CBCS SCHEME

21CV385

USN

Question Paper Version: B

Third Semester B.E. Degree Examination, Jan./Feb. 2023 Fire Safety in Buildings

Time: 1 hr.]

[Max. Marks: 50

INSTRUCTIONS TO THE CANDIDATES

- 1. Answer all the **fifty** questions, each question carries one mark.
- 2. Use only Black ball point pen for writing / darkening the circles.
- 3. For each question, after selecting your answer, darken the appropriate circle corresponding to the same question number on the OMR sheet.
- 4. Darkening two circles for the same question makes the answer invalid.
- 5. Damaging/overwriting, using whiteners on the OMR sheets are strictly prohibited.
- 1. Which of the following are the offences in fire and safety?
 - a) A person who disturbs the fire marshal in the execution of his duties.
 - b) Any owner or occupier of premises who permits more persons than the maximum number
 - c) Any owner or occupier of premises that do not comply with the codes or standards declared
 - d) All of the above
- 2. The fire management plan contains
 - a) The name of officers
 - b) Current arrangements for management of fire safety
 - c) Map of the city
 - d) All of the above.
- 3. What is the best time to write the fire incidence report?
 - a) The best time to write your report is when the incident is one day older
 - b) The best time to write your report is when the incident is two weeks older
 - c) The best time to write your report is when the incident is fresh in your mind
 - d) The best time to write your report is when the incident is one week older
- 4. All fire protection features and systems required for the finished building are included in which of the following document?
 - a) Maintenance
- b) Inspection
- c) Design
- d) Construction
- 5. Process of maintaining different components of buildings so that it can provide proper service throughout its working life is known as _____
 - a) Building maintenance

b) Building management

c) Building service

d) Building repairs

6.	Which type of works a) Remove chokage i c) Lawn moving	is done in day to day in pipes	repair? b) Cleaning of manho d) All of these	iles
7.	a) Improve its appearb) Utilize the funds pc) Stabilize the struct	provided	carry the functions for w	which it is constructed
8.	If the cracks width is a) Fine	s less than 0.1mm then b) Thin	n they are called c) Medium	d) Wide
9.		measured in f	or home electric system.	d) mA
10.	The repair and reha	bilitation of damaged	d or spelled concrete is	done by removing the
	a) Loose concrete	b) Collapsing	c) Breakage	d) Bonding
11.	by where f _{ck} is chara	cteristic strength of c	oncrete (in N/mm²) as poncrete	
	a) $5000\sqrt{f_{ck}}$	b) $5700\sqrt{f_{ck}}$	c) $3000\sqrt{f_{ck}}$	d) $4000\sqrt{f_{ck}}$
12.	a) Steel is rarely us	ed as a structural mat b) Cast iron	erial at present construct c) Aluminium	cion works. d) Asbestos cement
13.	According to IS 16 terms of a) Strength in N/mm c) Time in hours		b) Temperature in de d) Deformation in m	egree Celsius
14.	There are following	zones of a flame:	X	
	a) 2 c) 4		b) 3 d) No any zone	
15.		lly energized fire		
16.	a) Open doors	ving is NOT the cause	b) Electric short circ	
	c) Loose connection		d) Over loading on v	
17.	Urban fire services a) Fire prevention	provide the services t b) Education	o the community includi c) Fire suppression	ngd) All of these

18.	Which of the following are correct about common fire problems in rural areas? a) Wood stoves, are involved in most rural residential heating fires b) Damaged electrical equipment is often the source of fire				
	c) Heating is a common cad) All of the above.	ause of deaths		4	
19.	The head room clearance	for all pump house	should be minimun	n	
		2.75m	c) 1.5m	d) lm	
20.	Which system is installed a) FWSS b) H	to extinguish fire d	of liquids having fla c) MVWS	sh point below 65°C? d) None of these	
21.	Which type of fire protect a) Sprinkler system c) Water mist fire protecti		vapour explosion? b) Fire hydrant syst d) Portable fire ext		
22.	Smoke detector may not be a) 15 b) 3		feet from any poin c) 45	t of ceiling. d) 21	
23.	Whenever a leakage (wha a) High voltage b) I	tever leakage) is n	oticed, rectify it imr	nediately to d) Fire hazards	
24.	Which type of fire extingua) Class A b) (uisher is used for f Class B	ire due to liquids? c) Class D	d) Class C	
25.	Supply of outside air into	or the removal of	inside air from an e	enclosed space is called as	
	a) Venting fire b) v	Ventilation	c) Fire drill	d) None of these	
26.	In system, the us the room properly ventilar a) Artificial ventilation		s, windows, ventilat b) Air conditioning	fors and skylights to make	
	c) Natural ventilation	233 T	d) Mechanical ven	tilation	
27.	Exhaust system, Supply	system, air cond	ditioning, etc come	s under type of	
	ventilation system. a) Natural c) Manmade		b) Mechanical d) Doors		
	c) Walimade		d) D0013		
28.	Simplest method of idential Visual inspection c) Chipping the weak con		b) Tapping the surr d) Both a and b	face	
29.	In general, electric wiring a) 15 - 20 b) 2	g of the buildings a 20 - 30	c) 20 - 25	year d) 30 - 45	
30.	Ultrasonic testing is done a) Cracks below the surfa c) Ultimate tensile streng	ce	termine b) Yield strength d) Hardness		
31.		onductor of heat.			
	a) Asbestos cement b)	Wrought iron	c) Cast iron	d) Aluminium	

32.	a) Automatic sprinkler c) Internal hydrants	, the usual being carbon- b) Water taps d) Manual fire exting	
33.	What is the best tool available to us that ca a) Smoke alarm b) Fire hydrant	n prevent a fire from cre c) Telephone	eating victims? d) Extinguisher
34.	Fire resistance of RCC member depends reinforcement (3) Type of aggregate. a) Only on 2 b) Both 1 and 2	c) Only on 2 and 3	#
35.	During fire emergencies, fire lift is used by a) All persons in the building c) VIP person		
36.	Lighting provided for use when the supply a) Escape lighting c) Exit lighting	to the normal lighting fa b) Emergency lighting d) All of these	ails is
37.	Which of the following installation is us protection of fire? a) Sprinkler b) Hydrant	sed to spray water over	a surface to provide d) Drencher
38.	The colour code of fire hydrant isa) Orange b) Blue	c) Black	d) Red
39.	Which of the following is/are not required a) Fuel b) Oxygen	for combustion process c) Nitrogen	to start? d) Heat
40.	is a bad conductor of heat and construction. a) Steel b) Concrete	it is an effective mate	erial for fire resisting d) Granite
41.	The pH value of fresh concrete is around a) 10 b) 11	c) 11.5	d) 12.5
42.	Which of the following is the main reason a) Short circuit b) Transformer	for electric fire to occur?	d) Current
43.	Which of the following is not a factor affec a) Reactive aggregate c) Greater presence of magnesia in cement	b) Moisture availabilit	У
14.	The water cement ratio is expressed by base a) Volume of materials c) Density of materials	ed on b) Weight of materials d) Percentage of mater	
45.	Which of the following aggregate should n exhibits alkali-aggregate reaction? a) Granite b) Basalt	ot be used in the manufa	d) All of these

46.	Non-destructive test: a) Quality control c) Planning control	ing plays an impor	tant role in b) Production cont d) Quantitative and	
47.	A dye penetration in a) Undercut	spection is done to b) Cracks	find c) Slag inclusion	d) Porosity
48.	Combustion is a a) chemical process c) Both of these proc	eesses	b) Physical proces d) None of these	S
49.	Which of the follows a) Environment b) Size of the member c) Degree of exposure d) Protective measure	er and the structura	OT affect the durability o	of a steel structure?
50.	The unit mass (kg/m a) 7650	3) of structural stee b) 7750	el as prescribed by IS 80 c) 7850	0 is: d) 7950
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