Reg.No.									

INTERNATIONAL CENTRE FOR APPLIED SCIENCES

(Manipal University)

III SEMESTER B.S. DEGREE EXAMINATION – OCT. / NOV. 2017

SUBJECT: BUILDING CONSTRUCTION II (CE 231)

(BRANCH: CIVIL ENGINEERING)

Saturday, 4 November 2017

Time: 3 Hours **Max. Marks: 100**

- ✓ **Answer ANY FIVE full Questions.**
- ✓ **Missing data, if any, may be suitably assumed**

1a) What is foundation? Write advantages and disadvantages of concrete pile compared to timber piles. (10 marks)

1b) Write a note on black cotton foundation. What are the precautions to be taken when foundation is to be constructed in black cotton soil. (10 marks)

2a) Write any 12 points that has to be kept in mind while supervising stone masonry. (12 marks)

2b) What are the essential features of English bond. (8marks)

3)Explain the following type of partition walls: (5 x 4 = 20 marks)

a. Reinforced brick partitions
b. Brick nogging partitions
c. Concrete partitions
d. Glass partitions

4) With the help of neat sketch explain the following:

a. Collar beam roof (5marks)
b. Queen post truss (15marks)

5a) What are the factors that that affect the choice of flooring materials (10marks)

5b) write short note on: (i) Tiled flooring (ii) Rubber flooring (10 marks)

6a)What is scaffolding? (5marks)

6b) With the help of neat sketch explain pit method of under pinning (15 marks)

7)Write short note on the following: (20marks)

1) Lumpsum
2) Work charged establishment
3) Centre line method
4) Rate analysis

8a) Calculate the quantities of various materials required for the following items of work.

I. First class brick work in cement sand mortar 1:6 in Superstructure, ground floor.
II. Earth work in excavation in foundation including filling in trenches upto 30m lead & 1.5m lift – unit 100 cu m.

(5 X 2 = 10marks)

8b) The accompanying sketch below Shows the plan of a residential building and a section through the walls. Workout the quantities of following items of work. (5 X 2=10marks)

1. Adopting Centre line method.
    a. PCC bed in foundation trench for main walls
    b. RCC main slab 150 mm thick