

17531

14115

3 Hours / 100 Marks

Seat No.

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- Instructions* – (1) All Questions are *Compulsory*.
(2) Answer each next main Question on a new page.
(3) Illustrate your answers with neat sketches wherever necessary.
(4) Figures to the right indicate full marks.
(5) Mobile Phone, Pager and any other Electronic Communication devices are not permissible in Examination Hall.

Marks

1. a) **Attempt any THREE of the following:** **12**
- (i) Explain industrial water distribution system.
 - (ii) Differentiate between preventive and scheduled maintenance.
 - (iii) Explain in brief important features of TPM.
 - (iv) Enlist different properties of lubricant and explain any 2 in brief.
- b) **Attempt any ONE of the following:** **6**
- (i) Explain in details about planning and scheduling of maintenance work.
 - (ii) Enlist different lubrication systems and explain any 2 in details.

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- 2. Attempt any FOUR of the following: 16**
- a) Explain necessity of purification of water and enlist different methods of water purification.
 - b) Write down the importance of maintenance.
 - c) Describe wear behaviour observed due to primary wear processes.
 - d) Explain overload relay with neat sketch.
 - e) Define accident and enlist various causes of accident.
- 3. Attempt any FOUR of the following: 16**
- a) What is the necessity of industrial ventilation. Explain with the help of neat sketch.
 - b) State different types of mechanical maintenance.
 - c) Describe pillars of TPM.
 - d) Enlist equipments needed for electrical maintenance and write their functions in brief.
 - e) What is the necessity of safety policies in the plant and explain any one.
- 4. a) Attempt any THREE of the following: 12**
- (i) Explain the effect of lighting in plant.
 - (ii) Describe the advantages of preventive maintenance over Break down maintenance.
 - (iii) Describe basic systems of TPM.
 - (iv) Explain centralized lubrication system in detail.
- b) Attempt any ONE of the following: 16**
- (i) Explain machine history chart its necessity and advantages.
 - (ii) Enlist different mechanical controls in the plant and explain any two in details.

- 5. Attempt any FOUR of the following:** **16**
- a) State any four basic facilities in plant explain one of them in brief.
 - b) Describe accessibility for maintenance.
 - c) How TPM beneficial for plant explain in details.
 - d) Define wear and describe corrosive reaction wear process in details.
 - e) Describe necessity of earthing for electrical installation.
- 6. Attempt any TWO of the following:** **16**
- a) Describe electrical power supply system with neat sketch.
 - b) Describe fool proofing devices for interlocking
 - (i) Parallel Shafts
 - (ii) Shafts at right angle
 - c) Enlist primary wear process and explain in details.
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