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B.Tech. (Mechanical Engineering) 8th Semester
(G-Scheme) Examination, July-2022

PLANT MAINTENANCE ENGINEERING

Paper- PEC-ME-404-G

Time allowed : 3 hours]

[Maximum marks : 75

Note : Attempt any five question in all, selecting one question from each section. Question No.1 is compulsory. All Questions carry equal marks.

1. Explain the following
 - (a) Preventive Function 5
 - (b) Predictive Maintenance 5
 - (c) Levels of standardization 5

Section-A

2. What do you understand by the term 'Maintenance Planning'? What are different phases involved in Maintenance Planning? 15
3. Discuss the advantages and disadvantages of decentralization with reference to plant engineering department. 15

Section-B

4. When does an organization opt for contractual maintenance? Explain with examples. What are its merits and demerits? 15

5. What do you understand by the term RCM? Explain how Predictive Maintenance can help in implementing RCM? 15

Section-C

6. What are the major criteria taken into consideration for placing a manufacturing firm making lighter items? 15
7. What are the principal factors affecting the location choice? What are different types of facility location problem? 15

Section-D

8. Discuss the part codification and classification system with examples. Distinguish between the hierarchical and chain type coding structures with examples. 15
9. (a) What is inter-changeability? How it relevant for standardization of spare parts? 8
- (b) What is A-B-C Analysis? Explain the step-by-step method to conduct the A-B-C analysis. 7