

BIRLA INSTITUTE OF TECHNOLOGY AND SCIENCE, PILANI, PILANI CAMPUS

FIRST SEMESTER 2021– 2022

BITS F110 (ENGINEERING GRAPHICS)
MIDSEMESTER EXAM (OFFLINE and CLOSED BOOK)

Set: X

Duration: 60 Minutes for Solving + 10 minutes for Uploading

Max Marks: 50

NOTE:

- Save your work frequently and follow the note given for every question and draw accordingly.
- 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
- Label all the views properly (i.e., FV, TV and SV)
- It is mandatory to submit ‘.dwg’ file’ along with screenshot(s) of your solutions
- Please upload both ‘.dwg’ file and one screenshot file of all solutions on Google Classroom. Please make sure that all your solutions are clearly visible in the screenshot. If and only if all solutions are not clearly visible in a single screenshot, you may submit separate screenshots of solutions for the different questions.
- The ‘.dwg’ file name should be your ID number_First name. It is your responsibility to properly upload and turn in your ‘.dwg’ and screenshot files in your respective Google Classroom page.
- You will be allowed to permanently leave the examination room only after the end of submission time.

NAME:

SET:

BITS ID:

YOUR SIGNATURE:

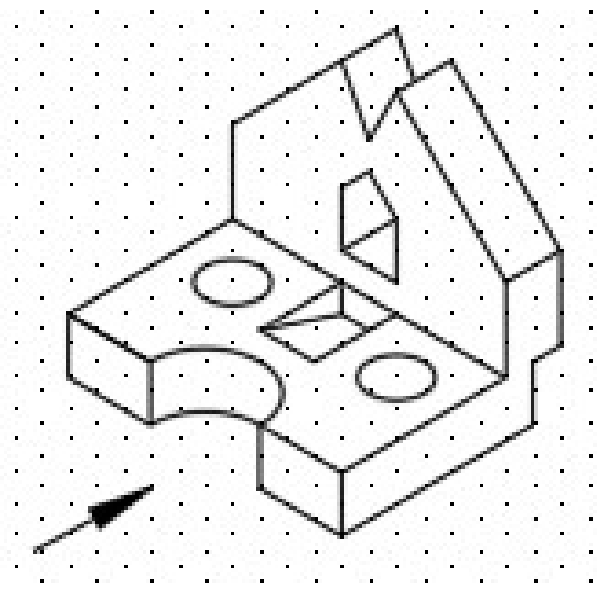
Q1. The end projection of a line AB is 80mm apart. Point “B” is 90mm behind the V.P. and 70mm below H.P. Point “A” is 45mm in front of V.P. and 50mm above H.P. Draw the projections of AB and find its true length and true inclination with H.P. and V.P. A is right to B [Take 1 grid spacing as 5mm].

[15]

Q2. A regular pentagonal plane, ABCDE of sides 50 mm each is resting on one of its base edge 20 mm above HP and the resting base edge is perpendicular to VP. The end of the resting base edge nearest to VP is to be marked as B. The pentagon is inclined to the HP at 40° CCW. The resting base edge is inclined at 55° CCW to the VP in the top view. Draw the projections of the plane and show the apparent dimension of the side BC in front view. [Take 1 grid spacing as 5mm].

[15]

Q3. Draw the orthographic projections of front view, top view and side view of the given isometric projection in third angle projection.



[20]

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