

Reg. No. :

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**Question Paper Code: 59719**

B.E. / B.Tech. DEGREE EXAMINATION, SEP 2020

Elective

Mechanical Engineering

15UME919 - MAINTENANCE ENGINEERING

(Regulation 2015)

Duration: One hour

Maximum: 30 Marks

PART A - (6 x 1 = 6 Marks)

**(Answer any Six of the following Questions)**

1. General failure mode in the gears are CO1- R
  - (a) Replace of component
  - (b) Repair of component
  - (c) Service of component
  - (d) All of the above
2. The following is not a classification of maintenance CO1- R
  - (a) Corrective maintenance
  - (b) Timely maintenance
  - (c) Scheduled maintenance
  - (d) Preventive maintenance
3. RCM means CO2- R
  - (a) Reliable centered maintenance
  - (b) Reliability center maintenance
  - (c) Reliability centered maintain
  - (d) Reliability centered maintenance
4. Maintenance schedule duration CO2- R
  - (a) Weekly
  - (b) Monthly
  - (c) Yearly
  - (d) All of the above
5. TPM means CO3- R
  - (a) Total Productive Maintenance
  - (b) Team Productive Maintenance
  - (c) Total Preventive Maintenance
  - (d) Team Preventive Maintenance
6. Types of Non-destructive testing CO3- R
  - (a) X- Ray
  - (b) Scanning
  - (c) Ultra sound
  - (d) All of the above

7. Advantages of condition monitoring CO3- R  
 (a) Links between cause and effect (b) Systems with sufficient response  
 (c) Benefits out weighing cost (d) All of the above
8. General failure mode in the gears are CO4- R  
 (a) Fatigue (b) Wear (c) Stress rupture (d) All of the above
9. Name the logical fault location methods CO4- R  
 (a) Fault tree analysis (b) Event tree analysis  
 (c) Both (a) and (b) (d) None of the above
10. Write which one is not the sources of failure CO4- R  
 (a) Improper selection of material (b) Manufacturing defect  
 (c) Assembly errors (d) Partial failure

PART – B (3 x 8 = 24 Marks)

**(Answer any Three of the following Questions)**

11. Identify the strategies can you reduce the maintenance cost in the industry. CO1- App (8)
12. Explain the principles and methods of lubrication in detail. CO2- U (8)
13. Explain the benefits and steps of preventive maintenance. CO2- U (8)
14. Explain the principle and working of pistol thermometer. CO3-U (8)
15. Explain the repair methods of slide ways and spindle. CO4-U (8)