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Question Paper Code: U8164

B.E. / B.Tech. DEGREE EXAMINATION, APRIL 2024

One credit

Civil Engineering

21UCE864- CONSTRUCTION SAFETY

(Regulations 2021)

(Common to All Branches)

Duration: 1.30 hours

Maximum: 50 Marks

Answer ALL Questions

PART A - (10 x 1 = 10 Marks)

1. What should slope angle for excavation of trenches in granular soils? CO1 U
(a) 34^0 (b) 40^0 (c) 45^0 (d) 38^0
2. What should be spacing of wales for soft soils having a depth more than 2.5m? CO1 U
(a) 1m (b) 1.5m (c) 2m (d) 2.5m
3. Road closing barriers during blasting operation should be provided at least _____ away when firing is to take place. CO1 U
(a) 400m (b) 350m (c) 450m (d) 500m
4. The overall height of step ladder shall not exceed CO1 U
(a) 6m (b) 5m (c) 6.5m (d) 7m
5. For a height of 6m scaffold, what should be the spacing of Horizontal & vertical ties? CO1 U
(a) 10m & 4m (b) 10m & 5m (c) 5m & 10m (d) 4m & 10m
6. The height of stacking of cement bag shall not be more than CO1 U
(a) 10 bags (b) 8 bags (c) 9 bags (d) 12 bags

7. What is the role of Safety officers? CO1 U
- (a) To Ensure operations with safety standards
 (b) To Ensure Proper checking of Equipments
 (c) To Ensure proper work environment.
 (d) All of the above
8. The following is indirect cost of accident CO1 U
- (a) Money paid for treatment of worker (b) Compensation paid to worker
 (c) Cost of lost time of injured worker (d) All of the above
9. _____ is best suited to extinguishing oil or flammable liquid fire. CO1 U
- (a) Soda acid (b) Vaporizing liquid (c) Foam (d) Dry chemical
10. Class-A fire consists of fire due to CO1 U
- (a) Wood (b) Oil (c) Transformer (d) Chemical

PART – B (5 x 2= 10Marks)

11. Define Construction Safety. CO1 U
12. What is personal protective equipment? CO1 U
13. Explain the general safety precautions in construction site. CO1 U
14. List out the precautions to be taken before and during excavation. CO1 U
15. Explain Safety Precaution for Scaffold. CO1 U

PART – C (2 x 15= 30Marks)

16. (a) Explain in detail about the safety precautions during project construction. CO1 U (15)
- Or
- (b) Discuss in detail about the precautions to be taken for the following CO1- U (15)
- i) Hoisting apparatus
 ii) Conveyors
 iii) Mobile cranes
17. (a) Explain about the safety precautions to be taken during excavation. CO1 U (15)
- Or
- (b) Discuss about the safety precautions to be taken for demolition works. CO1 U (15)

