BIRLA INSTITUTE OF TECHNOLOGY AND SCIENCE, PILANI, PILANI

SECOND SEMESTER 2022–2023 BITS F110 (ENGINEERING GRAPHICS) COMPREHENSIVE EXAM (OFFLINE and CLOSED BOOK)

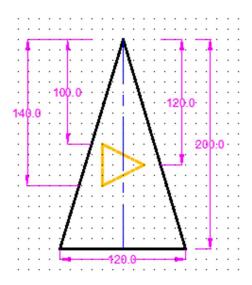


Duration: 1 hour 15 minutes Max Marks: 80

Name: ID: Signature:

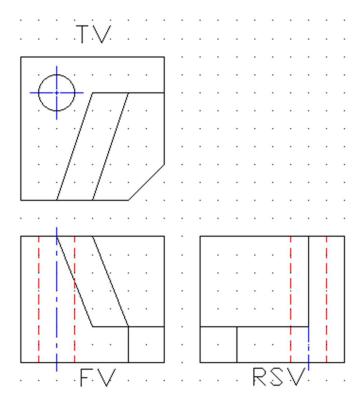
- Save your work frequently, read question carefully and draw accordingly. Use blank spaces for rough work.
- COLOR CODE: Visible lines → White/black Continuous, Hidden lines → Red Hidden2, Center lines → Blue Center, Construction lines → Cyan Continuous, Locus lines → Yellow Continuous, Dimension and extension lines → Magenta Continuous, Dimension text → Black/White, CCW → Counterclockwise; CW → Clockwise
- Save the .dwg file as 'ID number_First name' and ensure that your file is transferred to the pen drive correctly.
- Remember to mark attendance.

Q1. A right circular cone with base edge 120 mm and axis length 200 mm is resting on its base on the HP. A triangular hole is punched through it as shown below such that its axis intersects with the axis of the cone. Draw the development of lateral surface of the remaining portion of the solid. [30]



Q2. A pentagonal pyramid, side of base 30 mm and a length of axis 45 mm, is resting on one of its triangular faces on the HP with its axis parallel to the VP, such that the apex is on the right. It is cut by an AVP inclined at 60 deg (CCW) to the VP and passing through the highest corner of the base, thus removing the portion containing the apex. Draw the top view and the sectional front view of the cut pyramid. [30]

Q3. Draw the isometric drawing of the below orthographic projections given in third angle projection. [20]



----- Best Wishes -----