Reg.	No	

Name.....

B.TECH. DEGREE EXAMINATION, MAY 2014

Seventh Semester

Branch: Mechanical Engineering

PLANT ENGINEERING AND MAINTENANCE (Elective I) (M)

(Old Scheme – Prior to 2010 Admissions)

[Supplementary]

Time: Three Hours

Maximum: 100 Marks

Part A

Answer all questions.

Each question carries 4 marks.

- 1. Explain the term corrosive wear.
- 2. What do you mean by Fretting?
- 3. Write the properties of synthetic lubricant.
- 4. Explain the significance of cloud point.
- Comment on Sudden and Gradual obsolescence.
- 6. What do you mean by SWOT analysis? Explain its significance.
- 7. Explain the terms Maintainability and Availability.
- 8. Explain the term Reliability.
- 9. Explain the significance of an accident prevention programme.
- 10. Explain the significance of diagnostic instruments for maintenance and inspection.

 $(10 \times 4 = 40 \text{ marks})$

Part B

Answer all questions.

Each question carries 12 marks.

11. Explain the various theories of wear.

Or

- 12. Explain the procedure of calculation of working life.
- 13. Explain the various tests adopted for lubricants.

Or

14. Explain the various lubrication equipments and components.



15. Explain any two methods of failure analysis.

Or

- 16. Explain the various steps involved in planning, scheduling and controlling of maintenance.
- 17. Explain how the reliability of a standby system is determined.

Or

- 18. Explain the procedure of estimation of reliabilities of series and parallel system.
- 19. Explain any three non-destructive testing methods.

Or

20. Explain any one procedure of inventory control of spare parts.

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

