2020 with Choice Based Credit System (CBCS) be approved.(Appendix - I)

RESOLVED to include the following new elective courses in I & II semester from the batch of students to be admitted from 2020-21 under the Regulation 2020 to be approved. (Appendix - 1I)

- 1. ABTT1602- Plant Physiology
- 2. ACYT1607- Chemistry -I

Considered the new Regulations and syllabi of I & II semesters of M.Sc. 8.3 (Biotechnology) from the batch of students to be admitted from 2020-21 under the Regulations 2020 with Choice Based Credit System

RESOLVED that the new regulations and syllabi of I & II semesters of M.Sc. (Biotechnology) with course outcomes from the batch of students to be admitted from 2020-21 under the Regulations 2020 with Choice Based Credit System (CBCS) be approved.(Appendix -III)

RESOLVED to include the following new elective course in I semester from the batch of students to be admitted from 2020-21 under the Regulation 2020 to be approved.

1. ABTT1908 - Cell biology and Genetics" (Appendix - IV)

Considered to include value added courses imparting transferable and 8.4 life skills offered beyond the curriculum in the syllabi of B.Sc. (Biotechnology) and M.Sc. (Biotechnology).

RESOLVED that the value added courses imparting transferable and life skills offered beyond the curriculum such as course on "Biodiversity and Environment Conservation" be approved for the upcoming semester (2020-2021- Odd semester).

Registral

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Head of the Department Biotechnology "S! Dotore Institute attich

Date: 20.02.202

Appendix - I

St. Peter's Institute of Higher Education and Research B.Sc. Biotechnology

I Semester

Code No.	Course Title	L	T	P			Mar	ks
ATLT1601-/					Credit	CA	EA	Tota
AHIT16/								
ATET16/	*Language - I							
AFRT16	(Tamil/Hindi/Telugu/French)							1
AENT1638	English – I	5	0	0	4	40	60	100
AENT1642		5	0	0	4	40	60	100
	English For Communication	3	0	0	2	10	-	
ACYT1608	**Allied –I Bioorganic chemistry	-				40	60	100
ABTT1601	Advance Cell Biology	5	0	0	4	40	60	100
		5	0	0	4	40	60	100
	Allied –I Bioorganic chemistry Lab	0	0	4	2	40	60	
ABILIOUI	Advance Cell Biology Lab	0	0	4	0		00	100
	Totai		-	4	2	40	60	100
10		23	2	8	22	280	420	700

II Semester

	II Sem	ester	_		_				
Code No.	Course Title			Т	P		Marks		
ATLT1602/			1			Credit	CA	A E	A Tota
AHIT16/ ATET16/ AFRT16	*Language – II (Tamil/Hindi/Telugu/French)								
AENT1639		5	-	0	0	4	40	60	100
ABTT1604	**Allied –II General Microbiology	5	1	2	0	4	40	60	100
AEVT1601	Environmental Science	5	(0	4	40	60	100
	Molecular Biology	2	0		0	2	40	60	100
	Allied –II General Microbiology Lab	5	0		0	4	40	60	100
\BTL1603	Molecular Biology Lab	0	0	4	4	2	40	60	100
- Company of the Comp	Soft Skills – I	0	0	4	1	2	40	60	100
	nternship-I	2	0	C		1	100	100	100
		0	0	2		1	100	100	100
	Total	22	2	10		24		620	900

Overall percentage of syllabus revision for B.Sc. -40.4% for the academic year 2020-2021

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NEW COURSES FOR THE ACADEMIC YEAR 2020-2021

B.Sc. - BIOTECHNOLOGY

S.No	Programme Code Programme Name Course Code		Name of the Course		
1	BOU	B.Sc Biotechnology	ABTT1601	ADVANCE CELL BIOLOGY	
2	BOU	B.Sc Biotechnology	ABTL1601	ADVANCE CELL BIOLOGY LA	
3	BOU	B.Sc Biotechnology	ABTT1604	GENERAL MICROBIOLOGY	
4	BOU	B.Sc Biotechnology	ABTT1603	MOLECULAR BIOLOGY	
5	BOU	B.Sc Biotechnology	ABTL1604	GENERAL MICROBIOLOGY	
6	BOU	B.Sc Biotechnology	ABTL1603	MOLECULAR BIOLOGY LAB	
7	BOU	B.Sc Biotechnology	ABTT1602	PLANT PHYSIOLOGY	
8	BOU	B.Sc Biotechnology	ACYT1607	CHEMISTRY -I	



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Appendix - Il

Elective-I (ABTT1602) - I Semester

Plant Physiology

Course objectives:

- 1. To acquire theoretical knowledge in photosynthesis and respiration
- 2. To gain knowledge in physiological and chemical nature of plant growth regulators
- 3. To learn the basics of photoperiodism and photomorphogenesis of plants.

Unit I. Photosynthesis

No. Of Hours 12

Photosynthetic Pigments (Chl a, b, xanthophylls, carotene); Photosystem I and II, reaction center, antenna molecules; Electron transport and mechanism of ATP synthesis; C3, C4 and CAM pathways of carbon fixation; Photorespiration.

Unit II. Respiration and photorespiration

No. Of Hours 12

Citric acid cycle; plant mitochondrial electron transport and ATP synthesis; alternate oxidase; photorespiratory pathway.

Unit III. Nitrogen metabolism

No. Of Hours 12

Biological nitrogen fixation; Nitrate and ammonia assimilation.

Unit IV. Plant growth regulators

No. Of Hours 12

Chemical nature of auxin, Gibberlins, Cytokinins, ethylene and Abscissic acid (ABA); physiological effects and mechanisms of action, Gibberlins and Cytokinins, Practical applications of growth hormones in agriculture and horticulture

Unit: V. Plant response to light and temperature

No. Of Hours 12

Photoperiodism (SDP, LDP, Day neutral plants); Phytochrome (discovery and structure), red and far red light responses on photomorphogenesis; Vernalization.

Suggested Reading

- 1. Taiz, L., Zeiger, E. Mollar, I. M. and Murphy, A. (2015). Plant physiology and Development 6th edition. . Sinauer Associates Inc., USA.
- 2. Ross and Salisbury. (2009). Plant Physiology. Cengage Learning (Thompson), New Delhi, India.
- 3. Buchanan, B.B. and Gruissem, W. (2015). Biochemistry and molecular biology of plants. Willy Blackwell ASPB USA.
- 4. Dey, P.M. and Harborne, J.B. (2000). Plant biochemistry. Academic Press, UK.
- 5. Goodwin, T.W. and Mercer, E.I. (2003). Introduction to plant biochemistry. CBS Publishers & Distributors, New Delhi, India.

COURSE OUTCOME

CO1: Explain the significance of photosynthetic process.

CO2: Understand about plant electron transport, respiratory and photo respiratory pathways.

CO3: Gain knowledge in various plant growth hormones and its mechanism of actions.

CO4: Understand about biological nitrogen fixation, its types and ammonium assimilation

CO5: Understand about light and temperature responses on photo morphogenesis.

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Elective-I (ACYT1607) - II Semester

Chemistry - I

Course objectives:

- 1. To acquire knowledge in Nuclear and Industrial chemistry.
- 2. To understand the basics of Organic Chemistry.
- 3. To gain knowledge in the field of Thermodynamics and Chemical kinetics.

UNIT 1: NUCLEAR CHEMISTRY

Fundamental particles of nucleus, isobars, isotones and isomers – Differences between chemical reactions; fusion and fission – Radioactive series, group displacement law – Mass defect, derivation of 1amu = 931 MeV – nuclear binding energy and calculation – Applications of radio isotopes – carbon dating, and medicinal applications.

UNIT II: INDUSTRIAL CHEMISTRY

Fuels- Classification-gaseous fuels like water gas, producer gas, liquefied petroleum gas, gobar gas, compressed natural gas - Fertilizers- Classification – urea ,ammonium sulphate, superphosphate, triple super phosphate, potassium nitrate- manufacture and uses - Silicones - Preparation, properties and applications. Hardness of water: temporary and permanent hardness, disadvantages of hard water - Softening of hard water - zeolite process, demineralization process and reverse osmosis - Purification of water for domestic use: use of chlorine, Ozone and UV light - Definition and determinations of BOD and COD.

UNIT III: FUNDAMENTALS OF ORGANIC CHEMISTRY

Classification of organic compounds -Hybridization in methane, ethane, acetylene, benzene - classification of reagents - electrophiles, nucleophiles and free radicals - Classification of reactions addition, substitution, elimination, condensation and polymerization - Polar Effects - Inductive effect, resonance, hyper-conjugation, steric effect - Keto-enol tautomerism - electrophilic substitution mechanism in benzene (Nitration and Sulphonation) - Heterocyclic compounds - Preparation, properties and uses of furan, Thiophene, pyrrole and pyridine

UNIT IV: THERMODYNAMICS

Definition of Certain terms - system, surrounding, reversible and irreversible process- Limitations of I Law Need for II Law - Different Statements of II. Law - Carnot cycle - Efficiency - Carnot Theorem - Thermodynamic Scale of Temperature - Entropy- Definition, unit and change of entropy for phase transformation -Free energy nature of Process in terms of Free energy and entropy-Statement of Third Law.

UNIT V: CHEMICAL KINETICS

Rate of chemical reaction- Differential rate expression - order and molecularity - Integrated rate expression for first, second, and zero order reactions - Half-life period— Effect of temperature on rate - Activation energy . Arrhenius equation - Arrhenius reaction rate theory- homogeneous and heterogeneous catalysis. Photochemistry - Statement of Grothuss - Draper Law, Stark-Einstein's Law, Quantum Yield. Hydrogen-chlorine reaction (elementary idea only) Photosynthesis, Photosensitization, Phosphorescence Fluorescence, Chemiluminescence - Definition with examples.

Suggested Readings:

- 1. Morrison, R. N. & Boyd, R. N," Organic Chemistry", Dorling Kindersley (India) Pvt. Ltd, Pearson Education, 2016
- 2. Dr. Veeraiyan V., "Text book of Ancillary Chemistry", High mount Publishing house, 2008.
- 3. Vaithyanathan S. "Text book of Ancillary Chemistry", Priya Publications, 2006.
- 4. Puri B.R., Sharma and Pathania, "Text book of Physical Chemistry", Vishal Publishing Co., New Delhi.2017.

5. Dara S.S., "Text book of Environmental Chemistry and Pollution Control", S.Chand and Co., NewDelhl, 2014.

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COURSE OUTCOME

CO1: Gain knowledge in different types of Nuclear reactions.

CO2: Understand the importance of Industrial Chemistry.

CO3: Acquire knowledge in fundamentals of Organic Chemistry.

CO4: Become familiar with Laws of thermodynamics and concepts.

CO5: Analyze the rate of Thermal and Photochemical Reactions.

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Appendix - III

St. Peter's Institute of Higher Education and Research M.Sc. Biotechnology

Semester I

SUB CODE	Course Title	,	Т	P	C 12	Marks			
SUB CODE	Course Title	L	1	P	Credit	CA	EA	Total	
ABTT1901	Advanced Biochemistry	5	0	0	4	40	60	100	
ABTT1902	Cell and Molecular Biology	5	0	0	4	40	60	100	
ABTT1903	Institute Core – I Bio Instrumentation	5	0	0	4	40	60	100	
ABTT1906	Program Elective – I- Immunology and immune technology	5	0	0	4	40	60	100	
ABTL1901	Advanced Biochemistry Lab	0	0	4	2	40	60	100	
ABTL1902	Cell and molecular Biology Lab	0	0	4	2	40	60	100	
	Total .	20	0	8	20	240	360	600	

Semester II

SUB CODE	Course Title	L				Marks			
	Course Title		T	P	Credit	CA	EA	Total	
ABTT1909	Food and medical biotechnology	5	0	0	4	40	60	100	
ABTT1910	Herbal biotechnology	5	0	0	4	40	60	100	
ABTT1911	Open Elective-I - Bioethics and Biosafety	5	0	0	4	40	60	100	
ABTT1912	Program Elective-II- Microbiology	5	0	0	4	40	60	100	
ABTI1909	Food and medical biotechnology Lab	0	0	4	2	40	60	100	
ASSL1901	Soft skills – I	2	0	0	1	-	100	100	
ASSI1901	Internship – I/Mini – Project	0	0	4	3	40	60	100	
	Total	22	0	8	22	200	400	600	

Overall percentage of syllabus revision for M.Sc. - 61.9% for the academic year 2020-Education

2021

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NEW COURSES FOR THE ACADEMIC YEAR 2020-2021

M.Sc. - BIOTECHNOLOGY

o Programme Programme Name		Course Code	Name of the Course
DOD	M Sc Biotechnology	ABTT1901	ADVANCED BIOCHEMISTRY
		ABTT1902	CELL AND MOLECULAR BIOLOGY
BOP		ABTT1903	BIOINSTRUMENTATION
BOP			IMMUNOLOGY AND IMMUNO TECHNOLOGY
BOP	,		ADVANCED BIOCHEMISTRY
BOP			CELL AND MOLECULAR
BOP	M.Sc Biotechnology		BIOLOGY LAB FOOD AND MEDICAL
ВОР	M.Sc Biotechnology	ABTT1909	BIOTECHNOLOGY
BOP	M.Sc Biotechnology	ABTT1910	HERBAL BIOTECHNOLOGY
ROP	M.Sc Biotechnology	ABTT1912	MICROBIOLOGY
		ABTI1909	FOOD AND MEDICAL BIOTECHNOLOGY LAB
		ABTT1908	CELL BIOLOGY AND GENETICS
	BOP BOP BOP BOP BOP BOP BOP BOP BOP	BOP M.Sc Biotechnology BOP M.Sc Biotechnology	Programme CodeProgramme NameCodeBOPM.Sc BiotechnologyABTT1901BOPM.Sc BiotechnologyABTT1902BOPM.Sc BiotechnologyABTT1903BOPM.Sc BiotechnologyABTT1906BOPM.Sc BiotechnologyABTL1901BOPM.Sc BiotechnologyABTL1902BOPM.Sc BiotechnologyABTT1909BOPM.Sc BiotechnologyABTT1910BOPM.Sc BiotechnologyABTT1912BOPM.Sc BiotechnologyABTT1912BOPM.Sc BiotechnologyABTT1909



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Elective-I (ABTT1908) - I Semester

Cell Biology and Genetics

- The student can understand how the cell is equipped with machineries to conduct activities as Course objectives:
- The structural features of cell organelles/machineries. The functional mechanisms of cellular phenomena.

Cell: An Introduction. Membrane proteins, lipids. Fluid mosaic model, membrane fluidity, membrane asymmetry, lipid raft. Functions of the membrane. Membrane transport: Passive transport- Diffusion, facilitated diffusion- glucose porter molecules. Channel proteins- aquaporins.

Extracellular matrix: composition and functions. Cell signaling-Ion channel coupled receptors-Unit II Extracellular matrix synaptic transmission. Enzyme coupled receptors- ras pathway. cAMP as second messengersglycogen breakdown by epinephrine.ca ions as second messenger. ER: structure and function, Golgi complex: structure, types, protein sorting and trafficking

Mitochondrion: structural features and functions, Chemi osmotic coupling, Chloroplast -structural features and functions, LHC, rubisco, Nucleus, nuclear pore complex, structure of chromosomes, mitosis and meiosis, Model organisms in cell biology. Cell cycle: G1, S,G2, M phases

Mendel's laws, dominance, epistasis, multiple alleles-ABO blood groups, pseudoalleles, linkage, sex linkage, linkage groups, two point and three point test crosses, determination of gene order, chromosome mapping, sex influenced genes, sex limited genes.

Behavioral genetics, Hardy Weinberg principle- natural selection, genetic drift, Genetic variation, Allele frequencies and its changes, mutation, gene flow, random mating, inbreeding, out breeding, assortive mating, hybrid vigour. Mutational analysis using principles of probability-Chi square test

- 1. Principles of Genetics, Snustad D P, Simmons and Jenkins, John Wiley And Sons Inc ISBN-13: 978-1118129210 Suggested readings:
- 2. Genetics, Robert Weaver and Philip Hendricks, WH.C. Brown Publishers, Iowa
- 4. Introduction to Genetic Analysis, Griffiths, Wessler, Lewontin, Gelbart, Suzuki and Miller, Freeman's and Co, 3. Fundamentals of Genetics, B D Singh, Kalyani Publishers New York

CO1: Emphasis will be placed on developing an understanding of microbial cell biology, genetics, the

CO2: Students will apply their knowledge of cell biology to selected examples of changes or losses in cell CO3: Students will know about the cell and its biology, which will help the students to understand the

CO4: Emphasis will be placed on developing an understanding of microbial cell biology, genetics, the ori gins of cells and the generation interactions of microbes with their environment.

CO5: On completion of course students are able to understand.

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MINUTES OF THE 21st MEETING OF THE BOARD OF STUDIES IN

DEPARTMENT OF MANAGEMENT STUDIES

Held on 10.02.2020

Members Present

S.No	Name	Designation	Member	Signature
1.	Dr. M. UMA RAMAN	Professor& Head of Management studies	Chairman	Chance
2.	Dr. R.Arasu	Principal, University of Madras Arts & Science College, ECR Road, Nemmeli - 603	External Member	Freon
3.	Mr.M.Kailasagiri	Regional HR, Head - South, TI Cycles of India, Chennai	External Member	Kabajan
4.	Ms. R. Heena	Assistant Professor	Member	Heora
5.	Ms. D. Divya	Assistant Professor	Member	Dugg

Chenner Chenne

\$1. 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

21.1 Considered the minutes of the 20th meeting of Board of Studies in Department of Management Studies held on 23.08.2020

RESOLVED that the minutes of the 20th meeting of Board of Studies in Department of Management Studies held on 23.08.2020 be confirmed

21.2 Reviewed the Regulation and Syllabi of Department of Management Studies MBA for Semester I and Semester II, under the Regulations 2020 with Choice Based Credit System (CBCS).

RESOLVED that the Regulation and Syllabi of Department of Management Studies MBA for Semester I and Semester II, under the Regulations 2020 with Choice Based Credit System (CBCS) be continued.

21.3 Reviewed the Regulation and Syllabi of Department of Management Studies BBA for Semester I and Semester II, under the Regulations 2020 with Choice Based Credit System (CBCS).

RESOLVED that the Regulation and Syllabi of Department of Management Studies BBA for Semester I and Semester II, under the Regulations 2020 with Choice Based Credit System (CBCS) be continued With the addition of open electives.

21.4 Considered the new Regulations and syllabi of Department of Management Studies for MBA from the batch of students to be admitted from 2020-21 for MBA under the Regulations 2020 with Choice Based Credit System (CBCS).

RESOLVED that the new regulations and syllabi of Department of Management Studiesfor MBA with course outcomes from the batch of students to be admitted from 2020-21 under the Regulations 2020 with Choice Based Credit System (CBCS) be approved.

21.5 Considered the new Regulations and syllabi of Department of Management Studies for BBA from the batch of students to be admitted from 2020-21 for BBA under the Regulations 2020 with Choice Based Credit System (CBCS).

Registrar

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RESOLVED that the new regulations and syllabi of Department of Management Studiesfor BBA with course outcomes from the batch of students to be admitted from 2020-21 under the Regulations 2020 with Choice Based Credit System (CBCS) be approved.

21.6 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 Department of Management Studies MBA programme under the Regulations 2020 and BBA 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.

21.7 Considered to include courses having focus on employability/ entrepreneurship /skill development in the syllabi of MBA programme under under the Regulations 2020 & and BBA under the Regulations 2020.

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

21.8 Considered to include value added courses imparting transferable and life skills offered beyond the curriculum in the syllabi of MBA, Department of Management Studies and BBA Department of Management Studies.

RESOLVED that the value added courses imparting transferable and life skills offered beyond the curriculum such as course on "Digital Marketing" and "Business Analytics" be approved for the upcoming semester (2020-21 Odd and Even semester).

Date: 10.02.2020

Institute of H

Registrai

\$1. Peter's Institute of Higher Education and Researct (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

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MINUTES OF THE 9th MEETING OF THE BOARD OF STUDIES IN

CHEMISTRY

Held on 20th February, 2020

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, Sholinganallur

External Member

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

(7) Dr. Helan P Kavitha, M.Sc., PhD., Professor & Head, Department of Chemistry, SRM Institute of Science and Technology, Ramapuram

9.1	Considered the minutes of the 8 th meeting of Board of Studies in
	Chemistry held on 19.09.2019.
	RESOLVED that the minutes of the oth
	Chemistry held on 19.09.2019.be confirmed.
9.2	Reviewed the syllabi of Charles
	Reviewed the syllabi of Chemistry prescribed for Engineering and Technology programmes under the Regulations 2013, 2015 and 2017.
	RESULVED that the cyllobia f Cl.
	RESOLVED that the syllabi of Chemistry prescribed for Engineering and continued. Resolved that the syllabi of Chemistry prescribed for Engineering and continued.
9.3	Reviewed at the state of the st
	Reviewed the syllabi of Chemistry prescribed for Engineering and Technology programmes under the Regulations 2018
	regulations 2018.
	RESOLVED that the syllab: - COL
	RESOLVED that the syllabi of Chemistry prescribed for Engineering and Technology programmes under the Regulations 2018 be continued
9.4	Considered the syllabil of Chamiltons 2018 be continued
	Technology programmes under the new Regulations 2020.
	RESOLVED that the syllabil of Chart
	RESOLVED that the syllabi of Chemistry prescribed for Engineering and Technology programmes under the new Regulation 2000
	approved.(Appendix I) under the new Regulations 2020 be
9.5	Reviewed the Regulation & G. H. d.
wighou	Reviewed the Regulation & Syllabi of V and VI Semester of B.Sc Chemistry programme under the Regulation 2010
Deemed Deemed	RESOLVED that the D
Deemed Page	RESOLVED that the Regulation & Syllabi of V and VI Semester of B.Sc (Appendix- II)
I we offiversity I	(Appendix-II) Regulations 2018 be continued.
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9.6	Considered the Regulation & Syllabi of I and II Semester B.Sc Chemistry
	programme under the Regulations 2020.
	RESOLVED that the Regulation & Syllabi of I and II Semester B.Sc
	Chemistry programme under the Regulations 2020 be approved
	(Appendix III)
9.7	Considered the Regulation & Syllabi of III and IV Semester M.Sc
	Chemistry programme under the Regulations 2019.
	RESOLVED that the Regulation & Syllabi of III and IV Semester M.Sc
	Chemistry programme under the Regulations 2019 be continued
	(Appendix IV)
9.8	Considered to include value added courses imparting transferable and life
	skills offered beyond the curriculum in the syllabi of B.Sc (Chemistry)
	RESOLVED that the value added courses imparting transferable and life
	skills offered beyond the curriculum such as course on "Good Laboratory
	Practices" be approved for the upcoming semester (2020-21)
	1 Tractices be approved for the upcoming semester (2020-21)

Date: 20.02.2020

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600 054

Registrar

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Avadi, Chennai - 600 U54

Chairperson

St. PETER'S INSTITUTE OF HIGHER EDUCATION AND RESEARCH B.E/B.Tech - All Branches

Regulations 2020

REGULATIONS AND SYLLABI UNDER CHOICE BASED CREDIT SYSTEM

(Effective from the Academic Year 2020-2021)

		L	T	P	C	Total Marks
ACYT1101	CHEMISTRY	3	0	0	3	100

PREREQUISITES: School Chemistry

COURSE OBJECTIVES

- > To make the students conversant with atomic and molecular structure.
- > To develop an understanding on the concepts of spectroscopic techniques and their applications.
- > To understand the use of free energy in chemical equilibrium.
- To have thorough knowledge on phase rule and alloys.
- > To understand the basic concepts of stereochemistry, organic reactions and synthesis of a drug molecule.

UNIT 1: ATOMIC AND MOLECULAR STRUCTURE

Quantum mechanics -. Basics and significance-Schrodinger equation - Particle in one dimensional box-Molecular orbital theory- Molecular orbital diagrams of homonuclear and heteronuclear diatomic molecules. Energy level diagrams of diatomic pi-molecular orbitals of butadiene and benzene and aromaticity. Crystal field theory and the energy level diagrams for transition metal ions and their magnetic properties. Band structure of solids and the role of doping on band structures.

UNIT 2: SPECTROSCOPIC TECHNIQUES AND PHOTOCHEMISTRY

Principles of spectroscopy-Electromagnetic spectrum- Electronic spectroscopy - Vibrational spectroscopy -Nuclear magnetic resonance spectroscopy - Principle, Instrumentation (Block diagram only) and applications -Photochemistry-Laws of photochemistry-Photo processes-Internal conversion, Intersystem crossing, Phosphorescence, Fluorescence and its applications.

UNIT 3: USE OF FREE ENERGY IN CHEMICAL EQUILIBRIA

Thermodynamic functions: energy, entropy and free energy. Free energy and emf. Cell potentials, Corrosion-Types- -Control measures- Use of free energy Nernst equation and applications. considerations in metallurgy through Ellingham diagrams-Water Chemistry-Hardness-Types-Estimation of hardness by EDTA method-Desalination of brackish water-RO process.

UNIT 4: PHASE RULE AND ALLOYS

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Phase rule: Introduction, definition of terms with examples, One Component System- water system -Reduced phase rule - Two Component Systems- classification – lead-silver system, zinc-magnesium Higher F system. Alloys: Introduction- Definition- Properties of alloys- Significance of alloying, Functions and effect of alloying elements- Ferrous alloys- Nichrome and Stainless steel - heat treatment of steel; to be University ferrous alloys – brass and bronze. Registrar

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UNIT 5: STEREOCHEMISTRY AND ORGANIC REACTIONS

Representations of 3 dimensional structures, structural isomers and stereoisomers, configurations and symmetry and chirality, enantiomers, diastereomers, optical activity, absolute configurations and conformational analysis. Isomerism in transition metal compounds. Introduction to reactions involving substitution, addition, elimination, oxidation, reduction, cyclization and ring openings- Synthesis of

TOTAL HOURS: 45

COURSE OUTCOMES

Upon Completion of the course, the students will be able to:

CO1: Analyze microscopic chemistry in terms of atomic and molecular orbitals.

CO2: Distinguish the ranges of the electromagnetic spectrum used for exciting different molecular energy levels in various spectroscopic techniques.

CO3: Understand bulk properties and processes using thermodynamic considerations.

CO4: Evaluate various metals and alloy combinations.

CO5: Design the steps for the manufacture of drug for medicinal applications.

TEXT BOOKS

1. K. P. C. Volhardt and N.E. Schore, "Organic Chemistry: Structure and Function", 6thEdition, W.H. Freeman Publisher, NHBS, 2015.

2. P. W. Atkins, Julio de Paula,," Physical Chemistry", 8th Edition, Oxford University press, Oxford, 2016.

Dr. Sayeeda Sultana," Engineering Chemistry", R.K.Publishers, Coimbatore, 2016.
 B. M. Mahan, R. J. Meyers, "University Chemistry", 4th Edition,

5. Engineering Chemistry by Jain and Jain, 16th Edition, Dhanpat Rai Publishing Company, New Delhi, 2017.

6. C. N. Banwell, "Fundamentals of molecular spectroscopy",5th Edition McGraw-Hill Education India Pvt Limited, India, 2013.

> Higher Deemed to be University 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

ACYL1101	CYL1101 CHEMISTRY LABORATORY	T	P	С	Total Marks	
		0	0	4	2	100

PRE REQUISITES: None

COURSE OBJECTIVES

> To acquire the quantitative skills in volumetric analysis, potentiometric and condutometric titrations.

LIST OF EXPERIMENTS

- 1. Determination of hardness of water by EDTA method.
- 2. Determination of chloride content of water sample by argento metric method.
- 3. Determination of strength of given hydrochloric acid using pH meter.
- 4. Determination of strength of acids in a mixture using conductivity meter.
- 5. Conductometric titration of strong acid Vs strong base.
- 6. Estimation of iron content by Potentiometry.
- 7. Determination of molecular weight of polymer using Ostwald viscometer.
- 8. Determination of alkali content of water sample.
- 9. Estimation of copper by EDTA method.
- 10. Adsorption of acetic acid by charcoal.

TOTAL HOURS:60

COURSE OUTCOMES

On completion of the course students will be able to:

CO1: Understand the estimation of chloride, hardness and alkali content in water sample.

CO2: Determination of strength of acid by using pH meter.

CO3:. Gain knowledge on determination strength of acids using conductivity meter.

CO4: Estimation of copper by EDTA method. And iron by potentiometer.

CO5: Determination of molecular weight of polymer

REFERENCES

- 1. Dr. Sayeeda Sultana,"Practical Engineering Chemistry laboratory manual", R.K.Publishers, Coimbatore, 2016.
- Daniel R. Palleros, "Experimental organic chemistry" John Wiley & Sons, Inc. New York, 2011.

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3. Furniss B.S. Hannaford A.J, Smith P.W.G and Intelligible R., "Vogel's Textbook of Practical organic chemistry", LBS, Singapore, 2010.

St. Peter's Institute of Higher Education and Research

St. PETER'S INSTITUTE OF HIGHER EDUCATION AND RESEARCH B.Sc. (CHEMISTRY) PROGRAMME-Regulation 2018 REGULATIONS AND SYLLABI UNDER CHOICE BASED CREDIT SYSTEM

(Effective from the Academic Year 2018-2019) V Semester

					Mar	ks
Code No.	Course Ti	tle	Credit	CA	EA	Total
518UCHT01		Inorganic Chemistry -I	5	25	75	100
518UCHT02		Organic Chemistry –I	6	25	75	100
518UCHT03	Core	Physical Chemistry - I	6	25	75	100
518UCHP01	Subjects:	Gravimetric, Organic analysis	3	40	60	100
		and preparation (Practical)				
	Elective I:		5	25	75	100
518UVET01	Part IV:	Value Education (Common to all	2	25	75	100
	UG Branch	nes)				
		Total	27	165	435	600

VI Semester

					Mar	ks
Code No.	Course Titl	e	Credit	CA	EA	Total
618UCHT01		Inorganic Chemistry -II	5	25	75	100
618UCHT02	Core	Organic Chemistry II	5	25	75	100
618UCHT03	Subjects:	Physical Chemistry II	5	25	75	100
618UCHP01		Physical Chemistry	2	40	60	100
		Practical				
	Elective II		5	25	75	100
618UEAT01	Part IV : E	xtension Activity (Common to	1	-	-	-
	all UG Bran	iches)				
		Total	23	140	360	500

LIST OF ELECTIVES

Code No.	ode No. Subjects	
	Elective I (V Semester)	
518UCHT04	Industrial Chemistry	5
518UCHT05	Pharmaceutical Chemistry	5
518UCHT06	Nano Materials and green Chemistry	5
	Elective II (VI Semester)	
618UCHT04	Analytical Chemistry	5
618UCHT05	Polymer chemistry	5
618UCHT06	Spectroscopy Higher Fall	5

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St. PETER'S INSTITUTE OF HIGHER EDUCATION AND RESEARCH B.Sc. (CHEMISTRY) PROGRAMME & 2020 REGULATIONS AND SYLLABI UNDER CHOICE BASED CREDIT SYSTEM

(Effective from the Academic Year 2020-2021)
I Semester

						Marks		
Code No.	Course Title	L	T	P	Credit	CA	EA	Total
ATLT1601/AHLT1601/ ATET1601/AFLT1601	Language - I (Tamil/Hindi/Telugu/French)	5	0	0	4	40	60	100
AENT1638	English – I	5	0	0	4	40	60	100
AENT1642	English For Communication	3	0	0	2	40	60	100
AMAT1620/AMAT1621/ AMAT1622/	Allied –I	6	1	0	6	40	60	100
ACYT1601	Structure and bonding in Chemistry	5	0	0	4	40	60	100
ACYL1601	Inorganic qualitative analysis Laboratory-I	0	0	4	2	40	60	100
,	Total	24	1	4	22	240	360	600

II Semester

Ta.							Mar	ks
Code No.	Course Title	L	T	P	Credit	CA	EA	Total
ATLT1602/AHLT1602/ ATET1602/AFLT1602	Language – II (Tamil/Hindi/Telugu/French)	5	0	0	4	40	60	100
AENT1639	English – II	5	0	0	4	40	60	100
AMAT1625/AMAT1626/ AMAT1627/	Allied –II	6	1	0	6	40	60	100
AEVT1601	Environmental Science	2	0	0	2	40	60	100
ACYT1602	Basic concepts of Organic Chemistry	5	0	0	4	40	60	100
ACYL1602	Inorganic qualitative analysis Laboratory-II	0	0	4	2	40	60	100
ASSL1101	Soft Skills-I	0	0	2	1	100	-	100
ACYI1601								
1	Internship-I	0	0	0	1	100	-	100
	Total	23	1	6	24	440	360	800

Overall percentage change 63.41

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NEW COURSES FOR THE ACADEMIC YEAR 2020-2021

B.Sc. - CHEMISTRY

S.No	Programme Code	Programme Name	Course Code	Name of the Course
1	CYU	B.Sc Chemistry	ACYT1601	STRUCTURE AND BONDING IN CHEMISTRY
2	CYU	B.Sc Chemistry	ACYL1601	INORGANIC QUALITATIVE ANALYSIS LABORATORY -I
3	CYU	B.Sc Chemistry	ACYT1602	BASIC CONCEPTS OF ORGANIC CHEMISTRY
4	CYU	B.Sc Chemistry	ACYL1602	INORGANIC QUALITATIVE ANALYSIS LABORATORY -II
5	CYU	B.Sc Chemistry	ACYI1601	INTERNSHIP-I
6	CYU	B.Sc Chemistry	ASSL1601	SOFT SKILLS-I
7	CYU	B.Sc Chemistry	518UCHT01	INORGANIC CHEMISTRY I
8	CYU	B.Sc Chemistry	518UCHT02	ORGANIC CHEMISTRY I
9	CYU	B.Sc Chemistry	518UCHT03	PHYSICAL CHEMISTRY I
10	CYU	B.Sc Chemistry	518UCHP01	GRAVIMETRIC, ORGANIC ANALYSIS AND PREPARATION
11	CYU	B.Sc Chemistry	518UCHT04	ELECTIVE I :INDUSTRIAL CHEMISTRY
12	CYU	B.Sc Chemistry	518UVET01	VALUE EDUCATION
13	CYU	B.Sc Chemistry	618UCHT01	INORGANIC CHEMISTRY II
14	CYU	B.Sc Chemistry	618UCHT02	ORGANIC CHEMISTRY II
15	CYU	B.Sc Chemistry	618UCHT03	PHYSICAL CHEMISTRY II
16	CYU	B.Sc Chemistry	618UCHT05	ELECTIVE II : POLYMER CHEMISTRY
17	CYU	B.Sc Chemistry	618UCHP01	PHYSICAL CHEMISTRY PRACTICAL
18	CYU	B.Sc Chemistry	618UEAT01	PART-IV- EXTENSION ACTIVITY
19	CYU	B.Sc Chemistry	618UCHT04	ANALYTICAL CHEMISTRY



20	CYU	B.Sc Chemistry	618UCHT06	SPECTROSCOPY
21	CYU	B.Sc Chemistry	ACYT1601	STRUCTURE AND BONDING IN CHEMISTRY



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M.Sc. CHEMISTRY

Regulations -2019

Regulations and Syllabi

(Effective from the Academic Year 2019-'20)

III Semester

Code No.		Course Title		Credit		Marks	
Theory					CA	EA	Total
319CMPT01		Organic Chemistry-III		5	25	75	100
319CMPT02		Inorganic Chemistry-III		5	25		100
319CMPT03		Physical Chemistry-III		6		75	100
	Elective III				25	75	100
319CMPP01	Organic Chen	nistry Practical II		2	25	75	100
		mistry Practical II		2	25	75	100
317CWII 1 02	morganic Che	inistry Practical II		2	25	75	100
			Total	22	150	450	600

IV Semester

Code No.		Course Title	Credit		Marks	
Theory				CA	EA	Total
419CMPT01		Organic Chemistry-IV	4	25	75	100
419CMPT02	Core Sub:	Inorganic Chemistry-IV	4			100
419CMPT03		Physical Chemistry-IV		25	75	100
419CMPP01	Physical Che	mistry practical-II	4	25	75	100
419CMPP02	Project	Dissertation	2	25	75	100
	Work	Viva	10	25	65	100
	VVOIK	VIVa	10	23	10	
		Total	24	125	375	500

ELECTIVE III

Code No.	Course Title	Credits
319CMPT04	Materials Science	2
319CMPT05	Bioorganic Chemistry	2
319CMPT06	Research Methodology	2
319CMPT07	Bioinorganic Chemistry	2
319CMPT08	Paint Technology	2

Overall percentage change: 47.826

Date: 20.02.2020

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Avadi, Chennai-600 054

NEW COURSES FOR THE ACADEMIC YEAR 2020-2021

M.Sc. - CHEMISTRY

S.No	Programme Code	Programme Name	Course Code	Name of the Course
1	CYP	M.Sc Chemistry	319CMPT01	ORGANIC CHEMISTRY-III
2	CYP	M.Sc Chemistry	319CMPT02	INORGANIC CHEMISTRY-III
3	CYP	M.Sc Chemistry	319CMPT03	PHYSICAL CHEMISTRY-III
4	CYP	M.Sc Chemistry	319CMPT05	ELECTIVE III : BIOORGANIC CHEMISTRY
5	CYP	M.Sc Chemistry	319CMPP01	ORGANIC CHEMISTRY PRACTICAL-II
6	CYP	M.Sc Chemistry	319CMPP02	INORGANIC CHEMISTRY PRACTICAL-II
7	CYP	M.Sc Chemistry	419CMPT01	ORGANIC CHEMISTRY-IV
8	СҮР	M.Sc Chemistry	419CMPT02	INORGANIC CHEMISTRY-IV
9	CYP	M.Sc Chemistry	419CMPT03	PHYSICAL CHEMISTRY-IV
10	CYP	M.Sc Chemistry	419CMPP01	PHYSICAL CHEMISTRY PRACTICAL-II
11	CYP	M.Sc Chemistry	419CMPP02	PROJECT WORK - DISSERTATION/VIVA
12	СҮР	M.Sc Chemistry	119CMPT06	CHEMISTRY OF NANOSCIENCE AND NANOTECHNOLOGY
13	СҮР	M.Sc Chemistry	219CMPT07	ENVIRONMENTAL CHEMISTRY

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

MINUTES OF THE 21st MEETING OF THE BOARD OF STUDIES IN COMPUTER SCIENCE & APPLICATIONS

Held on 19.02.2020

Members Present

S.N	Name	Designation	Member	Signati
	1. Dr. R.Latha	Professor& Head	Chairperson	RIC
2	Dr.D.Kavitha,	Asso. Professor	Member	1 Della
3	- Weier Brilliana	Assistant Professor	Member	D.M.
4.	Mr. M.C.Babu	Assistant Professor	Member	00
5.	Mrs. R.Subhash	ni Assistant Professor	Member	Q. Jun
 7. 	Dr.S.Sasikala,	Professor (External)	(University of Madras- Chennai)	S. Semiler
8.	Mr. M E Thyagarajan, (External)	Cost	Industry Expert Member	Jrs.
	Mr. R. Ravishankar, (External)	(Asst.Vice Ir President, K7 Ex	ndustry xpert ember	Almis.

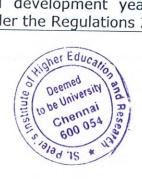
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Chairperson

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.

21.1	Considered the minutes of the 20 th meeting of Board of Studies in Computer Applications and Computer Science held on 20.09.2019.
	RESOLVED that the minutes of the 20 th meeting of Board of Studies in Computer Applications held on 20.09.2019 to be confirmed
21.2	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.
	RESOLVED that 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.
21.3	Reviewed the Regulation & Syllabi of B.C.A and B.Sc(CS) programme under the Regulations 2020 with Choice Based Credit System (CBCS).
	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.
21.4	Reviewed the Syllabi and course structure of M.Sc(CS) programmes under the Regulations 2020 with Choice Based Credit System (CBCS).
	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)
21.5	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.C.A programme under the Regulations 2020,B.Sc(CS) programme 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.
21.6	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.
	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.



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21.7	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).						
RESOLVED that the value added courses imparting transferable skills offered beyond the curriculum such as course on "Office Auto be approved for the upcoming semester (2017-18 Odd semester). Reviewed and considered the curriculum feedback analysis and actio 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: 19.02.2020

Deemed Deemed

Chairperson

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

AVADI, Chennai – 600054. Tamil Nadu.

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

NEW COURSES FOR THE ACADEMIC YEAR 2019-2020

BACHELOR OF COMPUTER APPLICATION

S.No	Programme Code	Programme Name	Course Code	Name of the Course
1	CAU	Bachelor of Computer Science and Application	218PMPE03	SPECTROSCOPY
2	CAU	Bachelor of Computer Science and Application	119UTMT01	PART - I TAMIL I
3	CAU	Bachelor of Computer Science and Application	119UEHT02	PART - II TECHNICAL ENGLISH
4	CAU	Bachelor of Computer Science and Application	119UIBT03	COMPUTERS FUNDAMENTAL AND ORGANIZATION
5	CAU	Bachelor of Computer Science and Application	119UIBT04	PROGRAMMING IN C
6	CAU	Bachelor of Computer Science and Application	119UIBT05	IBM COGNOS ANALYTICS
7	CAU	Bachelor of Computer Science and Application	119UIBP01	C PROGRAMMING LAB
8	CAU	Bachelor of Computer Science and Application	119UIBT06	MATHEMATICS - I
9	CAU	Bachelor of Computer Science and Application	119UIBT07	HTML
10	CAU	Bachelor of Computer Science and Application	219UIBT02	OPERATING SYSTEM
11	CAU	Bachelor of Computer Science and Application	219UIBT03	DATA COMMUNICATION AND NETWORKING
12	CAU	Bachelor of Computer Science and Application	219UIBT04	PYTHON PROGRAMMING
13	CAU	Bachelor of Computer Science and Application	219UIBT05	MATHEMATICS II
14	CAU	Bachelor of Computer Science and Application	219UIBT06	HTML
15	CAU	Bachelor of Computer Science and Application	219UIBT07	SOFT SKILLS -I
16	CAU	Bachelor of Computer Science and Application	119UIBT07J	MS ACCESS
17	CAU	Bachelor of Computer Science and Application	119UIBT08	PHOTOSHOP
18	CAU	Bachelor of Computer Science and Application	119UIBT09	FLASH

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NEW COURSES FOR THE ACADEMIC YEAR 2019-2020

B.Sc. – COMPUTER SCIENCE

S.No	Programme Code	Programma Nama		Name of the Course				
1	CPU	B.Sc Computer Science	616UCST08	COMPUTER GRAPHICS				
2	СРИ	B.Sc Computer Science	418PMPE02	INSTRUMENTAL METHODS OF ANALYSIS				
3	CPU	B.Sc Computer Science	116UCST06	BUSINESS AND OFFICE APPLICATIONS				
4	CPU	B.Sc Computer Science	216UCST07	MS ACCESS LAB				
5	СРИ	B.Sc Computer Science	216UCST08	FLASH LAB				

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BACHELOR OF COMPUTER APPLICATIONS 2016 REGULATIONS I Semester

Code No.				Marks			
code No.	Course Title		Credit	CA	EA	Total	
116UTMT01/ UTET01/UHIT01	Part I: Language -I (Tamil / Telugu / Hindi)		3	25	75	100	
116UEHT02	Part II: Eng	Part II: English -I		25	75	100	
116UCAT03	Part III:	Fundamentals of Digital Computers	4	25	75	100	
116UCAP01	Core Sub:	Practical - I: PC Software Lab	4	40	60	100	
116UCAT04	Allied Paper	r -I: Mathematics - I	5	25	75	100	
116UCST05	Non Major I	lective :	2	25	75	100	
116UCCP01	Soft Skills (C	Soft Skills (Common to all UG Branches)		50	50	100	
		Total	23	215	485	700	

NON MAJOR ELECTIVE:

- 1. MS ACCESS
- 2. Web Applications
- 3. FLASH
- 4. HTML

II Semester

Code No.	Course Title			Marks		
Code No.	Course Title		Credit	CA	EA	Total
216UTMT01/ UTET01/ UHIT01	Part I: Language -II (Tamil / Telugu / Hindi)		3	25	75	100
216UEHT02	Part II: English -II		3	25	75	100
216UCAT03	Part III :	Programming in C	4	25	75	100
216UCAP01	Core Sub:	Practical - II: Programming in C Lab	4	40	60	100
216UCAT04	Allied Paper -II:	Mathematics II	5	25	75	100
216UCSP05	Non Major Electiv	re:	2	40	60	100
216UCCP02	Soft Skills (Commo	Soft Skills (Common to all UG Branches)		50	50	100
		Total	23	235	470	700

NON MAJOR ELECTIVE:

- 1. MS ACCESS Lab
- 2. Web Applications Lab

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- 3. FLASH Lab
- 4. HTML Lab

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III Semester

		III Semester		Marks		
			Credit	CA	EA	Tota
Code No.	Course Title	LD to Christings	4	25	75	100
		Programming in C++ and Data Structures	4	25	75	100
316UCAT01		Misroprocessors and Its Applications	4	25	75	100
316UCAT02 316UCAT03	Core Subi	Numerical and Statistical Methods Practical – III: Programming in C++	3	40	60	100
316UCAP01		using Data structures	4	25	75	100
316UCAT04	Allied Pape	r - III : Financial Accounting	2	50	50	100
3160CAT04	-1.11 //	Common to all UG Branches) Total	21	190	410	60

IV	Sem	ester
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		IV Semester				Marks	
Code No.	Course Title			Credit	CA	EA	Total
Code III				4	25	75	100
· · · · · · · · · · · · · · · · · · ·		Programming in Java		4	25	75	100
416UCAT01	Core Sub:	Operating System		4	25	75	100
416UCAT02 416UCAT03	Corcount	Ctor Graphics		4	40	60	100
416UCATUS 416UCAP01		Practical – IV: Java Programming Lab		4	25	75	100
416UCAT04	Allied Pape	er - IV : Cost and Management					100
4160CA104	Accounting	- Loudies (Common to all UG		2	25	75	100
416UEST01	PART IV:	nvironmental Studies (Common to all UG					100
410010	n hoc)			2	50	50	100
416UCCP04	-1.111 /	Common to all UG Branches)	Total	24	215	485	700

V Semester

		V Semester				Marks		
				Credit	CA	EA	Tota	
Code No.	Course Title			4	25	75	100	
		Database Management System		4	25	75	100	
516UCAT01	Core Sub:	C. Churco Engineering		4	25	75	100	
516UCAT02	Core sub.	Rosource Management Techniques		4	40	60	100	
516UCAT03		Practical - V: RDBMS Lab		4	25	75	100	
516UCAP01	Elective - I			2	25	75	100	
		(Common to all U(1 Digities)	Total	22	165	435	60	
516UVET01	Value Ludeat	01. (Total					

VI Semester

				Marks			
		Credit	CA	EA	Total		
urse Ti			4	25	75	100	
	Web Technology	- I Natworking	4	25	75	100	
Core Sub:		on and Networking	4	25	75	100	
	Software Testing	" L' a Lob	4	40	60	100	
	Practical - VI: W	eb Applications Lab		25	75	100	
ective	- II :		4	25	75	100	
		to all UG Branches)	. 1		425	600	
ctension	Activities (Common	Tota	25	165	435	000	
tension	Deemed Deemed		25	_	165	165 433	
	re b: ective ective	Software Testing Practical – VI: We ective – II: ective – III: tension Activities (Common	web Technology Data Communication and Networking Software Testing Practical – VI: Web Applications Lab ective – II: ective – III: tension Activities (Common to all UG Branches) Total	web Technology Pata Communication and Networking Software Testing Practical – VI: Web Applications Lab ective – II: ective – III: tension Activities (Common to all UG Branches) Total Total	Web Technology	Web Technology	

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BACHELOR OF COMPUTER SCIENCE 2016 REGULATIONS

BACHELOR OF COMPUTER SCIENCE	Credit	Marks		
I Semester	Credit	CA	EA	Total
Code No. Course Title 116UTMT01 / UTET01/UHIT01 Part I: Language -I (Tamil / Telugu / Hindi) 116UEHT02 Part II: English -I 116UCST03 Part III: Programming in C 116UCSP01 Allied Paper -I: Mathematics - I 116UCST04 Non Major Elective 116UCST05 Soft Skills (Common to all UG Branches) Tota	3 3 4 4 5 2 2 2 1 23	25 25 25 40 25 25 50 21!	75 75 75 60 75 75 50	100 100 100 100 100 100 100 700

Non Major Electives:

- 1. Business and Office Applications
- 2. MS ACCESS
- 3. FLASH
- 4. HTML

II Semester

	II Semester Cred				lits Marks		
			Creates	CA	EA	Total	
-1-	Course Title		3	25	75	100	
Code No.		II (Tamil / Telugu / Hindi)		25	75	100	
216UTMT01/	Part I: Lang	uage -II (Tamil / Telugu / Hindi)	3	25	75	100	
UTFT01/UHIT01	TT · Fnc	alish -II	4	40	60	100	
216UEH102	Part III:	Digital Electronics & Micropres Practical – II: Digital Electronics &			75	100	
216UCST03			5	25	60	100	
216UCSP01	I Dane	Microprocessors = II Processors = II	2	50		100	
216UCST04	Non Major	Elective:	2 23	230		0 700	
216UCSP02	Soft Skills (Collinon	Total 23				
216UCCT02	30.0	(Common to B.Sc. (CS) & BCA)					

Non Major Electives: (Common to B.Sc. (CS) & BCA)

1. Business and Office Applications Lab

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18 d 18 *

- 2. MS ACCESS Lab
- 3. FLASH Lab
- 4. HTML Lab

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		III Semester	Credit		Marks	
		III Semesee	Crears	CA	EA	Tota I
Code No.	Course Title	4:)	3	25	75	100
21 CUTMTO1/	Part I: Lang	Jage -III (Tamil / Telugu / Hindi)	3 4	25	75 75	100
316UEHT02	Part II: Eng	lish –III Programming in C++ and Data Structures Practical – III: Data Structures using	4	40	60	100
316UCST03 316UCSP01	Core Sub:	Practical - III.	5 2	25 50	50	100
316UCST04 316UCSP01	Allied Pape	C++ er: Paper -I: Physics I etical: Physics - I Common to all UG Branches) Tot	2 al 23	24		-
316UCCT03	Soft Skills (IV Semester	Credi	it	Mar	

160CST 01 316UCCT03	Soft Skills (Common ster	Credit		Marks	
	IV Semester	Creare	CA	EA	Total
Code No.	Course Title Part I: Language -IV (Tamil / Telugu / Hindi)	3	25	75	100
416UTMT01 / UTET01 / UHIT01 416UEHT02 416UCST03 416UCSP01	Part II: English –IV Part III: Programming in JAVA Practical – IV: Java Programming Lab Practical – IV: Paper – II: Physics II	3 4 4 5 2	25 25 40 25 50 25	75 75 60 75 50 75	100
416UCST04 416UCSP02 416UEST03	PART IV: Environmental Studies (Common to differences) Branches) Tot	2	50		
4160001	v Somester			Marl	(5

		V Semester	Credit		arks EA Tota	al
Code No. 516UCST01 516UCST02 516UCST03 516UCST05 516UCST05	Elective	Operating Systems Database Management Systems Computer Architecture and Organization Practical - V: RDBMS Lab - I: Ucation (Common to all UG Branches) Tot	2	25 25 25 40 25 25	75 100 75 100 75 10 60 10 75 10 75 10	0 00
		vr comester				

	VI Semester	Credit	ı	Marks	
Code No. Course Tit 616UCST01 616UCST02 616UCSP01 Core Sub: 616UCST06 Elective - 616UCST09 Elective - 616UEAT01 Extension	Web Technology Practical – VI: Web Applications Lab	GC Act. 1956	25 25 40 25 25 25 - 140	75 75 60 75 75	100 100 100 100 100 100

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MINUTES OF THE 9th MEETING OF THE BOARD OF STUDIES IN

DEPARTMENT OF COMMERCE

Held on 24-02-2020

Members Present

S.No	Name	Designation	Member	Signature
1	Dr.S. Panneer Selvam	Professor & Head	Chairman	P. C.
2	Dr. A.Manorselvi	Associate Professor	Member	A-NOV
3	Dr. K. Ramesh	Associate Professor	Member	Dank
4	Dr. S. Smillee Bose	Associate Professor	Member	5
5	Ms. Sumalatha	Assistant Professor	Member	and the same
6	Dr. S.Gurusamy	Professor and Head, University of Madras	Academic Expert Member	S. Grandon
7	Mr. Michel Wagner	Vice President, Miles Foundation	Industry Expert Member	Leileh
8	Dr. K. Sekar	Manager, HR, KMF Automotive India Private Ltd., Thiruvallur	Industry Expert Member	Sola
9	Mr. James Vinoth	Manager, NSE Private Ltd.,	Industry Expert Member	Jan V

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Dr.S. PANNEL RSELVAM

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9.1 Considered the minutes of the 8th meeting of Board of Studies in B.Com.(Commerce), B.Com (Corporate Secretary ship) and B.Com(Bank Management) held on 17.09.2019

RESOLVED that the minutes of the 8th meeting of Board of Studies in B.Com.(Commerce), B.Com (Corporate Secretary ship) and B.Com(Bank Management) held on 17.09.2019 to be confirmed

9.2 Reviewed the Regulation and Syllabi of all semester B.Com.(Commerce), B.Com (Corporate Secretary ship) and III and IV semester of B.Com(Bank Management) under the Regulations 2016 with Choice Based Credit System (CBCS).

RESOLVED that the Regulation and Syllabi of B.Com.(Commerce), B.Com (Corporate Secretary ship) and III and IV of B.Com(Bank Management) under the Regulations 2016 with Choice Based Credit System (CBCS) to be continued with inclusion of new elective course. (Appendix - I)

Position 9.3 Reviewed the Regulation and Syllabi of I and II semester of B.Com.(Commerce), I and II semester of B.Com (Corporate Secretary ship) and I and II semester of B.Com (Accounting & Finance) under the Regulations 2020 with Choice Based Credit System (CBCS).

RESOLVED that the Syllabi of I & II semester of B.Com.(Commerce), I and II semester of B.Com (Corporate Secretary ship) and I and II semester of B.Com (Accounting & Finance) under the Regulations 2020 with Choice Based Credit System (CBCS) from the batch of students to be admitted from 2020-21 to be approved. (Appendix - II)

Considered the new Regulations and syllabi of I & II semesters of B.Com.(Commerce), I and II semester of B.Com (Corporate Secretary ship) and I and II semester of B.Com (Accounting & Finance) and B.Com(Bank Management) from the batch of students to be admitted from 2020-21 under the Regulations 2020 with Choice Based Credit System (CBCS).

RESOLVED that the new regulations and syllabi of I & II semesters of B.Com.(Commerce), I & II semesters B.Com (Corporate Secretary ship) and I & II semesters B.Com (Accounting & Finance) with course outcomes from the batch of students to be admitted from 2020-21 under the Regulations 2020 with Choice Based Credit System (CBCS) be approved.(Appendix - IV)

9.5 Reviewed the Syllabus and course structure of M.Com under the Regulations 2016 with Choice Based Credit System (CBCS).

RESOLVED that the Syllabus and course structure of M.Com under the Regulations 2016 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 courses (Appendix- II).

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9.6 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) and M.Com.

RESOLVED that the value added courses imparting transferable and life skills offered beyond the curriculum such as course on "Sustainable Management in Third Sector Organization, Managing Event Venues E-Governance, Cyber Law, Entrepreneurship and Advertising Management" to be approved for the upcoming semester (2020-21 Odd semester).

Date: 24-02-2020

Chairman

ANNEERSELVAW

L. Cont. M3A. M.Phil., Ph D

HOD / Commerce

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B.COM (General)

	SEMESTER	-I						
COURSE CODE	COURSE TITLE	L	т	Р	С	CA	EA	TOTAL
	(Language -I)							
ATLT1601	TAMIL-I							
AHLT1601	HINDI-I					85 7		
AFLT1601	FRENCH –I							
ATET1601	TELUGU –I	6	0	0	4	40	60	100
AENT1638	ENGLISH -I	6	0	0	4	40	60	100
AENT1642	ENGLISH FOR COMMUNICATION	2	0	0	2	40	60	100
	INSTITUTE ELECTIVE I							
AMAT1624	BUSINESS STATISTICS	5	1	0	5	40	60	100
ACMT1601	FINANCIAL ACCOUNTING -I	4	2	0	5	40	60	100
ACMT1602	BUSINESS ECONOMICS	6	0	0	5	40	60	100
	TOTAL	30	3	0	25	240	360	600

SEMESTER II

COURSE CODE	COURSE TITLE	L	Т	Р	С	CA	EA	TOTAL
	(Language -II)							2
ATLT1602	TAMIL – II							
AHLT1602	HINDI-II							
AFLT1602	FRENCH –II							
ATET1602	TELUGU –II	6	0	0	4	40	60	100
AENT1639	ENGLISH -II	6	0	0	4	40	60	100
AMAT1628	Institute Elective – II OPERATIONS RESEARCH	4	2	0	5	40	60	100
AEVT1601	ENVIRONMENTAL STUDIES	2	0	0	2	40	60	100
ACMT1603	FINANCIAL ACCOUNTING -II	4	2	0	5	40	60	100
ACMT1604	INDIAN ECONOMY	6	0	0	5	40	60	100
ASSL1601	SOFT SKILL –I	0	0	2	1	100		100
ACMP1605	INTERNSHIP- I	0	0	0	1	100	-	100
	TOTAL	28	4	2	27	440	360	800

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B. COM (CORPORATE SECRETARYSHIP) SEMESTER I

							Mar	ks
Code No.	Course Title	L	T	P	Credit	CA	EA	Total
ATLT1601/ AHLT1601/ ATET1601/ AFLT1601	Language - I (Tamil/Hindi/Telugu/French)	5	0	0	4	40	60	100
AENT1638	English – I	5	0	0	4	40	60	100
ACPT1601	Financial Accounting	4	2	0	5	40	60	100
ACPT1602	Principles of Management	6	0	0	5			
AEOT1605	Allied: Business Economics	5	0	0	5	40	60	100
AENT1642	English For Communication	3	0	0	2	40	60	100

SEMESTER II

					Credit	Marks		
Code No.	Course Title	L	Т	Р		CA	EA	Total
ATLT16/ AHLT16/ ATET16/	Language – II							
AFLT16	(Tamil/Hindi/Telugu/French)	5	0	0	4	40	60	100
AENT1639	English – II	5	0	0	4	40	60	100
ACPT1603	Advanced Financial Accounting	4	2	0	5	40	60	100
ACPT1604	Corporate Communication	6	0	0	5	40	60	100
AMAT1628	Allied: Operation research	5	0	0	5	40	60	100
AEVT1601	Environmental Science	2	0	0	2	40	60	100
ASSL1601	Soft Skills – I	2	0	0	1	-	100	100
ACPI1601	Internship-I	0	0	2	1	100		100
	Total	26	2	2	27	340	460	800



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B. COM (BANK MANAGEMENT)

SEMESTER I

Code No.							Ma	rks
ATLT1601/	Course Title	L	T	P	Credit	CA	EA	Total
AHLT1601/ ATET1601/ AFLT1601	Language - I (Tamil/Hindi/Telugu/French)	5	C	0	4	40	60	100
AENT1638	English – I	5	0	0	4	40	60	100
ABMT1601	Financial Accounting	4	2	0		100	100000	100
ABMT1602	Business Finance			U	. 5	40	60	100
AMAT1621/	- somess i munce	6	0		5	40	60	100
AEOT1606	Allied-I	5	0	0	5	40	60	100
AENT1642	English For Communication	2		1				
		3	0	0	2	40	60	100
	Total	28	2	0	25	240	360	600

SEMESTER II

Code No.	Course Titl						Ma	rks
ATLT1602/	Course Title	L	1	P	Credit	CA	EA	Tota
AHIT1602/	Language II /T					- I HADINGS	II Fannori	
ATET1602/	Language – II (Tamil/Hindi/Telugu/French)	5		0		4.0		
AFLT1602		-			4	40	60	100
AENT1639	English – II	5	0	0	1	40	-	
ABMT1603	Advanced Financial Accounting	-	+	-	4	40	60	100
ABMT1604	Business Communication	4	2	0	5	40	60	100
AMAT1628/	business communication	5	0	0	5	40	60	100
AMAT1626/	Allied-II	5	0	0	5	40		
AEVT1601		3	0	U	5	40	60	100
	Environmental Science	2	0	0	2	40	60	100
ASSL1601	Coft Chille	_					-	100
	Soft Skills – I	2	0	0	1	-	10	100
ABMI1601							0	
	Internship-I	0	0	2	1	100	_	100

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B.COM (A/F)

SEMESTER - I

COURSE CODE	COURSE TITLE	L	Т	P	C	CA	EA	TOTAI
	(Language -I)							
	TAMIL – I							
ATLT1601 AHLT1601	HINDI-I							
AFLT1601	FRENCH –I	6	0	0	4	40	60	100
ATET1601	TELUGU –I	10				- 0		
AENT1638	ENGLISH -I	6	0	0	4	40	60	100
	ENGLISH FOR					31129		
AENT1642	COMMUNICATION	2	0	0	2	40	60	100
AEOT1605	INSTITUTE ELECTIVE –I BUSINESS ECONOMICS	6	0	0	4	40	60	100
AAFT1601	FUNDAMENTALS OF FINANCIAL ACCOUNTING	4	1	0	4	40	60	100
AAFT1602	FINANCIAL PLANNINGAND PERFORMANCE	4	1	0	5	40	60	100
	TOTAL	28	2	0	23	240	360	600



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SEMESTER - II

COURSE CODE	COURSE TITLE	L	Т	P	С	CA	EA	TOTAL
	(Language -II)		4					
ATLT1602	TAMIL – II							
AHLT1602	HINDI-II							
AFLT1602	FRENCH -II							
ATET1602	TELUGU -II	6	0	0	4	40	60	100
AENT1639	ENGLISH -II	6	0	0	4	40	60	100
AEVT1601	ENIRONMENTAL STUDIES	2	0	0	2	40	60	100
	INSTITUTE ELECTIVE – II							
AEOT1606	INDIAN ECONOMY	6	0	0	4	40	60	100
AAFT1603	ADVANCED FINANCIAL ACCOUNTING	4	2	0	4	40	60	100
AAFT1604	FINANCIAL ANALYTICS & CONTROL	6	2	0	5	40	60	100
ASSL1601	SOFT SKILL –I	0	0	2	1	10 0	-	100
AAFP1605	INTERNSHIP – 1	0	0	2	1	10 0	-	100
	TOTAL	30	4	2	25	44 0	360	800

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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 2019-2020

BACHELOR OF COMMERCE

S.No	Programme Code	Programme Name	Course Code	Name of the Course
1	CMU	Bachelor of Commerce	ACMT3654	FINANCIAL MANAGEMENT
2	CMU	Bachelor of Commerce	516UCOT04	COMMERCIAL LAW
3	CMU	Bachelor of Commerce	416UCBT04	COMPANY LAW
4	CMU	Bachelor of Commerce	416UCBT06	BUSINESS MATHEMATICS - II SOFT SKILLS (COMMON TO
5	CMU	Bachelor of Commerce	416UCCT04	ALL UG BRANCHES) INCOME TAX LAW AND
6	CMU	Bachelor of Commerce	516UCBT01	PRACTICE - I BANKING THEORY
7	CMU	Bachelor of Commerce	516UCBT02	REGULATORY MECHANISM
8	CMU	Bachelor of Commerce	516UCBT03	PORTFOLIO MANAGEMENT
9	CMU	Bachelor of Commerce	516UCBT04	INTERNATIONAL BANKING CREDIT RISK AND
10	CMU	Bachelor of Commerce	516UCBT05	LANIA CEMENT BANKING
11	CMU	Bachelor of Commerce	616UCBT01	
12	CMU	Bachelor of Commerce		MANAGEMENT SOFT SKILLS – IV (COMMON
13	CMU	Bachelor of Commerce	416UCCTO	TO ALL UG BRANCHES)
14	CMU	Bachelor of Commerce	516UCOT0	1 COST ACCOUNTING SECURITIES LAW AND
15	CMU	Bachelor of Commerce	e 516UCOTO	- PED ATIONIC
16	5 CMU	Bachelor of Commerc	e 516UCOTO	93 PRACTICES- 1
17	7 CMU	Bachelor of Commerc	te 516UCOT	04 FINANCIAL MANAGEMENT ENTREPRENEURIAL
13	8 CMU	Bachelor of Commerc	516UCOT	05 DEVELOPMENT
1	9 CMU	Bachelor of Commerc	616UCOT	9 1
2	.0 CMU	Bachelor of Commer	ce	Lucy Change and Basesse

Avadi, Chennai-600

21	CMU	Bachelor of Commerce	616UCOT03	INCOME TAX LAW AND PRACTICE-II
22	CMU	Bachelor of Commerce	616UCOT04	INDIRECT TAXES
23	CMU	Bachelor of Commerce	616UCOT05	INSTITUTIONAL TRAINING(PROJECT)





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NEW COURSES FOR THE ACADEMIC YEAR 2019-2020

MASTER OF COMMERCE

S.No	Programme Code	Programme Name	Course Code	Name of the Course
1	CMP	M.COM.	418UEST01	ENVIRONMENTAL STUDIES

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MINUTES OF THE 7th MEETING OF THE BOARD OF STUDIES IN **ECONOMICS**

Held on 20th February, 2020

Members Present

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. K. Raja Associate Professor - External Member Dept. of Economics, Pachaiyappa's College, Chennai.
- (5) Mr. Peter Sahayaraj, Director, Jayam Academic, Chennai
- External Member

	7.1	Considered the minutes of the 6 th meeting of Board of Studies in Economics
		held on 19.09.2019.
1		
1		Resolved that the minutes of the 6 th meeting of Board of Studies in Economics
		held on 19.09.2019 be confirmed.
	7.2	Considered the syllabi of B.A Economics programme under the new
		regulations 2020, from the Batch of students to be admitted in 2020-21.
		DECOLVED 4 111' CD 4 E
		RESOLVED the syllabi of B.A Economics programme under the new
1		regulations 2020, from the Batch of students to be admitted in 2020-21 be
-		Approved.
1	7.3	Considered the Syllabi of Economics prescribed for Commerce and
		Management Studies programmes under the Regulations 2020.
1		DECOLVED 4 - 11-1' C.E. ' 11-1 C.C. 1
1		RESOLVED the syllabi of Economics prescribed for Commerce and
-		Management Studies programmes under the Regulations 2020 be Approved.
	7.4	Considered the syllabi of M.A Economics programme under the new regulation
		2020.
		Reviewed and Resolved the syllabi of M.A Economics under the new
		regulation 2020
		regulation 2020.



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7.5	Considered the Regulations & Syllabi of I and II Semester B.A. Economics programme under Regulations 2020.
	RESOLVED that the Regulations & Syllabi of I and II Semester B.A. Economics programme under Regulations 2020 be approved (Appendix I).
7.6	Considered to include the value added courses imparting transferable and life skills offered beyond the curriculum in the syllabi of B. A. Economics. RESOLVED that the value added courses imparting transferable and life skills offered beyond the curriculum such as course on "Logistics System for Drinking Water Distribution in Tamil Nadu " be approved for the upcoming semester (2020-21).

Chairperson

Date: 20.02.2020

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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

Řegistrar

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AVADI, Chennai - 600054. Tamil Nadu.

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

NEW COURSES FOR THE ACADEMIC YEAR 2020-2021

B.A. - ECONOMICS

S.No	Programme Code	Programme Name	Course Code	Name of the Course
1	EOU	B.A Economics	116UECT09	ECONOMICS OF EDUCATION
2	EOU	B.A Economics	116UECT11	ECONOMICS OF INDIAN SOCIAL INSTITUTIONS
3	EOU	B.A Economics	316UECT06	ECONOMICS OF MICROFINANCE
4	EOU	B.A Economics	316UECT07	INDIAN FINANCIAL INSTITUTION AND MARKETS

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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 I

St. PETER'S INSTITUTE OF HIGHER EDUCATION AND RESEARCH

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I Semester

						I	KS .	
Code No.	Course Title	L	T	P	Credit	CA	EA	Total
ATLT1601								
AHLT1601								
ATLT1601	Language - I							
AFLT1601	(Tamil/Hindi/Telugu/French)	4	0	0	3	40	60	100
AENT1638	English – I	4	0	0	3	40	60	100
AENT1642	English For Communication	3	0	0	2	40	60	100
AMAT1621	Statistical Methods – I (Allied)	5	0	0	5	40	60	100
AEOT1601	Micro Economics –I	5	0	0	5	40	60	100
AEOT1602	Marketing	5	0	0	5	40	60	100
	Total	26	0	0	23	200	300	500

II Semester

							I	Mari	KS .
Code No.	Course Title	L		Г	P	Credit	CA	EA	Total
ATLT1602			1	1					
AHLT1602									
ATLT1602	Language – II								
AFLT1602	(Tamil/Hindi/Telugu/French)	4	(0	0	3	40	60	100
AENT1639	English – II	4		0	0	3	40	60	100
AMAT1626	Statistical Methods – II (Allied)	5		0	0	4	40	60	100
AEVT1601	Environmental Science	2		0	0	2	40	60	100
AEOT1603	Micro Economics – II	5		0	0	5	40	60	100
AEOT1604	Business Communication	5		0	0	4	40	60	100
ASSL1601	Soft Skills – I	2		0	0	1	100	-	100
AEOI1601	Internship-I	C		1	0	1	100	-	100
	Total		27	1		23	400	300	700

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Ph: 044 - 2655 8080 website: www.stpetersuniversity.org

St. Peter's Institute of Higher Education and Hesearch (Deemed to be University U/S 3 of the UGC Act, 1998) Avadi, Chennai-600 054,

Date: 20.02.2020

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 8th MEETING OF THE BOARD OF STUDIES IN

MICROBIOLOGY

Held on 20.02.2020 (Online Mode)

Members Present

S. No	Name	Designation	Member	Signature
1	Dr. S. Sangeetha	Assistant Professor & Head	Chairman	S. Sargestr.
2	Dr. N. Radhakrishnan	Professor	Internal Member	S. Sangestr Padhakmu - Jahr. R
3	Ms. T. R. Jabila Mary	Assistant Professor	Internal Member	Jahr. R
4	Dr. G. Sriram Prasath	Assistant Professor, Department of Biochemistry D.G Vaishnav College	External Member	G. Jewing
5	Dr. A. Suresh Kumar	Scientist, Microbiology & Biotech Division, CSIR - CLRI, Chennai.	External Member	Surer

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Registrar

St. Peter's Institute of Higher Education and Research

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Avadi, Chennai-600 00+



S. Sangeetn.
Chairman

Professor and Head
Department of Microbiology
St. Peter's Institute of Higher Education & Research
Deemed to be University U/S 3 of the Up 19561
Avadi Chennai-600

8.1 Considered the minutes of the 7^h meeting of Board of Studies in Microbiology held on 19.09.2020.

RESOLVED that the minutes of the 7th meeting of Board of Studies in Microbiology held on 19.09.2020 be confirmed

8.2 Reviewed the new Regulation and Syllabi of I & II semester of B.Sc. (Microbiology) under the Regulations 2020 with Choice Based Credit System (CBCS).

RESOLVED that the Syllabi of I & II semester of B.Sc. (Microbiology) under the Regulations 2020 with Choice Based Credit System (CBCS) from the batch of students to be admitted from 2019-20 to be approved (Appendix - I).

8.3 Reviewed the new Regulation and Syllabi of B.Sc (Microbiology) programmes under the Regulations 2020 with Choice Based Credit System (CBCS).

RESOLVED that the new Regulation and Syllabi of B.Sc (Microbiology) 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 courses (Appendix-II).

- 1. 1. Biochemical basis of Diseases/ AMYT2605
- Reviewed the new Regulation and Syllabi of I & II semester of M.Sc. (Microbiology) under the Regulations 2020 with Choice Based Credit System (CBCS).

RESOLVED that the new Regulation and Syllabi of I & II semester of M.Sc. (Microbiology) from the batch of students to be admitted from 2019-20 under the Regulations 2020 with Choice Based Credit System (CBCS) be approved (Appendix - III).

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Reviewed the new Syllabus and course structure of M.Sc. (Microbiology) under the Regulations 2020 with Choice Based

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Credit System (CBCS).

RESOLVED that the new Syllabus and course structure of M.Sc. (Microbiology) 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 courses (Appendix-IV).

- 1. 1. Bioprocess Technology / AMYT1911
- 2. 2. Bioinformatics / AMYT1918
- 8.6 Considered to include value added courses imparting transferable and life skills offered beyond the curriculum in the syllabi of B.Sc and M.Sc (Microbiology) under the Regulation 2020

RESOLVED that the value added courses imparting transferable and life skills offered beyond the curriculum such as course on "Organic Compost Preparation" be approved for the upcoming semester (2020-21 Odd semester).

8.7 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 – **Y**)

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Date: 20.02.2020

Chairman ...

Professor and Head
Department of Microbiology
St. Peter's Institute of Higher Education & Research
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Avadi Chennai-600

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St.Peter's Institute of Higher Education and Research B.Sc Microbiology

APPENDIX I

I Semester

							Marks		
Code No.	Course Title	L	T	P	Credit	CA	EA	Total	
ATLT16/ AHIT16/ ATET16/ AFRT16	Language – I* (Tamil/Hindi/Telugu/French)	5	0	0	4	40	60	100	
AENT1638	English – I	5	0	0	4	40	60	100	
AENT1642	English For Communication	3	0	0	2	40	60	100	
ACYT16-	Allied –I**	5	0	0	4	40	60	100	
AMYT1601	General microbiology and Microbial physiology	5	0	0	4	40	60	100	
ACYL16-	Allied –I Lab	0	0	4	2	40	60	100	
AMYL1601	General microbiology and Microbial physiology Lab	0	0	4	2	40	60	100	
	Total	23	2	8	22	280	420	700	

II Semester

							Marks		
Code No.	Course Title	L	T	P	Credit	CA	EA	Total	
ATLT16/									
AHIT16/									
ATET16/	*Language – II								
AFRT16	(Tamil/Hindi/Telugu/French)	5	0	0	4	40	60	100	
AENT1639	English — II	5	0	0	4	40	60	100	
AMYT16	**Allied –II	5	0	0	4	40	60	100	
AEVT1601	Environmental Science	2	0	0	2	40	60	100	
AMYT1603	Immunology and Microbial genetics	5	0	0	4	40	60	100	
AMYL16-	Allied –II Lab	0	0	4	2	40	60	100	
AMYL1603	Immunology and Microbial geneticsLab	0	0	4	2	40	60	100	
ASSL1601	Soft Skills – I	2	0	0	1	-	100	100	
ASSI1601	Internship-I	0	0	2	1.	-	100	100	
	Total	22	2	10	24	280	620	900	

In Overall 37.2% Syllabus of B.Sc has been revised in the academic year of 2020-21

Registrar

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APPENDIX II

Course Code: Course Title: C L **AMYT2605 Biochemical basis of Diseases** 1 0 4 Prerequisites: Nil

Course Objectives:

- To enable the learner to understand the various types of human diseases and their biochemical basis.
- To enable the learner to understand the biochemical basis of diseases related to inherited metabolic disorders, digestive diseases and haemorrhagic disorders.

Unit I: Inborn errors of metabolism

No. Of Hours: 12

Inborn errors of metabolism: Phenylketonuria, alkaptonuria, albinism, tyrosinosis, maple syrup urine disease, Lesch-Nyhan syndrome, sickle cell anemia, Histidinemia.

Unit II: Disorders of carbohydrate metabolism

No. Of Hours: 12

Disorders of carbohydrate metabolism - Diabetes mellitus, glycogen storage diseases, pentosuria, galactosemia.

Unit III: Disorders of Lipids

No. Of Hours: 12

Disorders of Lipids: Hyperlipidemia, hyperlipoproteinemia, Gaucher's disease, Tay-Sach's and Niemann-Pick disease, ketone bodies, Abetalipoproteinemia.

Unit IV: Digestive diseases

No. Of Hours: 12

Digestive diseases: Maldigestion, malabsorption, creatorrhoea, diarrhoea and steatorrhoea. Disorders of liver and kidney - Jaundice, fatty liver. Abnormalities in Nitrogen Metabolism - Uremia, hyperuricemia, porphyria.

Unit V: Haemorrhagic disorders

No. Of Hours: 12

Haemorrhagic disorders - Haemophilia, von Willebrand's disease, Rendu-Osler- Werber disease, thrombotic thrombocytopenic purpura (TTP).

TOTAL HOURS: 60

Suggested readings:

- 1. Biochemistry (2013) 4th ed., Voet, D., Voet, J. & Pratt, C. Wiley & Sons, Inc. (New Jersey), ISBN:978-1-11809244-6.
- 2. Biochemistry (2012) 7th ed., Berg, J.M., Tymoczko, J. L. and Stryer, L., W.H Freeman and Company (NewYork)
- 3. Textbook of Biochemistry with Clinical Correlations (2011) Devlin, T.M. John Wiley & Sons, York)
- 4. Klein's Microbiology, (2008) 7 ed., Prescott, Harley, Wiley, J.M. Sherwood, L.M. Woolverton, C.J. McGraw Hill International Edition (New York) ISBN: 978-007- 126727.

Expected Course Outcomes:

On completion of the course the student will be able to

- CO1: Understand the various types of human diseases and their biochemical basis.
- CO2: Understand the disorders due to improper dietary constituents.
- CO3: Understand the biochemical basis of diseases related to inherited metabolic disorders, digestive diseases and haemorrhagic disorders.

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Expected Course Outcomes:

On completion of the course the student will be able to

- CO1: Develop basic knowledge about traditional and modern applications of biotechnological process
- CO2: Gain knowledge about the different fermentation process and its application in the Biotechnology industry
- CO3: Gain basic knowledge about the Enzymatic bioconversion processes and different Fermentation techniques and its industrial application.
- CO4: Gain basic knowledge and acquire knowledge on metabolic stoichiometry and energetics.
- CO5: Gain basic knowledge about the Kinetics of microbial growth and product formation

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AVADI, Chennai - 600054. Tamil Nadu.

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

NEW COURSES FOR THE ACADEMIC YEAR 2019-2020

B.Sc. - MICROBIOLOGY

S.No	Programme Code	Programme Name	Course Code	Name of the Course
1	MBU	B.Sc Microbiology	AMYT1601	GENERAL MICROBIOLOGY AND MICROBIAL PHYSIOLOGY
2	MBU	B.Sc Microbiology	AMYT1602	BIO CHEMISTRY - 1
3	MBU	B.Sc Microbiology	AMYL1601	(GENERAL MICROBIOLOGY AND MICROBIAL PHYSIOLOGY)
4	MBU	B.Sc Microbiology	AMYL1602	BIOCHEMISTRY I
5	MBU	B.Sc Microbiology	AMYT1603	IMMUNOLOGY & MICROBIAL GENETICS
6	MBU	B.Sc Microbiology	AMYT1610	BIOCHEMISTRY II
7	MBU	B.Sc Microbiology	AMYL1603	MAJOR PRACTICAL II: IMMUNOLOGY & MICROBIAL GENETICS
8	MBU	B.Sc Microbiology	AMYI1601	INTERNSHIP-I
9	MBU	B.Sc Microbiology	AMYT2605	BIOCHEMICAL BASIS OF DISEASES

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St.Peter's Institute of Higher Education and Research M.Sc Microbiology

APPENDIX III

1 Semester

						Marks		ks
C 1-No	Course Title	L	Tom	P	Credit	CA	EA	Total
Code No. AMYT1901	Microbial Taxonomy	5	0	0	4	40	60	100
AMYT1902	General Microbiology And Laboratory Animal Science	5	0	0	4	40	60	100
AMYT1903	Immunology	5	0	0	4	40	60	100
AMYT1904	Institute Core- I Metabolic pathway	5	C		3	40	60	100
AMYT1905	Program Elective- I Microbial Diversity	5	() (3	40	60	100
AMYL1901	Practical 1-General microbiology, Physiology and immunology	0			4 2	40	60	100
	Total	2	5	0	8 20	240	360	600

II Semester

						N	Aark	S
CO IL BIT	Course Title	L	T	P	Credit	CA	EA	Total
Code No.	Virology	5	0	0	4	40	60	100
	Systematic Medical Bacteriology	5	0	0	4	40	60	100
AMYT1907 AMYT1908	Mycology and parasitology	5	0	0	4	40	60	100
AMYT1909	Open Elective- I Industrial Pharmaceutical Microbiology	5	0		4	40	60	100
AMYT1910	Program Elective- II Biostatistics & Bioinformatics	5	() (0 3	40	60	100
AMYL1902	Practical II: Systematic Bacteriology Mycology Parasitology and Virology	0		0	4 2	40	-	-
ASSL1901	Soft skills – I	2		0	0 1	-	100	
	Total	2	2	0	8 22	20	0 40	0 60

In Overall 56.52% Syllabus of M.Sc has been revised in the academic year of 2020-21

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NEW COURSES FOR THE ACADEMIC YEAR 2019-2020

M.Sc. - MICROBIOLOGY

S.No	Programme Code	Programme Name	Course Code	Name of the Course
1	MBP	M.Sc Microbiology	AMYT1901	MICROBIAL TAXONOMY
2	MBP	M.Sc Microbiology	AMYT1902	GENERAL MICROBIOLOGY AND LABORATORY ANIMAL SCIENCE
3	МВР	M.Sc Microbiology	AMYT1903	IMMUNOLOGY
4	MBP	M.Sc Microbiology	AMYT1904	METABOLIC PATHWAYS
5	MBP	M.Sc Microbiology	AMYT1905	MICROBIAL DIVERSITY
6	МВР	M.Sc Microbiology	AMYL1901	GENERAL MICROBIOLOGY,PHYSIOLOGY AND IMMUNOLOGY
7	MBP	M.Sc Microbiology	AMYT1906	VIROLOGY
8	MBP	M.Sc Microbiology	AMYT1907	SYSTEMATIC MEDICAL BACTERIOLOGY
9	MBP	M.Sc Microbiology	AMYT1908	MYCOLOGY AND PARASITOLOGY
10	MBP	M.Sc Microbiology	AMYT1909	INDUSTRIAL PHARMACEUTICAL MICROBIOLOGY
11	MBP	M.Sc Microbiology	AMYT1910	BIOSTATISTICS & BIOINFORMATICS
12	MBP	M.Sc Microbiology	AMYL1902	SYSTEMATIC BACTERIOLOGY MYCOLOGY PARASITOLOGY AND VIROLOGY
13	MBP	M.Sc Microbiology	AMYT1911	BIOPROCESS TECHNOLOGY
14	MBP	M.Sc Microbiology	AMYT1918	BIOINFORMATICS

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APPENDIX IV

Course Code: Course Title: L T P C

AMYT1911 Bioprocess technology 5 0 0 6

Prerequisites: No

Course Objectives:

> To understand about the modern application of biotechnological process

> To provide the basic knowledge about enzyme bioconversion and different fermentation process in biotechnology industry

To gain theoretical knowledge about metabolic stoichiometry and the Kinetics of microbial growth

UNIT I No. Of Hours:18

Introduction to bioprocess: An overview of traditional and modern applications of biotechnological process, integrated bioprocess and the various (Upstream and down stream) unit operations involved in bioprocesses.

UNIT II

Fermentation processes: General requirements of fermentation processes, main parameters to be monitored and controlled in fermentation processes, aerobic an anaerobic fermentation processes and their application in the biotechnology industry.

UNIT III

Enzymatic bioconversion processes: Kinetics and thermodynamics of enzyme – catalyzed reactions, basic design and configuration of immobilized enzyme enzyme reactors, applications of immobilized enzyme technology. Media design and sterilization for fermentation processes: Medium requirements for fermentation processes and for industrial fermentation.

UNIT IV

No. Of Hours:18

Metabolic stoichiometry and energetics: Stoichiometry of cell growth and product fermentation, elemental balances, degrees of reduction of substrate and biomass, yield coefficients of biomass and product formation, maintenance coefficients energetic analysis of microbial growth and product formation.

UNIT V

Kinetics of microbial growth and product formation: Phases of cell growth in batch cultures, simple unstructured kinetic models for microbial growth – Growth associated (primary) and non-growth associated (secondary) product formation kinetics – leudeking – Piret models.

Suggested Readings:

- 1. Shuler, M.L. and Kargi, F. 2002. Bioprocess engineering Basic concepts. Prentice Hall of India.
- 2. Shuler, M.L. and Kargi, F. 1992. Bioprocess engineering, Prentice Hall.
- 3. Bailey and Ollis, 1986. Biochemical Engineering Fundamentals, McGrawHill (2Ed.,)

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그렇게 하는 아이들은 사람들이 되었다.		LTPC
Code (Course Title:	
Course Code:		5004
AMYT 1918 BIOINI	FORMATICS	And the second s
Prerequisites: None		

Course Objectives:

- The objective of the course is to introduce students to the rapidly evolving field
- The term "bioinformatics" often means different things to different scientists, and our goal is not to cover all those things. The principles and computational methods used to search and compare DNA, RNA and proteins, cast as biological No. of Hours: 09

Unit I Introduction Bioinformatics Introduction to Bioinformatics. Biological data bases - Primary, secondary and Composite databases. Nucleotide sequence data bases NCBI, EMBL and DDBJ. Protein sequence data bases-PIR-Uniprot/Swiss Prot, Sequence format, Protein structure database: PDB and MMDB. No. of Hours: 09

Drug Bank. Sequence alignment: Principle (Alignment parameter, Alignment score and optimum alignment), Types: Pairwase sequence alignment – Dot matrix, Dynamic programming and K-Tuple methods (BLAST and FASTA), Multiple Sequence alignment- Clustal Global and Local alignments. Sequence submission and retrieval system; BANKIT and SEQUIN. Gene prediction. No. of Hours: 09

Introduction to Phylogenetics analysis, Construction of phylogenetics tree- Distance matrix methods and parsimony methods. Phylogenetics Analysis tools- MEGA .Molecular Modeling of proteins – Comparative modeling template identification, alignment correction, backbone generation, generation of loops, side chain generation & optimization, Ab initio loop building, overall model optimization, model verification. No. of Hours: 09

Molecular Docking - Identification of ligands, active site prediction, docking and evaluation. Molecular Docking software – Auto Dock. Applications of Molecular Docking. Applications of Bioinformatics: pharmaceutical industry, immunology, agriculture, basic research, chemiinformatics in biology. Legal and ethical considerations. No. of Hours: 09

Molecular visualization tools -Rasmol, Chime and Sped viewer -Structure analysis tools - VAST and DALI, Structural biology - Homology modeling, Bioinformatics for micro array designing and transcriptional profiling, Bioinformatics for metabolic reconstruction, Bioinformatics for phylogenetics analysis.

- 1. Introduction to protein structure: Branden and Tooze, Garland Science Pub. ISBN-13: 978-Suggested readings:
- 2. Biophysics: An introduction-Rodney Cotterill. Wiley Pub.ISBN-13: 978-0471485384 3. Molecular Biophysics-Volkenstain M.V, Academic Press. ISBN-13: 978-0124125032
- DNA topology- Andrew D Bates, Maxwell, Oxford University Press. ISBN 0198567097.

Expected Course Outcomes:

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

CO1: Understand about the fundamentals of bioinformatic.

CO2: Explain the respiratory and nervous systems and related measurements Measure non-invasive diagnostic parameters

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APPENDIX V

ACTION TAKEN REPORT ON STAKEHOLDERS FEEDBACK ON CURRICULUM

DEPARTMENT OF MICROBIOLOGY

Academic Year 2019-2020

	Feedback	Recommendation	Action taken Students were asked to
Stakeholder	It was noted that students still lack few more competent skills to face the	Teaching pedagogy to be incorporated.	present PPT on certain topics & activities like Role play were included
Students Teachers	Assessment practices need more improvement to streamline the curriculum taught.	More assessment practices needs to be conducted.	Continuous assessment tests & Model Exams were conducted to enhance the follow-up of concepts taught.
Alumni	Upgrading on use ICT methods were welcomed.	Teachers were insisted to use more ICT enabled teaching methods.	Faculties were requested to opt for ICT teaching methods like PPT presentation, online quiz.
Professional	Updated tendency needs to be contributed in the curriculum.	Suggestions to include topics on recent trends and demo session	Faculty members were insisted to help the students to do their projects in recent and advanced fields
Employer	Requires enhancement in personality development and communication skills	Students were asked to improve their soft skills.	The Department of English was assigned to take up soft skill classes and communication classes

S. Sayett

HOD/MICROBIOLOGY

Dr. S. Sangeetha Asst. Professor/HOD, Department of Microbiology, St. Peters institute of Higher Education and Research Avadi, Chennai 600054.

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AVADI, CHENNAI-600054

MINUTES OF THE 4^{th} MEETING OF THE BOARD OF STUDIES IN TAMIL Held on 20th February, 2020

Members Present

S.No	Name	Designation		
1.	K. Jayaseelan	Assistant Professor	Member Chairman	Signature
2.	M.Ravichandran	Assistant Professor	Internal Member	Tomb doe
	R.Priya	Assistant Professor	and the second s	M Jan
4	K.Abigayil	Assistant Professor	Internal Member	Sr. Laura
5	V.E.Manigandan	Assistant Professor	Internal Member	CAR ME
6	Dr.G.Palani	Associate Professor Department of Tamil literature University of Madras	Internal Member External Member	Down
7	Dr.P.Anuradha	Associate Professor Pachaiyapas college,Chennai	External Member	2, huns

4.	1 Considered the
	the minutes of the 3rd meeting of Board of Studies in Table 11.
	RESOLVED that the minutes of 2nd marks in Taliff neid on 19-09-2019
4.2	RESOLVED that the minutes of 3rd meeting of Board of Studies in Tamil held on 19-09-2019 Reviewed the Regulations & Syllabi of B.A. Tamil.
4.4	Reviewed the Regulations & Syllabi of B.A. Tamil programme under the Regulations 2018 with Choice RESOLVED that the Programme and the Regulations 2018 with Choice
	Based Credit System (CBCS).
	LEGOLVED Hall the Regulations & C. H. L. Co.
	Choice Based Credit System (CBCS) be continued. Reviewed and consider the Regulations 2018 with
4.3	Reviewed and considered the curriculum feedback analysis and action taken report based on the suggestions RESOLVED that curriculum feedback analysis and action taken report based on the suggestions
	given by the stakeholders
	RESOLVED that curriculum C. II
	stakeholders to be engaged in the current feedback analysis and action taken report based on the current
4.4	RESOLVED that curriculum feedback analysis and action taken report based on the suggestions stakeholders to be approved. (Appendix-I).
	obsidered the revision of syllabus under the course 116UTMTOL TO
	316UTMT01-Tamil – III, 416UTMT01-Tamil – IV, prescribed for B.A, B.B.A, B.Com & B.Sc under I,II,III,IV Semesters of the Regulations 2016 from the best I. G.
	procombad C D
	I,II,III,IV Semesters of the Regulations 2016 from the batch of students to be admitted in 2020 - 21. RESOLVED that the revision of syllabus under the course 116UTMT01-Tamil – I, 216UTMT01-Tamil – II, 416UTMT01-Tamil – III, 416UTMT01-Tamil – IIII, 416UTMT01-Tamil – IIII – IIIII – IIII –
	I strong of Syllablis linder the course 11 Clums and
	316UTMT01-Tamil – III, 416UTMT01-Tamil – IV, prescribed for B.A, B.B.A, B.Com & B.Sc under III, III, IV Semesters of the Regulations 2016 from the betch of the least of the second seco
	I II III IV Somestan, City 7. Prescribed for B.A, B.B.A, B.Com & B.Sc. under
	syn, it, it is self-esters of the Regulations 2016 from the batch of students admitted in a con-
1.5	I,II,III,IV Semesters of the Regulations 2016 from the batch of students admitted in 2020 – 21 be approved.
	Preview of the Regulations & Syllabi of III & IV Semester of Tamil programme under the
	Regulations & Syllabi of III & IV Semester of Tamil programme and and
- 1	Regulations 2020 with Choice Based Credit System (CBCS).
	RESOLVED that the Regulations & Syllability of the Arms
	RESOLVED that the Regulations & Syllabi of III & IV Semester of Tamil programme under the Regulations 2020 with Choice Beard Co. IV se
	the Regulations 2020 with Choice Based Credit System (CDCC)
	the Regulations 2020 with Choice Based Credit System (CBCS) be continued(Appendix-I)
	hore

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RESOLVED that the value added courses imparting transferable and life skillsoffered beyond the curriculum such as course on "<u>Job opportunites in Tamil</u>" be approved for the upcoming semester (2020-21–ODDsemester).

Date: 20-02-2020

கயி<mark>ழ்த்துறைத்</mark> தலைவர்

பணிக பீட்டர் உயர்கல்வி மற்றும் ஆராழ்க்கி நினக்காக

ு. வெடி சென்னன் - AG

Registrar

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III Semester

				Marks		
Code No.	Course Title		Credit	CA	EA	Total
ATLT2603 AHLT2603 ATET2603	Part I:Langua French - III)	ge -III (Tamil-III / Telugu-III / Hindi- III /				
AFLT2603			4	40	60	100
AENT2640	Part II: Englis	sh - III	4	40	60	100
ATLT2620	Part – III: Core	நம்பியகப்பொருள்	4	40	60	100
ATLT2621	Subject:	சமயப் பாடல்களும் சிற்றிலக்கியங்களும்	4	40	60	100
ATLT2622	Allied Paper	III: I தமிழ் இலக்கிய வரலாறு	4	40	60	100
ASSL2602	Soft Skills - II		1	40	60	100
	நுண்கலைவி		2	40	60	100
ATLT2625	moon 2000000	Total	23	280	420	700

Allied

- > ATLT2622- தமிழ் இலக்கிய வரலாறு- I
- > ATLT2623- ஒப்பிலக்கிய கோட்பாடுகள்- I
- > ATLT2624- இலக்கியக் கோட்பாடுகள்- I

Non major Elective

- > ATLT2625- நுண்கலைவியல்.
- > ATLT 2626- தமிழர்களின் கட்டிடக்கலை

> ATLT2627: கல்வெட்டியல்- I

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IV Semester

			1.4	Marks	
	Course Title	Credit	CA	EA	Total
Code No.	Part I: Language –IV (Tamil-IV / Telugu-IV / Hindi-IV / French				
ATLT2604/					
AHLT2604/	- IV)	4	40	60	100
ATET2604/		4	40	60	100
AFLT2604	Part II: English – IV	4	40	60	100
AENT2641	Limusi diamon z		40	60	100
ATLT2628	III:Core காப்பியங்கள்	4	40		
ATLT2629		4	40	60	100
ATLT2630	Subject: Allied Paper – IV: தமிழ் இலக்கிய வரலாறு – II Non major Elective: தமிழக கோவில் கலையும் பண்பாடும்	2	40	60	100
	Non major Elective: தமிழ்க் கண்டை	1	40	60	100
ATLT2634	Soft Skills – III	$\frac{1}{1}$	40	60	100
ASSL2603		1		480	800
AEN1235	INTERNSHIP-1 TOTAL	24	320	480	300

Allied

- > ATLT 2630- தமிழக இலக்கிய வரலாறு- II
- > ATLT 2631- ஒப்பிலக்கிய கோட்பாடுகள்- II
- ATLT2632- இலக்கியக் கோட்பாடுகள்- II

Non major Elective

- » ATLT2634- தமிழக கோயில் கலையும் பண்பாடும்
- > ATLT2636- கல்வெட்டியல்- II
- > ATLT2633 சுற்றுச்சூழல் கல்வி

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Appendix-I

Programme	Stakeholders	Feedback	Recommendation	Action taken
	Student	Students suggested the need for job oriented courses in industry and training for facing interviews during campus selection. They also requested to provide career guidance and expert talks by industrialists.		Carrier guidance programs were given and counselling cell supported the development of soft skills and communication ability.
VCU	Teacher	Teaching methods and teaching aids must be improved	Suggested advance learning	ICT methods and smart boards were Used for effective teaching.

Date: 20-02-2020

தயிழ்த்துறைத் தலைவர் பனித பீட்டர் உய**ர்கல்லி மற்றும் ஆரா**ய்ச்சி நிறுவன. ஆவடி, சென்னை-600 054

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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 7th MEETING OF THE BOARD OF STUDIES IN
VISUAL COMMUNICATION
Held on 20-02-2020

Members Present

S.No	Name	Designation	Member	Signature
1.	Mr.V.Saravana Ragavan	Professor & Head	Chairman	
2.	Mr.S. Kanthaswami	Assistant Professor	Internal Member	Stamus
3.	Mrs. A.Maheshwari	Assistant Professor	Internal Member	Mahan
4.	Mrs. D.L. Yamini Latha	Assistant Professor	Internal Member	Yami Pant
5.	Mr. J. Manigandan	Assistant Professor	Internal Member	Dineson
6.	Mrs. E.Shobana	Assistant Professor	Internal Member	Elhulm
7.	Mrs. R.Ramani	Assistant Professor, Department of Visual communication, Sindhi Arts's and Science College, Chennai	External Member	Romm
8.	Mr. S. Kalaiselvan	Assistant Professor and Head, Department of Visual Communication, Vels Institute of Science, Technology and Advanced Studies, Chennai	External Member	strufi

7.1	Considered the minutes of the 6 th meeting of Board of Studies in Visual Communication held on 19-08-2019 RESOLVED that the minutes of the 6 th meeting of Board of Studies in Visual Communication held on 19-08-2019 be confirmed.			
7.2	Reviewed the Syllabi B.Sc Visual Communication programme under the Regulations 2016 with Choice Based Credit System (CBCS) RESOLVED that the Syllabi B.Sc Visual Communication programme under the Regulations 2016 with			
	Choice Based Credit System (CBCS) be continued.			
7.3	Considered the syllabi of B.Sc Visual Communication programme under the new Regulations 2020 with Choice Based Credit System (CBCS) from the batch of students to be admitted in 2020-21.			
	RESOLVED that the Syllabi of B.Sc Visual Communication programme under the new Regulations 2020 with Choice Based Credit System (CBCS) from the batch of students to be admitted in 2020-21 be approved. (Appendix-I)			

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7.4	Reviewed and considered the curriculum feedback analysis and action taken report based on the suggestions given by the stakeholders.
	RESOLVED that curriculum feedback analysis and action taken report based on the suggestions given by the stakeholders to be approved. (Appendix-II)
7.5	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
	RESOLVED that the Value Added Course imparting transferrable/local needs / employability / entrepreneurship /skill development and life skills offered beyond the curriculum such as course on" Advanced Techniques in Photoshop" be approved for the upcoming Semester (2020-21)/

Date: 20-02-2020

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I Semester

		Credit	Marks		
Code No.	Course Title		CA	EA	Total
ATLT1601/ AHLT1601/	601/			60	100
ATET1601/ AFLT1601 AENT1638	Part II: English –I		40	60	100
AVCT1601	Introduction to Visual Communication	4	40	60	100
AVCL1601	Drawing – I	4	40	60	100
AVCA1601	Allied Paper I: Graphic Design –I		40	60	100
AVCT1651	Non Major Elective: History of Journalism in Tamilnadu		40	60	100
1110		2	40	60	100
AENT1642	English For Communication Total	24	280	420	700

II Semester

			Credit]	Marks	
Code No.	Course Title			CA	EA	Total
ATLT1602/ AHLT1602/	Part – I: Language -II (Tamil-II / Telugu-II / Hindi –II / French -II)			40	60	100
ATET1602/ AFLT1602	Part – II: English –II		4	40	60	100
AENT1639 AVCT1602		Communication Skills	4	40	60	100
AVCL1602	Core Subject:	Drawing – II	4	40	60	100
AVAP1621	Allied Paper II: Graphic De	esign – II	5	40	60	100
AVCT1652 Non Major Elective:			2	40	60	100
AEVT1601	Environmental Studies		2	40	60	100
ASSL1601	Soft Skills I	1	1	10		
		Tota	26	380	420	800

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Appendix-II

Programme	Stakeholders	Feedback	Recommendation	Action taken
VCU	Student	Students suggested the need for job oriented courses in industry and training for facing interviews during campus selection. They also requested to provide career guidance and expert talks by industrialists.	To offer multilingual program for advancing in technical domain.	Carrier guidance programs were given and counselling cell supported the development of soft skills and communication ability.
	Teacher	Teaching methods and teaching aids must be improved	Suggested advance learning	ICT methods and smar boards were Used for effective teaching.

Date: 19-08-2019

Chairman HOU

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