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Question Paper Code: 99772

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

Open elective

Civil Engineering

19UME972- INDUSTRIAL SAFETY AND ENGINEERING

(Common to CSE, ECE, EEE, IT, Chemical, Agri, BME, CSBS & Biotechnology)

(Regulations 2019)

Duration: Three hours Maximum: 100 Marks

Answer ALL Questions

PART A - $(10 \times 1 = 10 \text{ Marks})$							
1.	Industrial safety management if that branch of management which is concerned with hazards from the industries.						
	(a) Reducing (b) controlling (c) eliminating (d) all of the above				above		
2.	In a functional organi	zation			CO1 U		
	(a) Quality of work is	better					
	(b) wastage of material is minimum						
	(c) specialized knowledge and guidance to individual worker is provided						
	(d) All of the above						
3.	Probability of the event that might occur X Severity of the event if occurs =						
	(a) Accident	(b) Hazard	(c) Risk	(d) None of the abo	ve		
4.	Identify the prevention of injuries from occurring at work.						
	(a) Keeping the work	place tidy	(b) Wearing lig	ht clothing			
	(c) Lifting heavy obje	ects with a bent back	(d) Keeping lig	hting to minimum			
5.	The primary reason for accident investigation is:			CO3 U			
	(a) To identify a scap	egoat	(b) To find faul	t			
	(c) To take disciplinate	ry action	(d) To prevent	future accidents			

6.	accident.	action to take when ap	oproaching the scene of	r an	CO3 U		
	(a) Check for sign	ns of life	(b) Wait for the emer				
	(c) Attend to the	most serious injury	(d) Make sure the area is safe to enter				
7.	Probability of the occurs =	e event that might occur	X Severity of the event	if it	CO4 U		
	(a) Accident	(b) Hazard	(c) Risk (d) None of the a	bove		
8.	Identify the preve	ention of injuries from occ	curring at work.		CO4 U		
	(a) Keeping the w	orkplace tidy	(b) Wearing light clo	othing			
	(c) Lifting heavy	objects with a bent back	(d) Keeping lighting	to minimum			
9.	Select the compul	lsory instructions when pr	oviding training.		CO5 U		
	(a) Training must	be tailored to the employ	ree's specific activities				
	(b) Training must	be provided in the form	of written documentation	l			
	(c) Training may	only be provided by an ex	kpert				
	(d) All of the abo	ve					
10.	Choose a benefit	to the individual while red	ceiving training.		CO5 U		
	(a) Creates an app	propriate climate for grow	th, communication				
	(b) Aids in increa	sing productivity and/ or	quality of work				
	(c) Satisfies a per	sonal needs of the trainer					
	(d) None of the al	bove					
		PART – B (5	x 2= 10Marks)				
11.	Describe the mod	ern safety concept of eval	luation.		CO1 U		
12.	. Briefly explain about safety audit.				CO2 U		
13.	. State the general parameters for sources of risk.						
14.	State about frequency severity incidence.						
15.	Outline about wo	rkplace safety training &	benefits.		CO5 U		
		PART – C ((5 x 16= 80Marks)				
16.	(a) Outline the safety.	functions of Line and S	taff organizations regard	ding CO1- U	(16)		
		Or					

	(b)	Suppose you were given authority to establish methods for accident control in a large manufacturing concern, explain the procedures you would set up.	CO1- U	(16)
17.	(a)	Extend safety audit in details that follow in an Automobile plant. Or	CO2 -U	(16)
	(b)	Illustrate the workers unsafe acts and conditions in the shop floor.	CO2- U	(16)
18.	(a)	Summarize the responsibilities of the safety committee in an Industry.	CO3 -U	(16)
	(b)	Or Interpret domino Theory in detail.	CO3 -U	(16)
19.	(a)	Demonstrate about permanent total disabilities, permanent partial disabilities and temporary total disabilities. Or	CO4- U	(16)
	(b)	Explain in detail about the lost workday cases incidence rate (LWDI).	CO4 -U	(16)
20.	(a)	Identify about the principles of safety training, problem identification and problem analysis. Or	CO5- U	(16)
	(b)	Choose the safety incentive scheme and rewards and give your suggestion to implement at anyone fireworks industry.	CO5 -U	(16)