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Question Paper Code: 59772

B.E./B.Tech. DEGREE EXAMINATION, NOV 2019

Open elective

Civil Engineering

15UME972 - INDUSTRIAL SAFETY AND ENGINEERING

(Common to CSE, ECE, EEE, EIE ,IT and Chemical Engineering branches)

(Regulation 2015)

Duration: Three hours

Maximum: 100 Marks

Answer ALL Questions

PART A - (10 x 1 = 10 Marks)

1. In time study, the rating factor is applied to determine CO1- R
 - (a) standard time of a job
 - (b) merit rating of the worker
 - (c) fixation of incentive rate
 - (d) normal time of a worker
2. Standard time is equal to CO1- R
 - (a) Normal time minus allowances
 - (b) Normal time plus allowances
 - (c) Representative time multiplied by rating factor
 - (d) Normal time taken by an operation
3. MBO was invented by _____. CO2- R
 - (a) Peter Drucker
 - (b) Koontz & O 'Donell
 - (c) Henry Fayol
 - (c) Henry Fayol
4. The end result of risk management is CO2- R
 - (a) To eliminate danger to the public
 - (b) To minimize cost to the company
 - (c) To reduce risk to an acceptable level
 - (d) None of the above

5. Which of the following is the primary reason for accident investigation? CO3- R
design?
- (a) To identify a scapegoat (b) To take disciplinary action
(c) To prevent future accidents (d) None of the above
6. Which one of the following factors is not important in organization CO3- R
design?
- (a) Environment (b) strategy (c) information relationships (d) technology
7. Which of the following specific procedures must your training include, to CO4- R
protect you from exposure to hazardous chemicals?
- (a) Appropriate work practices (b) Emergency procedures
(c) Personal protective equipment (d) All of the above
8. According to Herzberg, which of the following is a maintenance factor? CO4- R
- (a) Salary (b) work itself (c) responsibility (d) recognition
9. Protection of organizational facilities and employees is called CO5- R
- (a) Adverse situation (b) Security (c) Safety (d) Health
10. A product layout is generally preferred for CO5-R
- (a) Batch production (b) continuous type of production
(c) effective machine utilization ratio (d) all of the above

PART – B (5 x 2= 10 Marks)

11. How the modern safety concept is evolved ? CO1- U
12. Definitions of MBO CO2-U
13. Define institutional bio safety committee. CO3- U
14. What is meant by Brain Storming? CO4- U
15. What are the requirements for effective control? CO5- U

PART – C (5 x 16= 80 Marks)

16. (a) Analyze the history of safety movement in india CO1- Ana (16)
- Or
- (b) Illustrate how safety committee meeting is arranged and CO1- Ana (16)
conducted and prepare sample minutes of the safety committee
meeting conducted.

17. (a) Mention and explain the steps in planning process with neat diagram CO2-Ana (16)
- Or
- (b) Illustrate the Fault tree Analysis procedure with an example. CO2-Ana (16)
18. (a) Explain the nature and purpose of an organization CO3- U (16)
- Or
- (b) Name the factors determining departmentation. Mention the bases of departmentation and give examples. CO3- U (16)
19. (a) Explain how motivation helps an organization to improve productivity? CO4- U (16)
- Or
- (b) Explain the EMS models with Case Studies. CO4- U (16)
20. (a) Explain the steps in the process of controlling. CO5- U (16)
- Or
- (b) Define the role of government agencies and private consulting agencies in safety training DGFASLI. CO5- U (16)

