## B. E. CONSTRUCTION ENGINEERING 4<sup>TH</sup> YEAR 2<sup>ND</sup> SEMESTER - 2024

### SUBJECT: Construction Quality & Safety Management

Time: Three Hours

(50 Marks for each Part)

Full Marks: 100

Use separate answer script for each Part

#### PART I (50 Marks)

	Question No.		Marks
CO3 [20]		Answer any two from question (1), question (2) and question (3) in this block	
	Q1.	What are the main hazards involved in excavation in soil? Describe the different safety practices usually followed during excavation.	10
	Q2a.	Mention the different causes of accidents at construction site.	05
	Q2b.	What are the differences between an industry in operation and construction site from the safety point of view?	05
	Q3a.	What do you understand by "Risk at construction site? Why construction work is considered as risky?	05
	Q3b.	Write a short note on safety at construction site.	05
CO4 [10]		Answer any one from question (4) and question (5) in this block	
	Q4a.	Mention the different PPE generally used during excavation work.	03
	Q4b.	Discuss the importance of personal protective equipment (PPE) at construction site. Also state the measures for effective utilization of PPE.	07
	Q5a.	Briefly discuss the different aspects of Safety Helmets.	05
	Q5b.	What do you understand by full-body Harness? Describe the different components of full-body Harness.	05
CO5 [20]	Q6.	Describe the basic features of CUP LOCK scaffolding.	10
	Q7a	What are the general guidelines for using ladders in construction site from safety point of view?	05
	Q7b	Briefly explain the following in connection with scaffolding.  i) Caster ii) Screw Jack iii) Base Plate	05

# B. Construction Engg ,4<sup>th</sup> year 2<sup>nd</sup> semester Examination ,24

Ref: Ex/Con/PC/H/T/421/2024

#### **Construction Quality & Safety Management**

Answer all the questions:

PART - II Marks 50

			Define quality in construction.	
Q1	CO1	PO1		2
		PO2	Mention its importance for any structure	5
Q2	C02	PO1	A.Describe PDCA . Elaborate each through a neat sketch	5
		PO2	B. Define briefly the activities under each action of PDCA	3X6=18
		PO3	C. Describe through diagram the main activities of construction Quality  Management	6
	CO2	PO1	A.Discuss RACI Matrix	4
		PO2	B. Describe the advantages of RACI Matrix in construction quality	5
Q3		PO3	C. Discuss critically the disadvantages of the matrix	5