Total No. of Questions: 6

Total No. of Printed Pages:2

Enrollment No.....



Q.1

Faculty of Engineering End Sem Examination May-2023

FT3CO17 Fire Engineering -II

Programme: B.Tech. Branch/Specialisation: FT

Duration: 3 Hrs. Maximum Marks: 60

Note: All questions are compulsory. Internal choices, if any, are indicated. Answers of Q.1 (MCQs) should be written in full instead of only a, b, c or d. Assume suitable data if necessary. Notations and symbols have their usual meaning.

i.	How to put the fire out?			1
	(a) Cooling (b) Starvation	(c) Smothering	(d) All of thes	e
ii.	To operate fire extinguisher,	follow the-		1
	(a) RACE	(b) PASS & RACE		
	(c) PASS	(d) None of these		
iii.	What was the chemical gas l	eaked from Union carl	oide plant?	1
	(a) MIC (b) MICA	(c) MI	(d) MIS	
iv.	v. In which year Bhopal gas tragedy occurred-			
	(a) 1983 (b) 1984	(c) 1985	(d) 1986	
v.	What is U in UVCE?			1
	(a) Unconditioned	(b) Unoccupied		
	(c) Unconfined	(d) None of these		
vi.	What is L in BLEVE?			1
	(a) Liquid (b) Legal	(c) Lock	(d) Lethal	
vii.	What is the odour of LPG?			1
	(a) Odorless	(b) Fruity smell		
	(c) Undesirable odour	(d) Alcoholic odour		
viii.	ii. Which type of LPG is mostly produced in Indian refineries?			1
	(a) Grade A (b) Grade B	(c) Grade C	(d) Grade D	
ix.	How often fire alarm should	be tested?		1
	(a) Weekly (b) Yearly	(c) Monthly	(d) Hourly	
х.	Who is responsible for carrying out fire risk assessments?			
	(a) HSE inspector	(b) Employees		
	(c) Fire rescue	(d) Fire wardens		
				P.T.O.

Q.2 OR	i. ii. iii. iv.	What is turn table ladder? What are the methods we can use for extinguishment of fire? Where we are using crash fire tender? Also give a brief explanation about different types of CFT. Explain fire fighting vehicle and appliances.	2 3 5
Q.3 OR	i. ii. iii.	What is flash fire? What are the different types of branches with their IS specifications. Explain in brief Bhopal gas tragedy.	2 8 8
Q.4 OR	i. ii. iii.	Discuss hazards present in confined space. Differentiate between extension ladder & hook ladder with IS specification How BLEVE occurs? Explain with an example.	3 7 7
Q.5 OR	i. ii. iii.	What is JSA? Discuss any case study related to refinery which can cause severe hazard. Explain SCBA with sketch.	4 6
Q.6	i. ii. iii.	Attempt any two: What are the duties of safety officer in hazardous industries? How can we make accident investigation report? Differentiate between unsafe act & unsafe condition.	5 5 5

Marking Scheme FT3CO17 (T) Fire Engineering -II

Q.1	i)	d. all of these	1
	ii)	c. PASS	1
	iii)	a. MIC	1
	iv)	b. 1984	1
	v)	c. unconfined	1
	vi)	a. Liquid	1
	vii)	a. Odourless	1
		b. Grade	1
	ix)	a. Weekly	1
	x)	d. fire wardens	1
Q.2	i.	Definition of turntable	2
	ii.	3 methods of fire extinguishment	3
	iii.	Brief explanation of CFT	5
OR	iv.	About Fire fighting vehicles	3
		About appliances	2
Q.3	i.	Definition of flash fire	2
	ii.	6 types of branches- 1 Marks each one	6
		Diagram 2 Marks	2
OR	iii.	Case study of Bhopal Gas tragedy	8
Q.4	i.	3 types of hazards	3
	ii.	7 differences between extension & hook ladder	7
OR	iii.	Occurring of BLEVE 4 Marks	7
		Example 3 Marks	
Q.5	i.	4 steps of JSA	4
	ii.	Refinery fire case study	6
OR	iii.	Explanation of SCABA	4
		Sketch	2

	`	/
	- 1	r
•	,	١.

i.	Duties of safety officer at Least 5	5
ii.	Making accident report with 5 important points	5
iii.	5 difference unsolve act 2 conditions	5
