

B.E. Eighth Semester (Power Engineering) (C.B.S.)
Power Plant Maintenance Practices

P. Pages : 2

Time : Three Hours



KNT/KW/16/7642

Max. Marks : 80

- Notes :
- 1.. Solve Question 1 OR Questions No. 2.
 2. Solve Question 3 OR Questions No. 4.
 3. Solve Question 5 OR Questions No. 6.
 4. Solve Question 7 OR Questions No. 8.
 5. Solve Question 9 OR Questions No. 10.
 6. Solve Question 11 OR Questions No. 12.

1. a) What are various failure causes of plain bearing with its remedies? **6**
- b) Explain in brief classification and selection of Bearing? **4**
- c) Explain designation of antifriction bearing with one example. **3**

OR

2. a) Explain valve maint procedure of gate and globe valve? **6**
- b) Draw a well-labelled diagram of Globe valve? **4**
- c) Explain construction? Operation of Non-Return valve? **3**
3. a) Write short note on working principle of BFP hydraulic coupling? **6**
- b) What is alignment? Describe in short Radial and Axial alignment. **6**
- c) What is advantage of mechanical seal against gland packing? **2**

OR

4. a) What is impact of cavitation in pump? **3**
- b) What is NPSH? **3**
- c) Write any two difference between Reciprocating & centrifugal pump? **2**
- d) What are the causes of BFP performance deterioration with its remedies to improve pump efficiency? **6**
5. a) Write short note on Die-penetrant test and thermography. **6**
- b) What is NDT? **7**
List out various NDT techniques with brief description.

OR

6. Describe in detail vibration analysis of rotating machines & How we can diagnose various faults of machine with signature analysis. **13**
7. a) What are the various capital overhaul activities & checks carried out in KWU turbine overhaul in sequence. **7**
- b) Write in short about sand blasting activity of turbine casing & Rotor? **3**
- c) Explain in brief Turbine gland seal supply & leak-off? **3**
- OR**
8. a) What are causes of condenser performance deterioration and its remedies. **7**
- b) Draw a well-labelled diagram of feed water system (cycle)? **3**
- c) Justify why double casing is provided in KWU turbine? **3**
9. a) What is Significance of soot blower and classifier in boiler performances. **4**
- b) List out various types of coal mill & describe working of Bowl type coal mice? **9**
- OR**
10. a) What are various failures, causes of Boiler tube & their remedies with maint procedure? **13**
11. a) Explain Maintenance planning and cost control? **4**
- b) Write short note on Inventory control. **4**
- c) What is CPM & PERT & its significance in power plant maint planning? **6**
- OR**
12. a) What is Reliable Centered Maint? **4**
- b) Explain preventive, predictive and Reactive Maintenance? **6**
- c) List out A, B, C type preventive Maintenance activities in Boiler Feed Pump. **4**
