

JK LAKSHMIPAT UNIVERSITY, JAIPUR

INSTITUTE OF ENGINEERING AND TECHNOLOGY

End Term Examination (Regular/Backlog), Nov 2017

B. Tech Civil Engineering, Semester VII

Roll No.....

Course Code : CE703 Construction Equipment
Method

Time: 3 hours

Max. Marks: 100

Instructions to students:

1. Do not write anything other than your roll number on question paper.
 2. Assume suitable data wherever required and mention it clearly.
 3. Writing appropriate units, nomenclature, and drawing neat sketches/schematics/ flow chart wherever, required are an integral part of the answer.
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Q.1A Objective type multiple choice questions (10 questions @ 1 mark) 10

- i. Following is generally not used at residential building construction site.
(a) Pile hammer (b) scraper (c) dredger (d) Roller
- ii. Bulldozer is generally used for
(a) digging (b) earth removal (c) trenching (d) compaction
- iii. Following property of soil is changed by compaction
(a) permeability (b) porosity (c) density (d) b and c both
- iv. Sheep foot roller is generally used for Soil.
(a) alluvial soil (b) silts (c) black cotton soil (d) Sandy soil
- v. For leveling of uneven ground following is used.
(a) Scraper (b) Grader (c) Roller (d) Tractor
- vi. When the head is less following type of pump is used.
(a) axial (b) centrifugal (c) casing type (d) None
- vii. Forklifts are generally used for vertical direction. The height should not be
(a) very high (b) very low (c) both (d) None
- viii. Generally the water cement ratio is for ready mix concrete in comparison to traditional concrete.
(a) High (b) Low (c) Similar (d) None
- ix. At large construction site mixing is used for concrete preparation.
(a) volume (b) weight (c) both (d) none
- x. The outlet of concrete pump is
(a) continuous (b) intermittent (c) some time continuous some time intermittent
(d) None of the above

Q.2 10

- i. Draw a neat sketch of well foundation. Where it is used?
- ii. How the trenching is different than excavation?
- iii. Describe the advantages and disadvantages of crawler mounted machinery over wheel mounted machinery.

iv.	How the concrete pump is different than water pump?	
Q.3A	Name the various machines used in earthen dam construction with their respective use. (At least 5)	05
Q.3B	What are the various methods of finding depreciation?	05
Q.4A	What are the various uses of a Bull dozers?	05
Q.4B	What are the different types of trucks used in construction industry?	05
Q.5A	Describe the various types of drilling equipment's.	05
Q.5B	Describe the various steps used in blasting.	05
Q.6A	Describe in detail the use and working principles of concrete pumps.	05
Q.6B	Describe in detail the various advantages of RMC over traditional concrete.	05
	OR	
Q.6B	What are the different types of conveyer belts?	05
Q.7A	Describe in detail the various type of stone crushers.	10
Q.8A	Describe in detail the various type of compactors with neat sketch.	15
Q.9	Discuss in detail the various machinery used for Pile construction and pile driving	15
	OR	
Q.9	Define the use and working Principles of following machines.	15
	1. Scrapper	
	2. Drag line	
	3. Fork lift	
	4. Pile Hammer	
	5. Batch mixers	