

# **ARKA JAIN University, Jharkhand**

3<sup>rd</sup> Semester End Semester Examination – 2019-20

Subject: CIVIL ENGG DRAWING Branch -Civil Engineering

Time: 3 Hours

Course: Polytechnic Full Marks: 30 Pass Marks: 12

- Candidates are required to give their answers in their own words as far as practicable.
- Question paper is divided in to Three Parts-A, B & C.

### PART A

## Q.1) All questions are compulsory.

(5x1=5)

- a) The lower horizontal frame of a window is called ......
- b) A double storey building providing same floor area that of a single storey is cheaper by .........
- c) Representative factor for 1cm=10km is.....
- e) Building line for National and State highway is ......

#### PART B

## Q.2) Answer any one question

(1x10=10)

- a) Design a septic tank for 20 users assuming suitable scale. (Assume suitable data)
- **b**) i) Explain different type of conventional symbols used for different material in civil engineering drawing.
- ii) Explain Building Bye-Laws, Floor area ratio, Building line and Built up area for residential building.

#### PART C

Q.3)

(1X15=15)

Draw a suitable plan and elevation for residential building. Some of the specifications are as follows:

Level of plinth above ground= 450mm

Wall thickness= 300mm

Window=  $1.0m \times 1.2m$ 

Doors = 1.0 m X 2.0 m

Length= 11.5m

Width=10.2m

The plan consists of one bed room, drawing hall, verandah, kitchen, store room and bath room. Assume the suitable scale.