

Seat No.	62
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**M.Tech. (Civil Engineering) (Construction Management)
(Part - I) (Semester - I) Examination, November - 2018
CM 102 : CONSTRUCTION EQUIPMENT
Sub. Code: 72073**

Day and Date : Friday, 30 - 11 - 2018

Total Marks : 70

Time : 10.00 a.m. to 12.30 p.m.

- Instructions :
- 1) Attempt any two questions from each section
 - 2) Figures to the right indicates full marks.
 - 3) Draw neat diagram wherever necessary.
 - 4) Make suitable assumptions wherever necessary.

SECTION - I

- Q1) a) Draw a neat sketch of scrapper. Name the components & explain working of scrapper. Discuss the use of scrapper as a construction equipment in major construction projects. [9]
- b) What is meant by soil compaction? Will the type of soil influence the selection of compacting equipment? Explain with suitable examples. [8]
- Q2) a) Explain the principle of vibratory compaction & write in detail working of vibratory roller & vibrating plates with neat sketches. [9]
- b) Classify cranes on the basis of broad construction features & explain any one type in detail with its application. [8]
- Q3) a) Explain with neat sketch the working of belt conveyer. Explain its suitability in major construction projects. [9]
- b) What do you understand by "Cycle Time" of a excavating equipment? What factors influence cycle Time? How it is related to output of an. [9]

P.T.O.

SECTION - II

- Q4) a) Write a detailed note on preventive maintenance of construction equipment. [9]
b) Explain pile driving and extracting equipment. [9]
- Q5) a) Explain pile driving rigs and hammers. [9]
b) Discuss factors in selection of vibrators for concrete in different conditions. [8]
- Q6) a) Discuss Economic life and Replacement of construction equipment. [9]
✓ b) Write detail note on use of TBM's in tunneling. [8]

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