

Seat No: _____

Enrollment No: _____

PARUL UNIVERSITY
FACULTY OF ENGINEERING & TECHNOLOGY
B. Tech winter 2022- 23 Examination

Semester: 7

Subject Code: 203109438

Subject Name: Industrial Safety and Maintenance Engineering

Date: 11/10/2022

Time: 10:30am to 1:00pm

Total Marks: 60

Instructions:

1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever necessary.
4. Start new question on new page.

Q.1 Objective Type Questions-(All are compulsory) (Each of one mark)

(15)

1. The down time cost consists of
 - (A) Loss of production
 - (B) Wages paid to the workers
 - (C) Reduction in sales
 - (D) All of the above
2. State two objectives of Maintenance.
3. Define Surface Fatigue.
4. Advantage of spline joint over key joint.
5. Write any two functions of threaded assembly
6. Full form of FMECA
7. Define "Modernization"?
8. Define "Degreasing"
9. Belt of an electric motor is broken, it needs
 - (A) Corrective maintenance
 - (B) Scheduled maintenance
 - (C) Preventive maintenance
 - (D) Timely maintenance
10. Use of chromium plating.
11. Use of Gnatt Chart in Maintenance work.
12. Which safety feature is system that does not do any work until it is called upon?
 - (A) Passive Safety
 - (B) Active Safety
 - (C) Anyone of other two
13. A safe plant is the one in which
 - (A) Integrity is established at the design stage
 - (B) Technical integrity is maintained throughout the life cycle of the asset
 - (C) All of the above
14. Industrial safety management is that branch of management, which is concerned with _____ hazards from the industries.
 - (A) Reducing
 - (B) Controlling
 - (C) Eliminating
 - (D) All of the above
15. With increase in preventive maintenance cost, breakdown maintenance cost
 - (A) Increases
 - (B) Decreases
 - (C) Remains Same

Q.2 Answer the following questions. (Attempt any three) (15)

A) What do you mean by FTA?

B) How to eliminate hazards?

C). Explain the procedure of ensuring safety in planning

D) Explain CPM (critical path method) for scheduling maintenance work?

Q.3 A) Discuss factors to be considered for Accident Preventions (07)

B) How can you schedule the maintenance? (08)

OR

B) How FMEA technique work? (08)

Q.4.A) Discuss about the method of assembly and fitting with respect to different equipment. (07)

OR

A) What is corrosion? Discuss about the electrochemical process for corrosion (07)

B) Name Different types of Maintenance and explain any two (08)