

GANPAT UNIVERSITY
B. Tech. Semester: VICivilEngineering
Regular Examination (CBCS) - April – June 2016
2CI606: Advanced Construction

Maxi.Time: 3 Hours

Maxi. Marks: 70

- Instruction:** 1 Answer to the two sections must be written in separate answer book.
 2. Figures to the right indicate full mark.
 3. Assume suitable data if required.

Section – I

- Que. – 1 (A) Write short note on Franki Pile. 6
 (B) Write short note on Vibro pile. 5

OR

- Que. – 1 (A) Explain classification of pile based on functions. 6
 (B) Enlist classification of pile based on material. Explain any one. 5
- Que. – 2 (A) What do you mean by cofferdam? Enlist uses of cofferdam. Enlist factors affecting selection of cofferdam. 6
 (B) Define caisson. Explain difference between caisson and cofferdam. 6

OR

- Que. – 2 (A) Enlist types of cofferdam. Explain cellular cofferdam. 6
 (B) Explain pneumatic caisson with sketch. 6
- Que. – 3 **Answer the following questions. (Any Two)** 12
 (A) Enlist methods of dewatering. Explain electro osmosis process.
 (B) What is Formwork? Enlist requirements of good formwork.
 (C) Determine the safe allowable load on a precast pile driven by drop hammer weighing 60KN. The free fall of the hammer 130m and the average penetration recorded in the last few blows is 0.6 cm per blow. Adopt factor of safety is 6 and using Engineering News formula.

Section – II

- Que. – 4 (A) What are the contribution and importance of construction equipment? 6
 (B) Enlist different conveying equipment. Explain any two of them. 5

OR

- Que. – 4 (A) Describe operation of a power shovel, dragline and trenching machine. 6
 (B) Write short note on chain hoists with neat sketch. 5
- Que. – 5 (A) Explain different methods of blasting. 6
 (B) Define tunnel and what are the advantages and disadvantages of tunnel. 6

OR

- Que. - 5 (A) Write short note on diamond drills. 6
(B) Write short note on earth resistance construction. 6
- Que. - 6 (A) Enlist precaution to be taken during demolition of structures. 6
(B) Discuss important to be considered while constructing spatial structures. 6

Page No. 2/2

END OF PAPER