

B.E DEGREE EXAMINATIONS: NOV/DEC 2012

Seventh and Fifth Semester

MECHANICAL ENGINEERING

MEC144: Industrial safety management

Time: Three Hours

Maximum Marks: 100

Answer all the Questions:-

PART A (10 x 1 = 10 Marks)

1. Target in the field of safety management is set by
 - a) Workers
 - b) Government
 - c) Management
 - d) General public
2. Managerial grid is relevant to
 - a) Leadership behavior
 - b) Safety
 - c) Workmanship
 - d) Quality
3. Anthropometry concerned about
 - a) Parts of the body
 - b) Shape of the body
 - c) Weight of the body
 - d) Structural and functional dimensions of the body
4. Three important points to be considered in the design of seats
 - a) Cost, appearance and application
 - b) Ease, comfort and utility
 - c) Cost color and comfort
 - d) Comfort alone
5. The distance which the occupant has to cover during fire to arrive at an exit is called
 - a) Travel distance
 - b) Safe distance
 - c) Exit proximity
 - d) Distance to safety
6. Electric fires should be extinguished by
 - a) Dry powder, CO₂
 - b) Water, soda acid extinguisher
 - c) Dry sand, stone dust
 - d) Foam extinguishers
7. HAZOP is a rigorous and widely accepted technique for
 - a) Quality and safety
 - b) Inspection
 - c) Surveillance
 - d) hazard identification
8. The conditions necessary for a failure are presented in a reverse order starting with the unwanted or "top" event
 - a) FMEA
 - b) What if analysis
 - c) Fault tree
 - d) PDCA

(ii) Discuss in detail about the safety measures to be followed during welding (7)

23. a) (i) Write a short notes on the steps taken in the fire safety risk assessment in workplaces (7)

(ii) Write a short notes on the treatment of industrial sewage (recycling design and waste disposal) (7)

(OR)

b) Discuss about the control of environmental pollution and its implications

24. a) (i) Explain with examples, the various Hazard Identification Techniques adopted at workplaces. (8)

(ii) List out the proper Lifting methods in manual Material Handling. (6)

(OR)

b) Explain the steps involved in the HAZOP study procedure and guide words.

25. a) Explain about the industrial hygiene.

(OR)

b) Discuss in detail about the role of electricity act and explosive act in the safety measures.
