

BACHELOR OF CONSTRUCTION ENGINEERING EXAMINATION, 2019**(3rd Year, 1st Semester)****CONSTRUCTION PLANTS AND EQUIPMENTS****Time : THREE HOURS****Full Marks : 100**

No of Questions		Marks
	Answer any Five questions.	
Q1.	Draw a sketch of Derrick showing different parts of this machine. Discuss about working principle of Derrick. What is "Gin Pole", explain with a sketch.	20
Q2.	Draw a sketch of hydraulically operated backhoe excavator. Show its different parts. For digging for pipeline laying project which part of excavator is to be changes and why?	20
Q3.	Draw a sketch of "Strut Boom Crane" and show its different parts.	20
Q4.a.	What is sheep foot roller and for which type of soil compaction work it is used.	10
Q4.b.	Why vibratory roller is more efficient in respect to static roller to compact soil.	10
Q5.a.	What is Transit Mixer? How a Transit Mixer unloads concrete at site, explain with sketch.	10
Q5.b.	Draw a sketch of two cylinder concrete pump and discuss its working principle.	10
Q6.	Explain working principle of fixed based town crane with neat sketch showing different parts of it.	20