

Roll No.

Total No. of Pages : 02

Total No. of Questions : 09

B.Tech. (Automation & Robotics) (Sem.-4)

INDUSTRIAL SAFETY

Subject Code : BTAR-405-18

M.Code : 77601

Date of Examination : 12-07-22

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS 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 have to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

SECTION-A

1. Write briefly :

- a) Discuss the relevance of safety in industry.
- b) What are the different measures taken up in an organization to prevent accidents?
- c) What are the various measures of employee participation in safety?
- d) Define safety planning.
- e) Define environment. What is the need of environmental control?
- f) Discuss the effect of lightning on the working environment.
- g) Give the formulation for the heat load requirements of the industrial buildings.
- h) Differentiate between natural ventilation and mechanical ventilation.
- i) What are the sources of noise?
- j) What are the benefits of good illumination?

SECTION-B

2. Define industrial accidents. Explain various types of accidents in the industry.
3. Explain “*FMEA*” and “*HAZOP*” techniques of hazard identification.
4. Explain the different safety legislation adopted by the organization.
5. What are the various methods to measure fatigue? How it can be mitigated?
6. What are the various environmental standards for representative industry?

SECTION-C

7. Discuss the maintenance standard needed for lightning and colour so that healthy and conducive environment can be generated for higher productivity.
8. Define impulse noise. Elaborate various noise absorption techniques.
9. Write a short note on the following :
 - a) Objectives of ventilation.
 - b) Physiology of heat regulation.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.