B.TECH. SEM -IV (CIVIL) 2014 COURSE (CBCS) : WINTER - 2017

SUBJECT: CONSTRUCTION TECHNIQUES & MACHINERY

Day: **Thursday** Time: **02.30 PM TO 05.30 PM**

Date: **23/11/2017** Max. Marks: 60

W-2017-2071

N.B.:

1) All questions are **COMPULSORY**.
2) Figures to the right indicate **FULL** marks.
3) Draw neat diagrams **WHEREVER** necessary.
4) Assume suitable data if necessary.

Q.1 What is the role of construction activity in national and global development? **(10)**

OR

Q.1 Explain any five areas of infrastructure in India. **(10)**

Q.2 Draw any five labelled sketches of coffer dams and caissons. Explain any one of them. **(10)**

OR

Q.2 On what basis piles are classified? Give two examples of each. Explain conditions under which negative skin friction occurs. **(10)**

Q.3 State the conditions under which following types of tunneling techniques are not advantageous: **(10)**

i) Drilling and blasting ii) Tunnel boring

OR

Q.3 Write short notes on **Any TWO** of the following: **(10)**

a) Placing concrete under hot weather
b) Shotcreting
c) Micro tunneling

Q.4 Explain at least five factors on which efficiency of earth moving equipment depend. **(10)**

OR

Q.4 Explain importance of record keeping of machineries by giving suitable formats to be used for recording. **(10)**

Q.5 Name any five types of cranes. Draw sketch of any one crane stating its limitations. **(10)**

OR

Q.5 Draw line diagram of any one type of crusher stating functions of each component. **(10)**

Q.6 State the conditions under which following dewatering system is adopted: **(10)**

i) Electro osmosis ii) Well point system

OR

Q.6 Explain with line diagram asphalt paver or slip form paver. State its advantages. **(10)**

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