### CE-228

### B.E. IV Semester

### Examination, June 2017

# Choice Based Credit System (CBCS)

## **Building Planning and Architecture**

Time: Three Hours] [Maximum Marks: 60

Note: i) Attempt any five questions. ii) All questions carry equal marks.

- 1. a) Draw a typical cross section of wall passing through the door and show all the components of building from foundation to slab level.
- b) What is Foundation? Draw and show the various components of Raft foundation and column footing.
- c) Draw and differentiate the flush door with panel door.
- 2. a) Write five important provisions, related to residential building in National Building Code.
- b) Explain percent builtup area and FAR.
- c) What is orientation of building. Explain by drawing figure.
- 3. a) For planning considerations explain Residential, Institutional and Commercial buildings.
- b) What are the requirements of good quality staircase? Draw the figure of Dog legged and open well stairs.
- c) Write in brief on computer aided design.
- 4. a) Explain in brief by drawing flow diagram on water supply services and waste water disposal arrangement in a residential building.
- b) Write in brief on:
- i) Fire fighting system in multistoried building
- ii) Acoustics of building and
- iii) Electrification system in a building
- 5. a) State and briefly explain different principles of architectural composition in building elements.
- b) What are the various types of perspectives and give two methods of drawing perspective.
- 6. a) What is Master plan? Discuss its contents in details.
- b) Write the salient points of colony planning. Plan and allocate the area reserved for different purposes in a land having area approximate 8 Hectares. (Assume land shape either square or rectangle).
- 7. a) Write short notes on:
- i) Mass
- ii) Proportioning
- iii) Contrast
- iv) Different land use purposes.
- b) Write the various points to be incorporated with energy efficient building.
- 8. Write short notes on (any four):
- a) Open areas and set backs
- b) Building Bye laws
- c) Lintel and Chajja projections
- d) Auto CAD drawings
- e) Architectural symmetry
- f) Role of colours in architecture

\*\*\*\*\*