

Total No. of Questions : 08

Seat No:

M. E. (Mechanical) Design Engineering

ELECTIVE – I

(ME 2I M4 - Project Management; ME 2I M8 - Technology Transfer;

ME II M11- Environmental Pollution and Control)

2013-Course (502205)

Time: 3 Hours.

Max. Marks: 50

Instructions:

1. Answer Q.1 or Q.2, Q.3 or Q.4 and Q.5 or Q.6
2. Q.7 and Q.8 are compulsory
3. Figures to the right indicate full marks.

- Q. 1 a) Briefly explain the types of contract in project management (5)
b) Explain the problems faced by project manager during implementation (3)
c) Describe the importance of performance monitoring in project management. (2)

OR

- Q. 2 a) Make a Gantt chart for your preparation of energy manager/energy auditor examination. Split into to as many components as possible. (5)
b) Explain (i) Reverse Engineering, (ii) Franchise as Channels of Technology Flow (3)
c) What is a Joint Venture? Explain with example. (2)

- Q. 3 a) Classify the research and development? Explain the role of each with suitable example in stages of technology development? (5)
b) Discuss the role and importance of R&D in product development. (3)
c) Write a note on Foreign Direct Investment (FDI). Give suitable examples. (2)

OR

- Q. 4 a) Explain steps in procurement life cycle in modern businesses (5)
b) Define activity, event and network (2)
c) What are the aspects you would look for the technical design of the project? (3)

- Q. 5 a) Define a project with suitable example. What are basic elements of project management What are the hurdles faced in the implementation of a project (5)
b) Explain any 3 channels of technology flow. (3)
c) Define Invention and Innovation with examples. (2)

OR

- Q. 6 a) Discuss the stages in the process of technological innovation with block diagram. (5)
b) Compare the three popular scheduling tools (1) Gantt chart (2) PERT, and (3) CPM (3)

c) Why the work breakdown structures called "the backbone of project plan"? (2)

Q. 7 a) What do you understand by land pollution? Discuss different factors affecting the land pollution. State its effect. (5)

b) Explain following terms in detail: (5)

i) Global Warming

ii) Noise Pollution

Q. 8s a) What are the challenges in commercializing the research Results (5)

.b) Explain the various stages involved in new product development process (5)