

CT Inst. of Engg.,

Roll No.

Total No. of Pages : 02

Total No. of Questions : 09

B.Tech. (ME) (Sem.-7th, 8th)**INDUSTRIAL SAFETY AND ENVIRONMENT**

Subject Code : ME-402

Paper ID : [A0838]

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTION TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students has to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students has to attempt any TWO questions.

SECTION-A**I. Answer briefly :**

- a) What is the importance of safety at work?
- b) What is the role of a safety expert in ensuring safety at work?
- c) Enlist the types of accidents according to causes of events.
- d) Enumerate the terms : WBV and HAV.
- e) Differentiate between Natural ventilation and Forced ventilation.
- f) What is the purpose of Machine Guards?
- g) What are the key features of Boiler's Act?
- h) What is the effect of intermittent Noise?
- i) What do you know about Sleep Cycle and Sleep Debt?
- j) What are the salient features of ISO 14000 standards?

SECTION-B

- 2) What are various types of accidents? How industries cope up with various types of accidents?
- 3) Explain briefly the various occupational diseases due to extreme thermal explosion. Also explain the measures to be adopted in this regard.
- 4) Write the Major provisions of Factory Act 1947 regarding working hours and employee welfare.
- 5) Differentiate between Artificial lighting and Daylighting and disadvantages. The adequate lighting has to be adopted in this regard. Comment.
- 6) How does the management ensure the safety of workers?

SECTION-C

- 7) How can workers safety be maximized in a factory? the different approaches of safety management adopted to ensure employees participation in safety.
- 8) What is purpose of accident investigation and different measures taken up by organizations?
- 9) Write short notes on :
 - (a) Safety and ergonomics
 - (b) Safety standards and legislations.

