

**B. Const. Engg. 2<sup>nd</sup> YEAR EXAMINATION, 2024****(2<sup>nd</sup> Semester)****SUBJECT: CONSTRUCTION PLANTS AND PROCESS****(Name in full)****Time: Three Hours****Use separate answer script for each Part****Full Marks: 100**

<b>No of Questions</b>	<b>Part I ( 60 Marks)</b>	<b>Marks</b>
CO1: 15 Q1.	In a river where certain depth of water is always present, you want to construct a bridge with well foundation, which process you want to adopt. Explain this process with a neat sketch.	10
Q2.	In a Pipe laying project in Kolkata, you have to use excavator, Which part of excavator you have to change for excavation of narrow cutting along road side.	5
CO2: 5 Q3.	How we can mitigate the “TILTING” of Well.	5
CO3: 20 Q4	Draw a sketch of “Crawler Mounted Strut Boom Crane”. Show all major different parts of it.	15
Q5.	What is Luffing & Slewing.	5
CO4: 20 Q6. (a)	Explain the working principle of “Twin Cylinder Concrete Pump” with neat sketch.	10
(b)	Explain with sketch the Agitation & Unloading procedure of concrete from Transit Mixer.	10

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**Part-II ( 40 Marks)****B.E Construction Engineering 2<sup>nd</sup> Semester Examination,2024****Ref :EN/CON/PC/B/T/226/2024****Construction Plants and process****Answer all the question**

Q1	CO1	PO1	A )Mention the main factors that are considered in selection of a particular material for construction purpose ?	5
		PO2	A) Name some materials that are used for different purposed construction purpose .	5
Q2	CO2	PO1	A) Distinguish between centering & shuttering.	5
		PO2	A)Give a net sketch of bolt and lebel the parts .	5
Q3	CO2	PO1	Define -A) Vibrating of concrete, B)Curing of concrete	2+3=5
		PO2	B) Draw a Flow Chart for concrete mixing ONLY for production of Ready Mix Concrete(RMC)	5
		PO3	C) Discuss in brief the advantages of pumping of concrete	5
		PO3	D) Discuss the factors for selection of concrete pump	5