

Registration no:

Total Number of Pages: 01

M.TECH
IMPE204

Second Semester Examination – 2013
TOTAL PRODUCTIVE MAINTENANCE

Time: 3 Hours

Max marks: 70

Answer Question No.1 which is compulsory and any five from the rest.

The figures in the right hand margin indicate marks.

1. Answer the following questions: 2x10
 - (a) Name all the pillars of TPM.
 - (b) Explain the role of Jishu Hozen in TPM.
 - (c) What are the advantages of MIS in maintenance schedule?
 - (d) Differentiate between MTTF and MTBF.
 - (e) Explain how reliability of equipments can be increased.
 - (f) What is Optimum Inventory Assessment?
 - (g) What is reliability centered maintenance?
 - (h) Explain how Overall Equipment Effectiveness is calculated.
 - (i) What are the differences between TPM and TQM?
 - (j) Define Maintainability Analysis.

2. With the help of a Flow Chart or any Case Study, describe the implementation model of TPM activities in any manufacturing sector. [10]

- 3.(a) Describe how MIS can be used as an effective tool for carrying out effective maintenance program. [5]
 - (b) Explain the concept of re-engineering maintenance process. [5]

4. Briefly explain the present status of implementation of TPM activities in relation to Indian Manufacturing Industries. [10]

5. Describe the sixteen types of losses encountered in any maintenance schedule of activities. [10]

6. (a) What factors are considered for designing an effective maintainability program? [5]
 - (b) Explain how maintenance tactics are selected. [5]

7. What role does the various pillars of TPM play for implementation as maintenance strategy? Briefly describe any two pillars of TPM. What is the significance of 5S in TPM? [2+4+4]

8. Write short notes on any two: 5x2
 - (a) Planning and scheduling Resources.
 - (b) Significance of Overall Equipment Effectiveness in TPM
 - (c) Renewal Theory Approach.