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**M.E. (Civil) (Construction Management) (Semester - II) Examination,
April - 2016**

CONSTRUCTION TECHNIQUES

Sub. Code : 34324

Day and Date : Tuesday, 26 - 04 - 2016

Total Marks : 100

Time : 10.30 a.m. to 01.30 p.m.

- Instructions :**
- 1) **Attempt any three questions from Each section.**
 - 2) **Figures to the right indicate full marks.**
 - 3) **Draw neat diagrams wherever necessary.**
 - 4) **Make suitable assumptions wherever necessary.**

SECTION - I

- Q1) a)** What are the various methods for the control of seepage through embankment? Explain with neat sketches any one method in detail. **[9]**
- b) What is meant by 'piping' in earthen dams? enlist the various factors that are responsible for piping. **[8]**
- Q2) a)** State and explain various parameters involved in the design of river training work. **[9]**
- b) Enlist the methods of river training and explain any one method in detail stating its suitability. **[8]**
- Q3) a)** Define "offshore structures". Discuss the various types of offshore structures and explain the construction technique for any one type with neat sketches. **[10]**
- b) Write a short note on 'Bank protection techniques'. **[6]**
- Q4) a)** Explain the design procedure for foundations subjected to vibrations. **[10]**
- b) Write a detailed note on "Effects of vibrations transmitted through soil." **[6]**

P.T.O.

SECTION - II

- Q5) a)** State the importance of joints in prefabricated construction and explain with neat sketches. [10]
- i) Beam to column connection
 - ii) Beam to slab connection
- b) Write a detailed note on 'Transportation and erection in prefabricated construction. [7]
- Q6) a)** What is meant by 'Guniting '? Explain how the 'guniting' is carried out. State the applications of guniting. [8]
- b) What do you mean by 'prestressing'? Enlist various prestressing techniques. Explain any one method of prestressing in detail. What are the advantages of prestressing. [9]
- Q7) a)** What are the different materials commonly used for formwork comment on their suitability, cost and durability. [8]
- b) What is meant by 'slipform'? Explain with a neat sketch component and working of slipform. Discuss the major applications of slipform in construction projects. [8]
- Q8) a)** What are the different methods of erection of steel structures? Explain any one method in detail. [8]
- b) Enlist various types of Retaining walls. Explain with neat sketches construction technique for any one type. [8]

