K.L.N. COLLEGE OF ENGINEERING, POTTAPALAYAM – 630 612

(An Autonomous Institution, Affiliated to Anna University, Chennai)

Agenda for Fourth Academic Council Meeting to be held on 26th February 2022 through online mode @ 11:00 AM.

1. Review of minutes of 3rd Academic Council Meeting held on 31st July 2021
2. Approval of the amendments in KLNCE R 2020 Regulation clause 4.9(UG) & clause 3.7(PG)
3. Presentation of curriculum of V to VIII semesters and syllabus of V & VI semesters of all B.E/B.Tech programs
4. Presentation of curriculum and syllabus of the Humanities and Social Sciences (HS) courses offered to VI semester B.E./B.Tech Degree Programmes
5. Presentation of curriculum and syllabus of the OE course to be offered for B.E. Degree Programs
6. Presentation of end semester examination modalities
7. Any other points of common interest

Chairperson / Academic Council

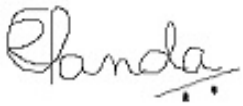
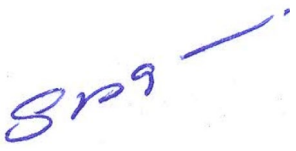
K.L.N. COLLEGE OF ENGINEERING, POTTAPALAYAM - 630 612.

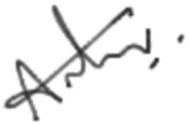
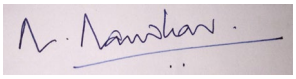
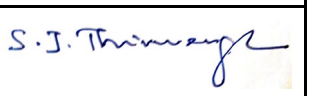
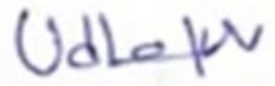
Sivagangai District

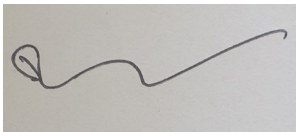
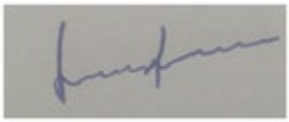
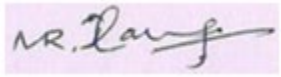
(An Autonomous Institution, Affiliated to Anna University, Chennai)

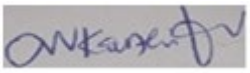
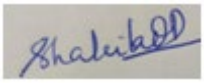
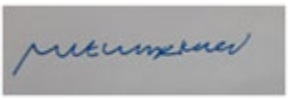
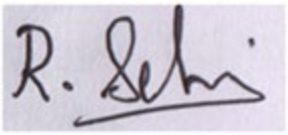
Ref: KLNCE/Autonomous/Academic Council /2022 26.02.2022

Minutes of the fourth Academic Council meeting held on 26th February 2022 through online mode. Webex Meeting ID: https://klncollegeofengineering.my.webex.com/join/pr26408630000, Date: 26.2.2022, Time:11:00am.

MEMBERS PRESENT			
S. No.	**Name of the member**	**Category**	**Signature**
1.	**Dr.A.V.Ramprasad**, Principal	Chairperson	
2.	**Dr.Rames Chandra Panda** Sr.Principal Scientist, Honorary faculty, Anna University, Chemical Engineering, CSIR-Central Leather research laboratory, Chennai – 600 020.	Anna University Nominee	
3.	**Dr.K.Sundareswaran** Senior Professor, Department of Electrical and Electronics Engineering, National Institute of Technology, Tiruchirappalli - 620 015.	Anna University Nominee	
4.	**Dr.Sishaj P Simon** Associate Professor, Department of Electrical and Electronics Engineering, National Institute of Technology, Tiruchirappalli - 620 015.	Anna University Nominee	

S. No.	Name of the member	Category	Signature
5.	**Dr.P.Asokan** Professor HAG, Department of Production Engineering, National Institute of Technology, Tiruchirappalli - 620 015.	Academician	
6.	**Dr.A.Antony Franklin** Associate Professor, Department of Computer Science and Engineering, Indian Institute of Technology, Hyderabad – 502 285.	Academician	
7.	**Dr.M.Manohar** Deputy General Manager, Booster Hardware Fabrication Facilities (Materials & Mechanical Entity) Vikram Sarabhai Space Centre, Department of Space, Government of India, ISRO, Thiruvananthapuram - 695 022.	Research Organization	
8.	**Dr.S.J.Thiruvengadam** Professor and Dean (Academics), Thiagarajar College of Engineering, Madurai - 625 015.	Academician	
9.	**Mr. S.M. Manikandan** Chief Operating Officer, M/s.Aparajitha Software Services Pvt. Ltd., Madurai.	Industrialist	
10.	**Dr.P.Udhaya Kumar**	Chairman BoS / Department of Mechanical Engineering	
11.	**Dr.S.M.Kannan**	Member Secretary & Chairman BoS / Department of Electrical and Electronics Engineering	

S. No.	Name of the member	Category	Signature
12.	**Dr.V.Kejalakshmi**	Chairman BoS / Department of Electronics and Communication Engineering	
13.	**Dr.P.R.Vijayalakshmi**	Chairman BoS / Department of Computer Science and Engineering	
14.	**Dr. P. Ganeshkumar**	Chairman BoS / Department of Information Technology	
15.	**Dr.R.M.Satheesh Kumar**	Chairman BoS / Department of Automobile Engineering	
16.	**Prof.S.Nagammai**	Chairman BoS / Department of Electronics and Instrumentation Engineering	
17.	**Dr.T.Jothimurugan**	Chairman BoS / Department of Management Studies	
18.	**Dr.MR.Ilango**	Chairman BoS / Department of Master of Computer Applications	
19.	**Dr.J.K.Subashini**	Chairman BoS / S & H	

S. No.	Name of the member	Category	Signature
20.	**Prof.N.V.Karthikeyan**	HOD / Physics	
21.	**Prof. O.D. Shakila**	HOD / Chemistry	
22.	**Dr.A.Raviekkumar**	HOD / English	
23.	**Dr.M.R.Thansekhar**	Professor / Mechanical Engineering	
24.	**Dr. R. Lakshmi**	Associate Professor / Computer Science and Engineering	
25.	**Prof.T.R.Muthu**	Assistant Professor / Electronics and Communication Engineering	
26.	**Dr.R.Selvarani**	Associate Professor / Mathematics	

Minutes of Academic Council Meeting

The meeting started with the welcome address by the Chairperson, Academic Council, by welcoming the members and Special invitees of the Academic Council. The chairperson reviewed the third Academic Council meeting held on 31st July 2021. He briefed the Agenda of the fourth Academic Council meeting and the minutes of Fourth Standing Committee meeting held on 18thFebruary 2022, based on the inputs from department Board of Studies(BoS) meetings held during January/ February 2022.

ACM 04.01: Business brought forwarded by the Chairperson, Academic Council:

Ratification of third Academic Council meeting minutes.

All the minutes of the third Academic Council were unanimously ratified.

ACM 04.02: Business brought forwarded by the Board of Studies:

ACM 04.02.01 DME: Department of Mechanical Engineering

To consider and approve

i. **The curriculum and syllabus of V&VI semesters of B.E Mechanical Engineering Degree Program.**
ii. **The Curriculum of VII & VIII semesters of B.E Mechanical Engineering Degree Program.**

as passed in the BoS meeting held on 29.01.2022.

Resolved to Approve the above for B.E Mechanical Engineering Degree Program.

ACM 04.02.02:DEE : Department of Electrical and Electronics Engineering

To consider and approve

i. **The curriculum and syllabus of V& VI semesters of B.E Electrical and Electronics Engineering Degree Program.**
ii. **The Curriculum of VII & VIII semesters of B.E Electrical and Electronics Engineering Degree Program.**

as passed in the BoS meeting held on 21.01.2022.

Resolved to Approve the above for B.E. Electrical and Electronics Engineering Degree Program.

ACM 04.02.03 DEC : Department of Electronics and Communication Engineering

To consider and approve

i. **The curriculum and syllabus of V&VI semesters of B.E Electronics and Communication Engineering Degree Program.**
ii. **The Curriculum of VII & VIII semesters of B.E Electronics and Communication Engineering Degree Program.**

as passed in the BoS meeting held on 29.01.2022.

Resolved to Approve the above for B.E Electronics and Communication Engineering Degree Program.

ACM 04.02.04 DCS: Department of Computer Science and Engineering

To consider and approve

i. **The curriculum and syllabus of V&VI semesters of B.E Computer Science and Engineering Degree Program.**
ii. **The Curriculum of VII & VIII semesters of B.E Computer Science and Engineering Degree Program.**

as passed in the BOS meeting held on 10.02.2022.

Resolved to Approve the above for B.E Computer Science and Engineering Degree Program.

ACM 04.02.05 DIT: Department of Information Technology

To consider and approve

i. **The curriculum and syllabus of V&VI semesters of B.Tech Information Technology Degree Program.**
ii. **The Curriculum of VII & VIII semesters of B.Tech Information Technology Degree Program.**

as passed in the BoS meeting held on 25.01.2022.

ACM 04.02.06 DADS: Department of Artificial Intelligence and Data Science.

To consider and approve

i. **The curriculum and syllabus of III & IV semesters of B.Tech Artificial Intelligence and Data Science Degree Program.**
ii. **The Curriculum of V to VIII semesters of B. Tech Artificial Intelligence and Data Science Degree Program.**

as passed in the BOS meeting held on 25.01.2022.

Resolved to Approve the above for B. Tech Artificial Intelligence and Data Science Degree Program.

ACM 04.02.07 DAE: Department of Automobile Engineering

To consider and approve

i. **The curriculum and syllabus of V&VI semesters of B.E Automobile Engineering Degree Program.**
ii. **The Curriculum of VII & VIII semesters of B.E Automobile Engineering Degree Program.**

as passed in the BoS meeting held on 01.02.2022

Resolved to Approve the above for B.E Automobile Engineering Degree Program.

ACM 04.02.08 DEI : Department of Electronics and Instrumentation Engineering

To consider and approve

i. **The curriculum and syllabus of V&VI semesters of B.E Electronics and Instrumentation Engineering Degree Programme.**
ii. **The Curriculum of VII & VIII semesters of B.E Electronics and Instrumentation Engineering Degree Programme.**

as passed in the BoS meeting held on 25.01.2022.

Resolved to Approve the above for B.E Electronics and Instrumentation Engineering Degree Program.

ACM 04.02.09 DBA : Department of Master of Business Administration

To consider and approve

The curriculum and syllabus of the following Humanities and Social Sciences (HS) Courses offered to VI semester B.E./B.Tech Degree Programmes.

20HS601- Principles of management (IT & CSE)

20HS6Al -Intellectual property Rights (ECE, EEE&EIE)

20HS6A2- EntrepreneurshipDevelopment (CSE& IT)

20HS6B1 -Project Management and Entrepreneurship ECE)

200E301 -Human Relations at Work (ECE)

as passed in the BoS meeting held on 31.1.2022

Resolved to Approve the above for VI semester B.E./B.Tech Degree Programmes.

The curriculum and Syllabus of I to IV Semesters of MBA degree program was already approved in the first Academic Council Meeting.

ACM 04.02.10 DCA: Department of Master of Computer Applications

The curriculum and Syllabus of I to IV Semesters of MCA degree program was already approved in the first Academic Council Meeting.

ACM 04.02.11 DSH : Department of Science and Humanities

To consider and approve

The curriculum and syllabus of the following Courses to be offered for B.E. Degree Programmes.

(i).20HS 601-Operations Research-VI Semester B.E.Mechanical Engineering

(ii).20OE Linear Algebra and Number Theory-V semester B.E.CSE

as passed in the BOS meeting held on 02.02.2022

Resolved to Approve the above for the B.E. Degree Programmes.

ACM 04.03: Business brought forwarded by the Chairperson, Academic Council

To consider and approve

(i). Online Courses for Credit Transfer for **B.E./B.Tech Degree Programmes (Annexure-I)**

(ii).Value Added Courses for B.E./B.Tech, MBA & MCA Degree programmes

(Annexure-II)

Resolved to Approve the above for B.E./B.Tech, MBA & MCA Degree Programmes.

ACM 04.04: Business brought forwarded by the Controller of Examinations:

The Chairperson requested Dr. P.R. Vijayalakshmi, Controller of Examinations to brief the end semester examination modalities and the results.

CoE presented the results of end semester examinations of II, IV and VI semester B.E./B.Tech Degree programmes held during **April/May 2021**, fast track courses (2018-2022-batch,B.E./B.Tech),M.E.(II&IV semesters),MBA(II&IV semesters),MCA(II,IV&VI semesters), Ph.D.Course work, and informed that for the conduct of end semester examinations, the guidelines of Anna University were followed. **The results of the above end semester examinations were approved in the third result passing board meeting held on 18.09.2021.**

CoE informed that, as per the guidelines of Anna University, the end semester **Theory** examinations-**November/December 2021**, of Regulation 2017, and Regulation 2020(Regular and Arrear), for **B.E./B.Tech programmes** were conducted in **Online mode** (descriptive type, 3 hours,100 marks as per Regulation) and the **Practical Examinations** were conducted in **Offline mode** (3 hours, 100 marks, as per Regulation)

The end semester **Theory &Practical** examinations-**November/December 2021**, of Regulation 2017, and Regulation 2020 (Regular and Arrear), for **ME,MBA,MCA, Ph.D course work** Degree programmes were conducted in **Offline mode** (descriptive type,3 hours,100 marks as per Regulation), CoE added.

ACM 04.05: Business brought forwarded by the Chairperson, Academic Council :

To consider and approve

(i).To start new Program, B.Tech Computer Science and Engineering (Cyber Security)

Chairperson informed that it is proposed to start a new program, B.Tech Computer Science and Engineering (Cyber Security), from the Academic Year, 2022-2023 and requested Dr.P.R.Vijayalakshmi, Chairman, BoS-CSE to present the proposed curriculum for the above program.

Chairman, BoS-CSE presented the curriculum-I to VIII semester, B.Tech Computer Science and Engineering (Cyber Security) and syllabus of I & II semester. She informed that the curriculum was framed based on the inputs from AICTE, Anna University, ACM and premier National level institutions.

Resolved to Approve the above for B.Tech Computer Science and Engineering (Cyber Security).

To consider and approve

(ii).To increase in intake of B.Tech-Artificial Intelligence and Data Science from 30 to 60 from the Academic year 2022-2023 onwards.

Chairman proposed and members agreed upon for increase intake.

Resolved to Approve the above for B.Tech Artificial Intelligence and Data Science.

ACM 04.06: Business brought forwarded by the Chairperson, Academic Council

To consider and approve the following Amendments in R- 2020 :

(i).Passing requirement for the courses which are assessed only through purely internal assessments (Employability Enhancement Courses-EEC, except project work & mini project) (Annexure-III)

(ii).Assessment for MINI PROJECT (Annexure-IV)

(iii).For all theory and practical courses, including project work, the continuous internal assessment will carry 40 marks while the End - Semester examination will carry 60 marks (Applicable for those admitted in the first year in the Academic Year 2021-2022 onwards, under Regulation 2020) (Annexure-V)

Resolved to Approve the above for B.E/B.Tech, ME, MBA and MCA programmes..

Any other matters.

ACM 04.07: Business brought forwarded by the Chairperson, Academic Council

Chairman requested the members to give guidance or scope for proposing the following two new courses in the coming academic years.

1. B.E -Electrical and Computer Engineering

2. B.E-Robotics and Automation

The above two courses are proposed under the Department of Electrical and Electronics Engineering and Mechanical Engineering respectively**.**

Chairman informed that the proposal for starting B.E. Electrical and Computer Engineering, under the faculty of Electrical and Electronics Engineering, had been already discussed in the first Academic Council meeting. He informed that 70% of the portion will be from Electrical Engineering curriculum requirements and 30%of the portion will be from Computer Science Engineering curriculum requirements.

The members suggested to discuss with reputed institutions who run these Programmes and also suggested for B.E. Electrical and Data Science Engineering, to have suitable proportion of Electrical and Electronics component and Data Science concepts as per the curriculum requirements.

Members suggested that for B.E. Robotics and Automation the scope is highly narrowed and proposed to discuss about B.E-Mechatronics Engineering.

Chairman informed that the curriculum will be framed for the above two programs after getting the inputs from AICTE, Anna University, IEEE, ASME, Scope, stack holders feedback

and curriculum of premier institutions. The Curriculum after finalizing, the Programmes will be presented in the BoS of the respective departments and will be applied to Anna University for further processing,chairman added.

The following are the suggestions given by Nominees and Experts

(i).For B.E. Mechanical Engineering program, the title of the Value Added Course may be changed as "Design and Innovation Methodologies". The above changes to be suitably incorporated in other departments also.

(ii).The title of the course "Supply Chain Management" may be changed as "Manufacturing Management"

(iii).For B.E. Electrical and Electronics Engineering, the title of the course "Microprocessors, Microcontroller and Applications" may be revised. Also, to re-consider the laboratory course on the above subject.

(iv).For Electronics and Communication Engineering Program, the title of the course may be changed as "System Design on Chip for ICE" instead of IC Design.

(iv).For Automobile Engineering program, the title of the course "Vehicle Design" may be changed as "Vehicle Design features and Characteristics".

(v).The title of the course may be "Basics of Nano science"instead of "Introduction to Nano science".

(vi).Course titles bearing "Its" may be avoided.

(vii).In the Value Added Courses, R Programming may be included.

(viii).Certificate courses on SAP-I, SAP-II may be conducted.

Chairperson informed that the above suggestions are resolved and incorporated.

Dr.S.M.Kannan, Member secretary proposed vote of thanks and the meeting came to an end.

Signature of the Chairperson

Cc to ACM members
Cc to CoE, BoS chairmans, CAC- AU, CC to file.

ANNEXURE-I-

Online Courses for Credit Transfer

B.E. - Mechanical Engineering

S.No.	Course title	Course Duration
1	Introduction to Mechanical Micro Machining	12 weeks
2	Introduction to Abrasive Machining and Finishing Processes	8 weeks
3	Principles of Casting Technology	8 weeks
4	Turbulent Combustion: Theory and Modeling	12 weeks
5	Heat Transfer and Combustion in Multiphase Systems	8 weeks
6	Design Practice	8 weeks
7	Manufacturing guidelines for Product Design	8 weeks
8	Design, Technology and Innovation	8 weeks
9	Strategies for Sustainable Design	12 weeks

B.E. - Electrical and Electronics Engineering

S.No.	Course title	Course Duration
1	An Introduction to Programming through C++	12 Weeks
2	An Introduction to Artificial Intelligence	12 Weeks
3	Cloud Computing	12 Weeks
4	Introduction to Internet of Things	12 Weeks
5	Biomedical Signal Processing	12 Weeks
6	Fuzzy Sets, Logic and Systems & Applications	12 Weeks
7	Optical Fiber Sensors	12 Weeks
8	Design and Analysis of VLSI Subsystems	12 Weeks
9	Power Management Integrated Circuits	12 Weeks
10	Deep Learning for Visual Computing	12 Weeks
11	Data Science for Engineers	8 Weeks
12	Data Base Management System	8 Weeks
13	Programming, Data Structures and Algorithms Using Python	8 Weeks
14	CMOS Digital VLSI Design	8 Weeks
15	VLSI Signal Processing	8 Weeks
16	The Joy of Computing using Python	12 Weeks

B.E. - Electronics & Communication Engineering

S.No.	Course title	Course Duration
1	Data Analytics with Python	12 weeks
2	Machine Learning, ML - (For R-2017 Students only)	(8 weeks)*
3	Introduction to Machine Learning(- (For R-2017 Students only)	(12 weeks)*
4	The Joy of Computing using Python	12 weeks
5	Data Science for Engineers	8 weeks
6	Blockchain and its Applications	12 weeks
7	Introduction To Internet of Things	12 weeks
8	Introduction to Database Systems	12 weeks
9	Biomedical Signal Processing	12 weeks
10	An Introduction to Artificial Intelligence	12 weeks
11	Analog IC Design	12 weeks
12	Digital IC Design	12 weeks
13	Computer Vision and Image Processing – Fundamentals and Applications	12 weeks
14	VLSI Signal Processing	12 weeks
15	Programming, Data Structures and Algorithms Using Python	8 weeks
16	Programming In Java	12 weeks
17	Introduction to Soft Computing	8 weeks
18	Microwave Integrated Circuits	12 weeks
19	Fundamentals of MIMO Wireless Communication	12 weeks
20	Enhancing Soft Skills and Personality	12 weeks

B.E. - Computer Science and Engineering

S.No.	Course title	Course Duration
1	Blockchain and its Applications	12 weeks
2	Ethical Hacking	12 weeks
3	Data Science for Engineers	8 weeks
4	Computer Vision and Image Processing- Fundamentals and Application	12 weeks
5	Introduction to Soft Computing	8 weeks
6	Social Networks	12 weeks
7	Introduction to Internet of Things	12 weeks
8	User-centric Computing for Human-Computer Interaction	8 weeks
9	The Joy of Computing using Python	12 weeks

B.Tech. – Information Technology

S.No.	Course title	Course Duration
1	AdvancedComputerArchitecture	8weeks
2	AnIntroductiontoArtificialIntelligence	12weeks
3	IntroductiontoMachineLearning	12weeks
4	CloudComputingandDistributedSystems	8weeks
5	SocialNetworks	12weeks
6	IntroductionToIndustry4.0 AndIndustrial Internet of Things	12weeks
7	DataMining	8weeks
8	IntroductionToInternetOfThings	12weeks
9	Blockchainand itsApplications	12weeks
10	Programming,DataStructuresAnd AlgorithmsUsing Python	8weeks
11	DeepLearning	12weeks
12	DataAnalyticswithPython	12weeks
13	EthicalHacking	12weeks
14	DataScienceforEngineers	8weeks
15	The JoyofComputingusingPython	12weeks
16	EmbeddedSystemsDesign	12weeks
17	ObjectOrientedSystemDevelopmentUsingUML, JavaAnd Patterns	12weeks

B.E. - Electronics and Instrumentation Engineering

S.No.	Course title	Course Duration
1	Biomedical Signal Processing	12 weeks
2	Introduction to Industry 4.0 and Industrial Internet of Things	12 weeks
3	Data Science for Engineers	8 weeks
4	Optical Fiber Sensors	8 weeks
5	An Introduction to Artificial Intelligence	12 weeks
6	Solar Photovoltaics: Principles, Technologies & Materials	8 weeks
7	Enhancing Soft Skills and Personality	8 weeks
8	Six Sigma	12 weeks
9	Blockchain and its Applications	12 weeks
10	Industrial Automation and Control	12 weeks

Annexure-II-

List of Value-Added Courses

1. Design Thinking and Innovation
2. Embedded Systems and Controller Applications
3. Cloud Computing using Amazon Web services
4. Design of Internet of Things
5. Python for Machine Learning
6. Sales Force ADX201
7. PHP and MYSQL
8. Inbound Marketing
9. Tally ERP
10. Human Values and Business Ethics
11. Motor Sports Engineering
12. New Product Development

Annexure-III-

KLNCE R-2020 Amendments

EXISTING	PROPOSED
PASSING REQUIREMENTS - EEC COURSE- CLAUSE 14.3 The passing requirement for the courses which are assessed only through purely internal assessments (EEC courses except project work), is 50% of the internal assessment (continuous assessment) marks only.	14.3 The passing requirement for the courses which are assessed only through purely internal assessments (EEC courses except project work & mini project), is 50% of the internal assessment (continuous assessment) marks only.

Annexure-IV

EXISTING	PROPOSED
12.5 a Assessment for Technical seminar / Professional practices / Creative and Innovative project / Mini project The Technical Seminar / Creative and Innovative Project shall carry 100 marks and shall be evaluated through continuous assessment only. Every student is expected to present a minimum of 2 technical seminars / demonstrations per semester before the evaluation committee and for each technical seminar, marks can be equally apportioned. The three member committee appointed by Head of the Department will evaluate the seminar and at the end of the semester the marks can be consolidated and taken as the final mark. The evaluation shall be based on the seminar paper/ report (40%), presentation (40%) and response to the questions asked during presentation (20%).	12.5 c Assessment for MINI PROJECT The Mini Project shall carry 100 marks and shall be evaluated through three reviews as continuous assessments. The first and second reviews are to be evaluated by a three member internal committee constituted by the BOS chairman, which includes the guide. At the end of the semester the student shall submit a brief report on the Mini Project. The third review will be conducted based on this report and Viva-Voce Examination conducted by the committee constituted by COE.

ASSESSMENT FOR MINI PROJECT

	Internal assessment evaluation			
	Review I	Review II	**Review III (50 Marks)**	
Marks			Report	Viva-Voce Examination
	25	25	20	30

Annexure-V-

(For the students admitted from the academic year 2021 – 2022 onwards)

EXISTING	PROPOSED
System of Examination Clause 11 **11.2 For all theory and practical courses including project work, the continuous internal assessment will carry 30 marks while the End - Semester examination will carry 70 marks**	**11.2 For all theory and practical courses including project work, the continuous internal assessment will carry 40 marks while the End - Semester examination will carry 60 marks.**

Assessment of Project Work

Continuous Assessment(40 Marks)			**End Semester Examinations(60 marks)**				
Review-I (5 marks)	**Review-I (15 marks)**	**Review-I (20 marks)**	**Report evaluation (20 Marks)**		**Viva-Voce(40 Marks)**		
Review committee and Guide			**External examiner**	**Internal Examiner**	**External examiner**	**Internal Examiner**	**Supervisor**
40 Marks			**10**	**10**	**20**	**10**	**10**