## **Indian Institute of Technology (IIT) Guwahati**

## **CE101: Engineering drawing**

Assessment-2 Max marks: 90

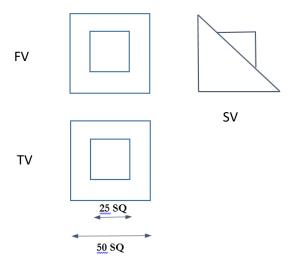
20th February 2021 Duration: 90 minutes

- Attempt any three questions
- Assume any missing data and clearly justify the assumption.
- A total of 5 marks in each question will be solely for neatness, dimensioning and notations.

## **Important instructions for the students**

- a. Total time for the examination is 90 minutes. This includes solving and uploading vour completed answer book for evaluation.
- b. You may use paper of any size (for example A4, A3, A2).
- c. On each paper, write your name, roll number and page number at the top right corner. Take special care in writing the question number in each page.
- d. No title block
- e. Answer with pencil only. Weightage will be given for neatness and usage of drawing conventions (dimensioning and notation). Further, you are free to use either drafter OR scale and set squares.
- f. You may refer any course material
- g. No clarifications will be provided by the tutors during examination.
- 1. A hexagonal prism of base edge 30 mm and axis 60 mm rests on one of its base edges on the H.P. such that the axis is inclined at 30° to H.P. and 45° to the V.P. Draw its projections. [30]
- 2. A tetrahedron of 60 mm long edge rests with one of its faces on HP and an edge is parallel to VP. It is cut by a section plane perpendicular to VP, inclined at 40° to HP and passing through a point on the axis 20 mm below the apex. Draw the front view, and sectional top view. [30]
- 3. A cylinder of base diameter 50 mm and axis 70 mm is resting on ground with its axis vertical. It is cut by a section plane perpendicular to the V.P., inclined at 45° to the H.P., passing through the top of a generator and cuts all the other generators. Draw the development of its lateral surface. [30]

4. Figure below shows the orthographic views of an object. Draw its isometric projection. [30]



Figure