

Minutes of the Twenty Second Meeting of Academic Board of Vishwakarma Institute of Technology, Pune- 411 037 held on Monday, 29th July 2019.

Meeting No. : AB/22/2019

Date : 02-08-2019

Venue : Conference Room, Vishwakarma Institute of Technology, Pune.

The Twenty Second meeting of the Academic Board of Vishwakarma Institute of Technology, Pune – 411 037 was held on Monday, 29th July 2019 at 11-00 a.m. in Conference Room of the Institute.

The following members were present :

- | | | | |
|-----|-------------------------------------|---|------------------|
| 1. | Prof. (Dr.) R.M. Jalnekar, Director | - | Chairman |
| 2. | Prof. (Dr.) R.A. Waikar | - | Member Secretary |
| 3. | Prof. (Dr.) K.G. Narayankhedkar | - | Member |
| 4. | Prof. A.S. Marathe | - | Member |
| 5. | Prof. M.M.Kulkarni | - | Member |
| 6. | Prof.(Dr.) R.J.Dhake | - | Member |
| 7. | Prof.(Dr.) S.R.Bahulikar | - | Member |
| 8. | Prof.(Dr.) M.B.Chaudhari | - | Member |
| 9. | Prof. (Dr.) N.S. Chandollikar | - | Member |
| 10. | Prof. (Dr.) G.G. Dongre | - | Member |
| 11. | Prof. (Dr.) M.M. Upkare | - | Member |
| 12. | Prof. (Dr.) S.S. Bhatlawande | - | Member |
| 13. | Prof. (Dr.) V.D. Gaikwad | - | Member |
| 14. | Prof. (Dr.) V.S. Deshpande | - | Member |
| 15. | Prof. (Dr.) P.P. Ghadekar | - | Member |
| 16. | Prof. (Dr.) G.N. Kotwal | - | Member |
| 17. | Prof. (Dr.) S.Y. Sondkar | - | Member |
| 18. | Prof. (Dr.) C.M. Mahajan | - | Member |
| 19. | Prof. (Dr.) M.S. Deshpande | - | Member |
| 20. | Prof. (Dr.) J.V. Kulkarni | - | Member |
| 21. | Mr. Rakesh Lagu | - | Invitee |

The following members conveyed the inability to attend the meeting and leave of absence was granted to them.

- | | | | |
|----|--------------------|---|--------|
| 1. | Dr. D.R. Nandanwar | - | Member |
|----|--------------------|---|--------|

2. Prof. (Dr.) G.K.Kharate	-	Member
3. Mr. S.V. Tambaku	-	Member
4. Mr. D.K.Kuvalekar	-	Member
5. Prof. (Dr.) Vilas . Kharat	-	Member
6. Prof. S. B. Karthick	-	Member
7. Prof. N. B. Patki	-	Member
8. Prof. (Dr.) S.N.Shilaskar	-	Member
9. Prof. (Dr.) M.P.Deosarkar	-	Member
10. Prof. G.D. Korwar	-	Member
11. Prof. A.N. Umrani	-	Member
12. Prof. (Dr.) A. B. Barbadekar	-	Member
13. Prof. (Dr.) T. S. Bhattacharjee	-	Member

Item-1 : Welcoming New Members

Prof. R.A. Waikar, Member Secretary, Academic Board, extended a warm welcome to all the members of the Academic Board.

Hon. Director felicitated Mr. Rakesh Lagu, Vice President- Delivery, Xoriant Solutions Pvt. Ltd., an invited member of Academic Board. All members gave self introduction to Mr. Rakesh Lagu.

The Academic Board considered the items on the agenda and the items permitted by the Chair and following resolutions were passed.

Item- 2 : To read and confirm Minutes of 21st Academic Board Meeting held on Friday, 19th April 2019

The minutes of the last meeting held on Friday, 19-04-2019 were read. All the members of the board confirmed the minutes of 21st Academic Board Meeting.

Prof. (Dr.) R.A. Waikar, Member Secretary, Academic Board, also presented the various actions taken on the resolutions approved by Academic Board in the previous meeting.

Resolution :

The minutes of the last meeting held on Friday, 19-04-2019 were read and confirmed, with no modification.

Proposed by - **Prof. (Dr.) R.A. Waikar**
Seconded by - **Prof. (Dr.) K.G. Narayankhedkar**

Resolution unanimously passed.

Item-3 : Administrative updates

Prof. M. M. Kulkarni, Member, Academic Board, gave administrative updates.

He informed about increase in U.G. First Year intake by 180 i.e. a division of 60 was added in Chemical Engineering and addition of 2 divisions i.e. 120 to Electronics Engineering in Academic Year 2019-20. He informed Board members about merging of Electronics and E&TC Engineering. He also gave information about recommendation for 3 Years extended Extension of Autonomy and initiated the process of extension of autonomy for 10 Years.

He also informed about various Audits conducted and Certificates received e.g. Fire Safety, Green Audit, Drinking Water Potability and Food Safety.

He also gave information regarding new 65 faculty members appointed in various Departments.

Prof. A.S. Marathe, Dean Quality Assurance, gave updates regarding accreditations. He informed members that Institute Score in the National Assessment and Accreditation Council (NAAC) result is **3.53/4 with A++ Grade** which is 2nd Best in Country amongst Autonomous Institutes. It is valid from 2nd November 2018 to 1st November 2023.

He also informed that National Board of Accreditation i.e. NBA Expert committee visit took place on 9th March 2019 for Extension of Accreditation of 7 UG programs from 1st July 2019 to 20th June 2022 i.e. B.Tech. Computer, B.Tech. Electronics, B.Tech Industrial, B.Tech. Production, B.Tech. Mechanical, B.Tech. Instrumentation & Control, B.Tech. Chemical. He proudly told that Institute Score of NAAC (National Assessment and Accreditation Council) was 3.53 on a scale of 4 with A++Grade which is 2nd best in Country amongst Autonomous Institutes. This is valid from 2nd November 2018 to 1st November 2023.

He also told about Ministry of Human Resource Development Rankings -

- 1) Institute received 155th Rank in National Institute Ranking Framework (NIRF) 2019 Cycle.
- 2) Institute participated in Atal Ranking of Institutions on Innovations Achievements (ARIIA) 2019 Cycle. Only best 5 private institutions were announced so Institute performance and ranking is not known.

He gave information about Examination Question paper audit for Mid Semester and End Semester Examinations for 198 Courses in A.Y. 2018-2019.

He told that ISO 9001:2015 Recertification audit took place on 11th and 12th April 2019. Institute is recertified.

All above points were unanimously approved by the academic board members

Resolution : Administrative initiatives were appreciated by the Academic Board Members. The increase in intake was also appreciated by the Academic Board. The board members appreciated the Quality initiatives and congratulated institute for the excellent NAAC score.

Proposed by - Prof. Dr. M.M Kulkarni

Seconded by - Prof. (Dr.) K .G. Narayankhedkar

Resolution unanimously passed.

Item-4 : Research Updates and conduction of Engineering, Design & Innovation

Prof. (Dr.) G.G. Dongre, Dean Research & Innovation, presented highlights of Research activities of the institute. He informed that Institute has received AICTE Grant of more than 35 lacs. Consultancy of Bharat Forge was more than 10 lacs. He gave information about VIT-UPL Agricultural Robotics Lab worth about 39 lacs. Total Lab development work was more than 1 crore. He also told that 5 projects were shortlisted for ISRO funding. He informed about winners in Smart India Hackathon and various project competitions. He told about successful completion of Institute Innovation Council (IIC) 1.0.

He gave information about number of ongoing Research projects, its amount, number of completed research projects, Faculty members having research projects, faculty submitted research proposals and Consultancy and Training activities.

He informed about externally funded R&D projects - project name, funding agency, amount, name of PI and duration of project. He also informed regarding ISRO Projects of 53.32 Lakhs. Electronic navigation for visually impaired people of 19.64 Lakhs & VIT students develop accident alert system. Prof. (Dr.) N.S.Chandolika explained the project GYAN SHODH of 39.63 Lakhs.

Dr. R.M. Jalnekar told that 1000 projects were carried out by students. He also explained Project based learning & Project centric learning.

Project for HERO MOTORS was explained by Prof. (Dr) J.V.Kulkarni. Super hydrophobic surface project was explained by Dr. G.G. Dongre, Dr. R.M. Jalnekar and Dr. R.A. Waikar.

Dr. G.G. Dongre informed about research publications, number of faculty involved in publication, patents by faculty, etc. He told about research proposals applied in 2018-19.

He also explained about Student Conference. 1866 papers were presented on student project work. 192 parallel sessions were held in 9 Departments. There were 221 examiners all from Industry. Outcome of conference is most of the papers were submitted in journals and some patents are also filed. The impact of Student Conference was - 132 Journal papers, 183 conference papers and 13 patents.

He gave plagiarism policy updates. He told that Academic Integrity Panel shall impose penalty considering the severity of the Plagiarism.

He informed about review mechanism done by Research Forum e.g. Research Project Progress Review, Consultancy work Review, Review of Ph D scholars work (VIT and Outside), Review of Research activities(Publication, Patent, Conference etc), Student EDI projects and Major projects.

He gave information that 228 Workshops, Training Programs and Seminars were conducted during last 5 years and number of days involved were 1499. He also told about Conferences and Workshops organized in 2018-19. He informed about one International Conference, one National conference and one state level workshop organized.

He informed about Research Workforce, Centre of Excellence, domain areas of research, etc.

He informed about seed money given by VIT to budding researchers in last 5 years. He also told about Research projects - applied. Total funds requested are 1648.35 lacs.

Resolution : The research activities were appreciated by the Academic Board Members.

Proposed by - Prof. (Dr.) G.G. Dongre

Seconded by - Mr. Rakesh . Lagu

Resolution unanimously passed.

Item-5 : Faculty Training updates

Prof. (Dr.) M. M. Upkare, Dean Faculty Development explained about Faculty Development activities conducted. He informed the Board Members about focus areas of Faculty Development Cell and summary of Faculty Development Cell activities. He told about Institute driven trainings, Facilitating specific trainings, team building activities and awareness programs for faculty. Dr. R.M. Jalnekar informed that Training sessions in Robotics, mathematics & Computer engg. were conducted.

Dr. Upkare gave information about various activities conducted -

- 1) Day long activities - 4 Day long activities were conducted which include Faculty training on MOOC development, faculty competition in Industry 4.0, ISO field trips, Kirloskar film festival on Global Warming.
- 2) 2 Leaders Field Trips
- 3) 1 Faculty Competition
- 4) 17 FDP Sessions and other activities
- 5) Total training per Faculty = 58 hrs.

He presented some samples of Inhouse Trainings .

Prof. (Dr.) Rajesh Jalnekar Director conducted in house training on Mindful Assessment.

Dr. M.M. Upkare informed about Faculty Competition held in which 40 Faculty groups includes total 160 faculty presented their case studies on Industry 4.0, Transport 4.0, Health 4.0, Institute 4.0, Agriculture 4.0

Dr. M.M. Upkare informed that training session on MOOC Development conducted. Total 182 faculty members in 8 groups were present. Also a guest lecture on GLOBAL WARMING given by Mr. Neeraj Jain , IIT Kharagpur (Environmentalist).

Resolution : The Faculty Development Cell activities were highly appreciated by the Academic Board Members.

Proposed by - Prof. M.M. Upkare

Seconded by - Prof. (Dr.) K.G. Narayankhedkar

Resolution unanimously passed.

Item-6 : Student Career Counseling and Guidance updates and conduction of PD

Prof. (Dr.) Rahul Waikar, Dean, Academics, informed about Student career Counseling and Guidance updates. He presented chart from Final Year students regarding preference for higher education. Students' choice for outside India is less. Dr. R.M. Jalnekar said that we want to give information to students regarding education cost, procedure for visa, etc. so that students can make choice on facts and not on whims.

Prof. (Dr.) Rahul Waikar also gave information that 31 career counseling sessions conducted for students. he informed that alumni are participating whole heartedly in conducting career planning sessions. He then told about `V' Dream Career Fair. about 3500 students and 400 parents participated in this. 6 sessions were conducted. Many students showed interest in defense.

Prof. (Dr.) Rahul Waikar also gave detailed information regarding International Internship Program, International Students Exchange Program, International Summer Internship Program with duration & No of students selected.

Mr. Rakesh Lagu suggested that Technical skills , Training in teamwork, defining objectives, Awareness in emotions is very important.

Prof. (Dr.) Rahul Waikar also gave information regarding in process internships at NTU – India with stipend, International Internship at NTNU – NORWAY with stipend, International Internship at Peschi Ultraviolet – Germany with stipend and at Teesside University- UK .

Prof. (Dr.) Rahul Waikar said that different Universities have been contacted regarding internship programs. He also informed about the launch of new Alumni website www.VITPUNEALUMINI.IN.

Prof. (Dr.) Rajesh Jalnekar, Director, explained the necessity of Professional Development Course for F.E Students. He said that many rural students required help regarding Passport information, Resume Writing, and all types of official work. Professional Development Course helps in self organization, self development, self presentation, strength identification. It includes Design/development of solutions, Conduct investigations, Ethics, Individual and team work, Communication, Project management and finance.

Resolution : The Student career counseling initiatives were highly appreciated by the Academic Board Members.

Proposed by - Prof. (Dr.) Rahul Waikar

Seconded by - Mr . Rakesh Lagu

Resolution unanimously passed.

Item-7 : General Proficiency Courses

Prof. (Dr.) R. J. Dhake informed the Board Members about General Proficiency Courses. General Proficiency 2 course was conducted in Second Year. Around 30 hrs. Besides academic are spent for this activity. Orientation sessions on Social aspects, planning and execution of extensive social activity were conducted. Completion status is 98%.

He also told about Course outcomes like enhance awareness and commitment towards active citizenship and social responsibility, Examine and articulate personal social identities, privileges, and biases, Define personal role as an engineer and citizen in both local and global communities, Recognize the importance of and actively seek contributions from others regardless of differing social identities, Appropriately challenge the unfair, unjust, or uncivil behavior of other individuals or groups, Develop a positive attitude towards under-privileged sections of the society, Correspond professionally with others (e.g. peers/team members, agents, campus offices, cosponsoring groups, etc.) to organize logistics related to specific programs or events.

He informed about Project areas like Cleanliness drives at predefined places, Street plays for social, economic awareness of citizens , Tree Plantation, Digital Literacy, Teach for India- Training of school students in rural areas, government schools , Rain harvesting, Awareness of Various Govt. schemes, Women empowerment, Contribution towards plastic free environment, Training for skills development, etc.

He also added that this activity was totally driven by Student Council.

General Proficiency 3 course was conducted in Third Year of about 42 hours duration. It includes 7 Days Extensive Activities in identified Areas :

- 1) **Technical & Allied Activities:** (Department level Student Chapters, Technical Forums, Related Club Activities, Events – In & outside Institute, etc.)
- 2) **Social Activities:** (Aatmabodh, Blood Donation, Organ Donation Drive, Drishti, NSS Camp, Social Awareness through Street Plays, etc.)
- 3) **Sport Activities:** (Organize, Conduct, Participate in sports competitions (at institute-, district-, state-, national- , and international level), workshops, programs, etc.)
- 4) **Extra-Curricular Activities:** (Organize, Conduct, Participate in related club activities, extra-curricular related competitions (at institute-, district-, state-, national- , international level), workshops, etc.)
- 5) **Managerial & Leadership Skills Related Activities:** Activities related with planning, organizing, staffing, executing & controlling events, programs

Its Completion status is 93%.

Course Outcomes are :

- a) Articulate personal skills, abilities, and areas for growth.
- b) Exhibit and enhance leadership skills by working effectively with others, employ delegation as a means to involve group members, use discretion when dealing with liability, suitability, or matters of confidentiality.
- c) Develop problem solving abilities and critical thinking by diagnosing problems, generate and choose between multiple solutions, and evaluate outcomes.
- d) Develop and enhance communication, interpersonal and team working abilities by articulating relevant information to various individuals and groups.
- e) Understand the importance of and work to develop professional relationships with constituents, staff, faculty, peers, external persons etc.

- f) Prioritize commitments and employ time management skills to maintain balance between academic work, co-curricular and extracurricular activities, personal time, etc.

Student participation is 100% for this activity.

Resolution : General Proficiency courses were appreciated by Board members

Proposed by - Prof. (Dr.) R.J. Dhake

Seconded by - Prof. (Dr.) K.G. Narayankhedkar

Resolution unanimously passed.

Item-8 : Academic approvals

1. CGPA to Percentage conversion formula:

Prof. (Dr.) R.A. Waikar, Dean Academics, presented the current CGPA to Percentage conversion formula . He told that current calculation of CGPA to Percentage is $\text{Percentage} = \text{CGPA} * 9.00$ but the mapping of percentage and CGPA given by AICTE is not matched by this formula.

Dr. Neelam Chandollikar suggested that CGPA to Percentage conversion formula be revised to $\text{Percentage} = (\text{CGPA} * 10) - 7.5$ for 2019-20 Batch. The academic board members deliberated on various factors and agreed that this formula was better for mapping with AICTE given CPI and percentage equivalence. It was unanimously agreed to adopt and implement this formula from AY 2019-20

2. CPI improvement scheme:

Prof. (Dr.) R.A. Waikar, gave information about current class improvement scheme. He told that a student can give exam for 3 papers for Class improvement and only 3rd year and 4th year subjects are allowed for this scheme also 3 chances within 5 years of graduation are allowed.

He also said that many a times students requested to increase the subjects as 3 papers are not sufficient to improve class. Prof. Narayankhedkar suggests to include 6 subjects. He also suggested that instead of giving class improvement the idea of CPI improvement can be thought of. After due deliberations all AB members agreed to CPI improvement as it would help a larger number of students and the purpose of Class Improvement would also be served.

3. Examination on Demand :

Students who require only 8 credits to complete B.tech Degree can avail this facility. Students can request an Examination without waiting for semester end examination and pass it to complete credit requirements for B Tech degree.

The facility of Exam on demand can also be availed by students who fail to secure admission to the next academic year because they fail to meet credit earning requirements as specified by carry over rule of the institute. The facility of Exam on demand can also be given to students with special needs based on approval of competent authority.

The academic board welcomed the aforementioned rules as they were student centric and said that this was a good use of Autonomy. The class improvement and the examination on demand scheme would help students who had passed out from the point of view of their careers.

4. Carry Over Rule :

The revised carry over rule was presented to the AB members. A student must earn at least 20 credits in F.Y. B.Tech in order to be eligible to take admission to S.Y. B.Tech. The student would get attempts in Semester 1, Semester 2, and summer term to give exams in order to earn credits. If at the end of the summer term a student failed to earn at least 20 credits then he would not be eligible to take admission to second year. Such a student would have to appear for backlog exams and be allowed to take admission to SY Btech after earning a minimum of 20 credits in the first year.

Also students must earn all credits of F.Y. B.Tech. to become eligible to take admission to T.Y. B.Tech. & Students must earn all credits of S.Y. B.Tech. to become eligible to take admission to Final Year B. Tech.

All Board members agreed to this and said that this 20 credit criterion was good and approved the carry over rule for AY 2019-20.

Resolution : The CGPA to percentage formula, CPI improvement scheme and Examination on demand scheme and Carry over Rule were unanimously approved by the Academic Board members.

Proposed by - Prof. (Dr.) R.A. Waikar

Seconded by - Mr. Rakesh Lagu

Resolution unanimously passed.

Item-9 : (A) Structure and Curriculum and assessment scheme approval

Prof. (Dr.) R.A. Waikar, Dean Academics, presented the Structure and Curriculum and assessment scheme for approval.

1. Assessment scheme approval :

He presented the rubrics of new assessment scheme for UG PG and MCA course for A.Y. 2019-20 before the Board members. He described various details i.e. Home Assignment, Mid Semester Examination, Viva, Lab, End Semester Examination, Group Discussion and Presentation.

He explained that to enhance the presentation and technical group discussion skills of the students, assessment scheme of Group Discussion (GD) and Presentation (PPT) is introduced to improve the technical group discussion skills of the students. All courses with lab will have GD/PPT assessment of weightage 10%. Also at least 1 course per module will have GD assessment and at least 1 course per module will have PPT assessment. The GD/PPT exam will be assessed by external examiners preferably from industry. Assessment Rubrics for Group Discussion and Presentation is attached as Annexure -I.

The assessment pattern for the First year B.Tech subjects Robotics, Comp. programming & Mathematics and PD were also presented before the Board. The first year students were not assessed by the GD or PPT. This was done to allow students to focus more on the hands on components of courses like Robotics and Comp. programming. The AB members agreed with the assessment schemes for the FY courses as attached in Annexure - II and SY Maths assessment pattern for other courses attached as Annexure - III.

2. Mode of Conduction of Mid Semester and End Semester Examination :

The mode of conduction of the MSE and End semester examination was discussed in the academic board. The members deliberated on the current mode of of the written examinations and concluded that this type of examination was not helpful in aligning itself with the real life situations experienced in the workplace. The traditional 3 hour written exam was not even relevant when it came to taking entrance examinations like GATE GRE CAT etc for taking admission for higher studies as well as for clearing the aptitude and technical test of industries who come to campus for recruitment- simply because these test are only in MCQ mode.

All of these examinations are held in the MCQ mode and students in general are not used to this assessment pattern. In order to train students to this relevant type of examination it was decided by the academic Board members to conduct the mid semester and the end semester examinations in the MCQ mode. Also to increase cognitive flexibility it was suggested that the tests of various subjects be taken together.

3. Structure and Syllabus AY 2019-20 :

Prof. (Dr.) R. A. Waikar, Dean Academics, presented the Syllabus and Structure of Academic Year 2019-20 for final approval. In First Year, students will study Basic Sciences, Engineering Sciences, Humanity & Social Sciences.. In Second Year, students will study Departmental Core Subjects, In Third Year Elective Subjects & In Final Year Open Electives & Major Projects, Internship. Also EDI in all semesters, The Total Credits to be earned are 162. Programme structure for all years is attached as Annexure IV.

The graphical presentation of Course Components with % credits was presented to indicate a well distributed curriculum with all components having fair weightages. He presented outcomes of Project based learning. There was one course project per subject per semester. He gave figures of no. of course projects year wise i.e.

F.Y. -1200 (5 course projects per group)

S.Y. -1824 (8 course projects per group)

T.Y. -1824 (8 course projects per group)

Final Year -1368 (6 course projects per group)

He explained that the subject Engineering Design and Innovation includes Socially Relevant projects in areas like Agriculture, Healthcare, Renewable energy, Green Earth, Smart city, Weaker section (e.g. Handicapped), Swatch Bharat, Water, Security, Waste management. He also gave examples of socially relevant problems and technologies used in them e.g. IoT Enabled Smart Farming.

He explained Project centric learning which includes :

- Cater Customer needs & Market requirement
- Multidisciplinary Approach
- Latest Technologies & Tools
- Focus on :
 - ❑ Cost effectiveness
 - ❑ Performance improvement
 - ❑ Innovation
 - ❑ Product Development

- Inclusion of EDD & Major Project in Structure & Curriculum

He also gave yearwise number of EDD/Major Projects : F.Y.-240, S.Y.-228, T.Y.-228 & Final Year-228 projects.

Finalized Structures of all U.G., P.G. and M.C.A. Courses and their Syllabi were presented by respective BOS Chairman to Academic Board members. The board reviewed and approved all structures and syllabi i.e. F.Y.B.Tech. - A-19 Pattern, S.Y.B.Tech. - B-19 Pattern, T.Y.B.Tech. - C-19 Pattern, Final Year B.Tech. - D-19 Pattern, F.Y.M.Tech. - A-19 Pattern, S.Y.M.Tech. - B-18, F.Y.M.C.A. - A-19 Pattern, S.Y.M.C.A. - B-19 Pattern and T.Y. M.C.A. - C-19 Pattern. Approved list of Programmewise Structure and Syllabus Patterns is attached as Annexure V.

Resolution : It is unanimously resolved to approve the Structure and Syllabus of all U.G., P.G. and M.C.A. Courses for Academic Year 2018-19.

Proposed by - Prof. (Dr.) R.A. Waikar

Seconded by - Prof. (Dr.) K.G. Narayankhedkar

Resolution unanimously passed.

(B) Other points:

The Academic Calendar was presented which includes 90 days of Teaching Learning per semester, ESE Exam week, Viva week, Academic events & assessment deadline calendar.

Item-10 : Futuristic Curriculum

Prof. (Dr.) R. A. Waikar, Dean Academics, seek suggestions from board members on :

- 1) Futuristic Curriculum for creating engineers with blend of most relevant subjects from multiple branches
- 2) Common 3 semesters

Mr. Rakesh Lagu suggested that this was a much needed move as the industry needed more and more engineers who were cross skilled. Hence students needed inputs from multiple branches.

Prof. Narayankhedkar also welcomed this suggestion and requested the team at VIT to work on it.

The meeting concluded with a vote of thanks to the Chair.

[Prof. Dr. R.A. Waikar]
Member Secretary

Annexure - I

Group Discussion/ Presentation – Assessment Rubrics

Presentation Assessment			
Slide Contents	Understanding of concept	Presentation skills	
(25M)	(25M)	(25M)	(25M)

100 marks scaled down to 10

Group Discussion Assessment	
Knowledge and Relevance (50M)	Interaction skills (50M)
<ul style="list-style-type: none">• Knowledge of Topic• Understanding of multiple angles of analysis• Innovative thinking• Creative Thinking	<ul style="list-style-type: none">• Leadership skills<ul style="list-style-type: none">• Initiative• Team working ability• Communication Skills<ul style="list-style-type: none">• Listening ability• Clarity confidence and nonverbal gestures

100 marks scaled down to 10

Annexure - II

Assessment Pattern for F.Y. B.Tech. Courses

Robotics & Computer programming

In Semester Assessment			End Semester Assessment	
Tutorial (%)	Lab Assessment (%)	Mid Semester Exam (%)	Viva/Lab Exam (%)	End Semester Exam (%)
10	40	15	20	15

Mathematics

In Semester Assessment			End Semester Assessment	
Tutorial (%)	Assignment (%)	Mid Semester Exam (%)	Viva/Lab Exam (%)	End Semester Exam (%)
10	20	25	20	25

Annexure - III

Assessment Pattern for other Courses

Assessment pattern for Mathematics 3, Mathematics 4 - direct grade Entry

In Semester Assessment (%)		VIVA	End Semester Exam (%)
50			
Mid Semester Exam	Assignment	20	30
30	20		

Assessment pattern for Logical Reasoning and Quantitative Aptitude. F.Y. B.Tech.

In Semester Assessment (%)		End Semester Assessment (%)
Assignment	Mid Semester Exam	End Semester Exam
40	30	30

**Assessment pattern for Personality Development and Ethics for Engineers F.Y.
B. Tech.**

In Semester Assessment (%)		End Semester Assessment (%)
Assignment	Mid Semester Exam	End Semester Exam
40	30	30

Assessment Pattern for all Engineering Courses with lab

In Semester Assessment				End Semester Assessment	
Assignment (%)	Lab Assessment (%)	Mid Semester Exam (%)	Group Discussion / Ppt	Viva/Lab Exam (%)	End Semester Exam (%)
10	30	15	10	20	15

Hands on				Theory	
Viva/Lab Exam (%)	Lab Assessment (%)	GD/ Ppt (%)	Mid Semester Exam (%)	Assignment (%)	End Semester Exam (%)
20	30	10	15	10	15

Annexure - IV

Program Structure F.Y. B.Tech.

Subject	Module 1	Module 2	Nature	Credits Mod I	Credits Mod II	Contact Hours	Contact Hours	
S1	Calculus	Linear Algebra	Mathematical	4	4	3+1	3+1	
S2	Computer Programming	Advanced Computer Programming	Computer Science	5	5	3+2+1	3+2+1	
S2	Logical Reasoning	Quantitative Aptitude		3	3	3	3	
S4	Robot Mechanics and Control	Mechatronics and Robotics	Core	5	5	3+2+1	3+2+1	
S5	EDI1	EDI2		4	4	1+6	1+6	
S6	Graphics and Mechanical Workshop	Graphics and Mechatronics Workshop	Core	1	1	0+2	0+2	
S7	Personality Development	Ethics for Engineers		1	1	1	1	
S8	* Induction Training * Life Skills	EVS		NA	NA	2	2	
S9		PD					2	
			Total	23	23			
		Total Credits		46				
			(**) Audit Course					

Program Structure S.Y. B.Tech.

Subject	SY Sem1	SY Sem2	Theory (Hrs / Week)	Lab (Hrs/ Week)	Tutorial	Credits Sem 1	Credits Sem 2	Contact Hours	Contact Hours
S1	C1	C5	3	2		4	4	3+2	3+2
S2	C2	C6	3	2		4	4	3+2	3+2
S3	C3	C7	3	2		4	4	3+2	3+2
S4	C4	C8	3	2		4	4	3+2	3+2
S5	EDI3	EDI4	1	6		4	4	2+4	2+4
S6	M3	M4	2			2	2		
						22	22		
				Total credits		44			

Program Structure T.Y. B.Tech.

Subject	TY Sem 1	TY Sem 2	Theory (Hrs / Week)	Lab (Hrs/ Week)	Tutorial	Credits Sem 1	Credits Sem 2	Contact Hours	Contact Hours
S1	CE1	CE3	3	2		4	4	3+2	3+2
S2	CE2	CE4	3	2		4	4	3+2	3+2
S3	SE1	SE3	3	2		4	4	3+2	3+2
S4	SE2	SE4	3	2		4	4	3+2	3+2

S5	EDI5	EDI6	1	6		4	4		
S6	* GP2 (Social Service)	GP3(SS TC)							
						20	20		
				Total credits		40			

Program Structure Final Year B.Tech.

7/8th Sem	Theory (Hrs / Week)	Lab (Hrs/ Week)	Tutorial	Credits Mod 1
OE1	3	2		4
OE2	3	2		4
OE3	3	2		4
Major Project		8		4
				16
7/8 th Sem				
Semester Internship				16
		Total = 32		

Annexure : V : Approved Structure & Syllabus of U.G., P.G. and M.C.A. Programs

Name of BOS	<u>Year</u>	<u>Pattern</u>
Department of Engineering, Sciences and Humanities	F.Y. B. Tech.	A-19
Chemical Engineering	S.Y. B. Tech.	B-19
	T.Y. B. Tech.	C-19
	Final Year B. Tech.	D-19
	F.Y. M. Tech.	A-19
	S.Y. M. Tech.	B-18
Computer Engineering	S.Y. B. Tech.	B-19
	T.Y. B. Tech.	C-19
	Final Year B. Tech.	D-19
	F.Y. M. Tech. Computer Science and Engineering	A-19
	S.Y. M. Tech.	B-18
Electronics Engineering	S.Y. B. Tech.	B-19
	T.Y. B. Tech.	C-19
	Final Year B. Tech.	D-19
E & TC Engineering	S.Y. B. Tech.	B-19

	T.Y. B. Tech.	C-19
	Final Year B. Tech.	D-19
	F.Y. M. Tech.	A-19
	S.Y. M. Tech.	B-18
Industrial & Production Engineering	S.Y. B. Tech. Industrial	B-19
	T.Y. B. Tech. Industrial	C-19
	Final Year B. Tech. Industrial	D-19
	F.Y. M. Tech. Industrial	A-19
	S.Y. M. Tech.	B-18
	S.Y. B. Tech. Production	B-19
	T.Y. B. Tech. Production	C-19
	Final Year B. Tech. Production	D-19
IT & MCA Engineering	S.Y. B. Tech.	B-19
	T.Y. B. Tech.	C-19
	Final Year B. Tech.	D-19
	First Year M.C.A.	A-19
	Second Year M.C.A.	B-19
	Third Year M.C.A.	C-19

Instrumentation & Control Engineering	S.Y. B. Tech.	B-19
	T.Y. B. Tech.	C-19
	Final Year B. Tech.	D-19
	F.Y. M. Tech. Process Instrumentation	A-19
	S.Y. M. Tech.	B-18
Mechanical Engineering	S.Y. B. Tech.	B-19
	T.Y. B. Tech.	C-19
	Final Year B. Tech.	D-19
	F.Y. M. Tech. Mechanical Heat Power	A-19
	F.Y. M. Tech. Mechanical Design	A-19
	S.Y. M. Tech. Mechanical Heat Power	B-18
	S.Y. M. Tech. Mechanical Design	B-18