

B. Tech Civil Engg. (Semester – 3rd)
COMPUTER AIDED CIVIL ENGINEERING DRAWING
Subject Code: BCIES1301
Paper ID: 18110711

Time: 03 Hours **Maximum Marks: 60**

Instruction for candidates:

1. Section A is compulsory. It consists of 10 parts of two marks each.
2. Section B consist of 5 questions of 5 marks each. The student has to attempt any 4 questions out of it.
3. Section C consist of 3 questions of 10 marks each. The student has to attempt any 2 questions.

Section – A **(2 marks each)**

Q1. Attempt the following:

- a) When do you choose 'PLINE' command?
- b) What is the scale ratio of full-size scales?
- c) What is 'Diagonal Scale'? When it is preferred/used?
- d) Give sign convention/Symbols of Plumbing (Any TWO).
- e) Give sign convention/Symbols (Any TWO) related to Electrical.
- f) What is full form of BIM?
- g) Define 'Building Line'.
- h) What do you understand by 'Squint Junction'?
- i) Define 'Cone of Vision'.
- j) Explain in brief 'Offset Command'.

Section – B **(5 marks each)**

- Q2. A room having volume of 2000m³ is shown as 200 cm³ on a drawing sheet. What is RF? If RF is to be doubled, what will be volume on drawing sheet?
- Q3. Proper Roof drainage is to be ensured for proper disposal of water. Show typical roof drainage plan for a room having size 20' x 12'.
- Q4. Differentiate between English bond and Flemish bond.
- Q5. Give classification of Perspective projections. Mention the practical application of any TWO of them.
- Q6. Write a note on co-ordinate systems.

Section – C **(10 marks each)**

- Q7. It is proposed to construct a residential building (G+3) RCC framed structure with at least the following requirements: (a) Drawing Hall (b) Living Room (c) Master Bedroom (d) Guest Room (e) Study Room (f) Children's Bed Room (g) Kitchen cum Dining . Provide Passage, staircase, lift, verandah and other provisions, you deem fit. Show Second Floor Plan.
- Q8. Differentiate between 'Corner wall' and 'Cross wall'. Show sketches for the case of (a) Double Flemish Bond (b) English Bond.
- Q9. Describe in brief the following: (a) Architecture plan (b) Principles of Isometrics (c) Drawing Aids (d) Rebar drawings