Reg.	No	•••••
Nan	1e	

B.TECH. DEGREE EXAMINATION, MAY 2016

Eighth Semester

Branch: Mechanical Engineering/Production Engineering

 $\begin{array}{c} \text{ME 010 805 G01} \\ \text{PE 010 805 G01} \end{array} \text{INDUSTRIAL SAFETY} \hspace{0.1cm} \text{(Elective IV) [ME, PE]}$

Time: Three Hours

Maximum: 100 Marks

Part A

Answer an questions.

Each question carries 3 marks.

- 1. Write most relevant five sentences about OSHA Act.
- 2. What are the major causes of accidents?
- 3. Differentiate between the two types of safety inspection.
- 4. What is meant by ventricular fibrillation?
- 5. Differentiate between the various types of fires.

 $(5 \times 3 = 15 \text{ marks})$

Part B

Answer all questions.

Each question carries 5 marks.

- 6. List down the ten axioms of safety philosophy.
- 7. Present arguments to claim that "accident proneness" is a misleading expression.
- 8. What is meant by "incident recall technique"? Where and how it is used?
- 9. Explain the conditions necessary for dust explosion.
- 10. What are the factors affecting ignition temperature of a fuel?

 $(5 \times 5 = 25 \text{ marks})$

Turn over

Part C

Answer all questions. Each question carries 12 marks.

11. Explain the various steps involved in developing an effective safety plan in an industrial organization.

Or

- 12. Discuss on the necessary personal characteristics of a safety director in an organization.
- 13. Discuss on the indirect (uninsured) costs of accidents.

Or

- 14. Explain four methods of accident prevention.
- 15. What is meant by environmental audits? What are the types and what are the users?

Or

- 16. What is Job Safety analysis? Explain the various steps involved in doing it.
- 17. Discuss on the principles of manual material handling to avoid possible injuries.

Or

- 18. Discuss on the mechanical, physical, chemical and biological causes of occupational dermatitis.
- 19. Discuss on the fire risk of metals.

Or

20. Discuss on dry chemical fire extinguishing agents with their advantages and disadvantages.

 $(5 \times 12 = 60 \text{ marks})$

