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Total No. of Printed Pages: 01

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B. Tech. (ECE) Semester: 6th)
INDUSTRIAL SAFETY AND ENVIRONMENT
Subject Code: BMEE0F91
Paper ID: OE1111311

Time: 03 Hours

Maximum Marks: 60

Instruction for candidates:

1. Section A is compulsory. It consists of 10 parts of two marks each.
2. Section B consist of 5 questions of 5 marks each. The student has to attempt any 4 questions out of it.
3. Section C consist of 3 questions of 10 marks each. The student has to attempt any 2 questions.

Section – A

(2 marks each)

Q1. Attempt the following:

- a) What is the primary goal of industrial safety?
- b) What are the safety considerations in plant layout?
- c) What are good questions to ask at a safety meeting?
- d) How safety is related to economics?
- e) What control measures can be put into place to reduce the risks of fatigue?
- f) What is the best way to measure fatigue?
- g) What is the basic concept of ISO 14000?
- h) What are environmental heat stress indices used to?
- i) What are the factors that affect human comfort and effective temperature required for human comfort?
- j) What are the sources of heat stress?

Section – B

(5 marks each)

- Q2. How are employees encouraged to participate in the safety process?
- Q3. What are the key factors you think should be considered to create a good work environment for you?
- Q4. What are the basic types of ventilation systems?
- Q5. (a) What are the three main types of environmental standards?
(b) What are the challenges of thermal comfort?
- Q6. Write in detail about industrial accidents, their nature, types and remedies to reduce them.

Section – C

(10 marks each)

- Q7. Write about Environmental factors in industry. Explain the effects of temperature, illumination, humidity noise and vibrations on human body and mind.
- Q8. Write in detail on the following statement:
The effect of noise on man. Measurement and evaluation of noise. Noise isolation and noise absorption techniques. Effect, measurement and control measures of noise.
- Q9. Write a detailed note on the following:
 - (a) Hazard identification techniques.
 - (b) Safety standards and legislation