Annasaheb Dange College of Engineering and Technology, Ashta

An Autonomous Institute

Minutes of Meeting

BOS Meeting

Date – 28th April, 2018, Saturday

DEPARTMENT OF MECHANICAL ENGINEERING

Minutes of Meeting

BOS Meeting SY B.Tech (192 Credits) &M.Tech

Date – 28/04/2018, Saturday

1) Dr. Prashant Kumar, Professor Emeritus COEP Pune

2) Dr. S SMohite, Profcssor GCE Karad

3) Dr. VasudevShinde, Professor DKTEIchalkaranji

4) Mr. Bhalchandra Joshi, Joshi JamphalaSatara (Industry Expert)

5) Mr. Ramesh Gavade, ManagerKBL Pune (Industry Expert)

6) Mr. Ganesh Nikam, (Aluminus - Industry Expert)

Theory Subjects SY B.Tech Sem - III

Points-

1)Engineering Mathematics - III – It was proposed to take 1-hour lecture to explain the application of the subject in real life and motivate studentsspecially Diploma students to understand and correlate the subject.

2)Engineering Thermodynamics–Focus on heat transfer in process industry (80% process industries include drying process). Prof. S A Urunkar – Process heat transfer included in TE HMT subject.

3)Fluid Mechanics –In laminar and pipe flow chapter cover velocity and pressure drop calculations in pipe bend which is useful in piping design application. Erosion of pipe due to velocity of fluid can be included in TE. FM equations must be covered in M3.

4)Machine Tools &Processes–Practical application of Non-conventional machining processes. Add additive manufacturing (3D printing) in chapter 1. It is added in TE advanced manufacturing processes. Fabrication processes of polymer and composites must be included. Students must practically see the processes. More industrial visits and vocational training must be included.

5)Machine Drawing– Visualization/imagination is important, students must be able to put the ideas on paper without using computer software.Improve free hand sketching skills, line work. Measure the component and then draw the component. Give project to each student to measure the machine component and draw assembly and detail drawing.

6)Computer Programming C++ - One semester project should be given. Students should write programs for application-based problem. C++ is basic platform for all the languages.

7)Environmental Studies – No any changes can be done. University syllabus.

LABORATORYS

8)Fluid Mechanics Laboratory–Add experiments on solar panels, solar cells.

9) Machine Drawing Laboratory(AutoCAD) – Individual drawing must be given to each student.

10) Computer Programming C++ Laboratory - One semester project should be given to each student to write programs for application-based problem.

11) Workshop Practice -III – Everystudent must do manual arc welding, they should burn the electrode.While preparing pattern they should consider allowances.

12) General Proficiency –Scientific techniques of decision making must be included. Students must be able to make quick and correct decisions.

SEM IV

Theory Subjects

1) Applied Numerical Methods –Add importance of subject in Unit 1. Add points in each chapter that numerical are based on mechanical engineering applications.

2) Mechanics of Materials –Modulus of rigidity not used, replace it with shear modulus. Introduction to 3D stress and strain analysis. Application of partial differential equation (PDE) in strain curvature. Remove the word moment of resistance and add bending

moment. Remove the word built up sections and add varying sections. Add more sections such as C, rectangular, circular.

3) Thermal Engineering –Add advanced boilers and their maintenance.Basics and details of Steam must be included. This is included in Steam Engg subject (elective).

4) Hydraulic Machines –Add centrifugal fans, valves, compressors.

5) Kinematics of Machines –Give projects based on application of mechanism for automation. Practical example of mechanism, add names of mechanism with practical approach.

6) Materials Science and Metallurgy - Dislocations must be added in Unit 1. Reduce hours for chapter on heat treatment and powder metallurgy. Add heat treatment of polymer and composites.

LABORATORYS

7) Numerical Methods using MATLAB Laboratory –Availability of license copy of MATLAB software.

8) Hydraulic Machines Laboratory –Modify turbocharger experiment. Remove word study and keep only word trial. Two experiments on Francis turbine can be combined to one.

9) Kinematics of Machines Laboratory –Don't include assignment on flywheel and dynamometer. Include assignment on belt drive. Don't combine flywheel and dynamometer, both are different concept. Add mini project for practical application of mechanism.

10) Materials Science and Metallurgy Laboratory –Include tensile, compressive, hardening, normalizing test. Add experiments with available equipment's. Add industrial visits.

11) Computer Aided Design Laboratory –Solid Edge software is widely used. Individual component for each student. Use 3D modeling in AutoCAD software. Use modeling software for mini project and final year project.

12) Workshop Practice -IV – Hands on all machine tool available in the workshop. Industrial visit - remove gear manufacturing industry.