Reg. No. LIBRARY

B.TECH. DEGREE EXAMINATION, NOVEMBER 2014

Seventh Semester

Branch: Mechanical Engineering/Production Engineering

PE 010 706 L05/ME 010 706 L01 – PLANT ENGINEERING AND MAINTENANCE (Elective II) [PE, ME]

(New Scheme - 2010 Admission onwards)

[Regular/Supplementary]

Time: Three Hours

Maximum: 100 Marks

Part A

Answer all questions.

Each question carries 3 marks.

- 1. Explain corrective maintenance.
- 2. Explain the classification of wear.
- 3. Explain failure ratio.
- 4. Explain overall equipment effectiveness.
- 5. Explain waste recycling.

 $(5 \times 3 = 15 \text{ marks})$

Part B

Answer all questions.

Each question carries 5 marks.

- 6. Explain condition based maintenance.
- 7. Explain plasticity dominated wear.
- 8. Explain MAPI method.
- 9. Explain fluorescent dye technique.
- 10. Explain fire protection and prevention.

 $(5 \times 5 = 25 \text{ marks})$

Part C

Answer all questions.

Each question carries 12 marks.

11. Explain deterioration and failure analysis.

Or

Turn over

- 12. Sketch and explain layout of facilities.
- 13. Explain "wear regime maps for metals".

Or

- 14. Explain different types of sliding wear.
- 15. Explain Inherent reliability and archievable reliability.

Or

- 16. Explain the important factors to be considered in determining the reliability of industrial systems.
- 17. Explain TPM.

Or

- 18. Explain vibration analysis with example.
- 19. How chemical hazards can be minimised? Explain with a suitable example.

Or

20. Write a note on pollution control. Explain with an example.

 $(5 \times 12 = 60 \text{ marks})$

