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Diploma in Construction Technology		
NVQ Level 05 – Semester I		
Technical Drawing	F45C001M02	2 Hours
*Answer all questions given in Section A, Section B and Section C		

INSTRUCTIONS:

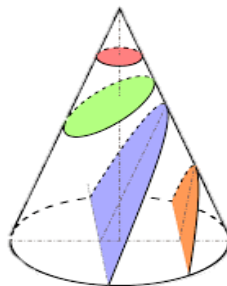
1. This question paper consists of three sections
2. Provide answers for
 - a. Section-A in given answer sheets,
 - b. Section-B in given **A-2 sheets** and
 - c. Section-C in AutoCAD worksheet
3. Time allocation,
 - a. Section-A and Section-B; **2 hours** at Drawing room
 - b. Section-C; **1 hour** at IT laboratory

Section-A

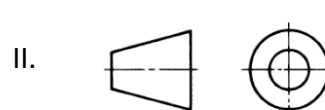
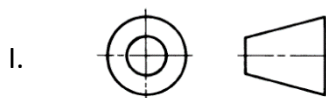
Provide short answers for following questions and use necessary sketches to explain your answers.

- 1) Draw simple shapes (separately) and name the conic sections in the figure below.

(4 marks)



- 2) **Identify** the symbols mentioning below and **state the dimensions relationship** with the external diameter, \varnothing .



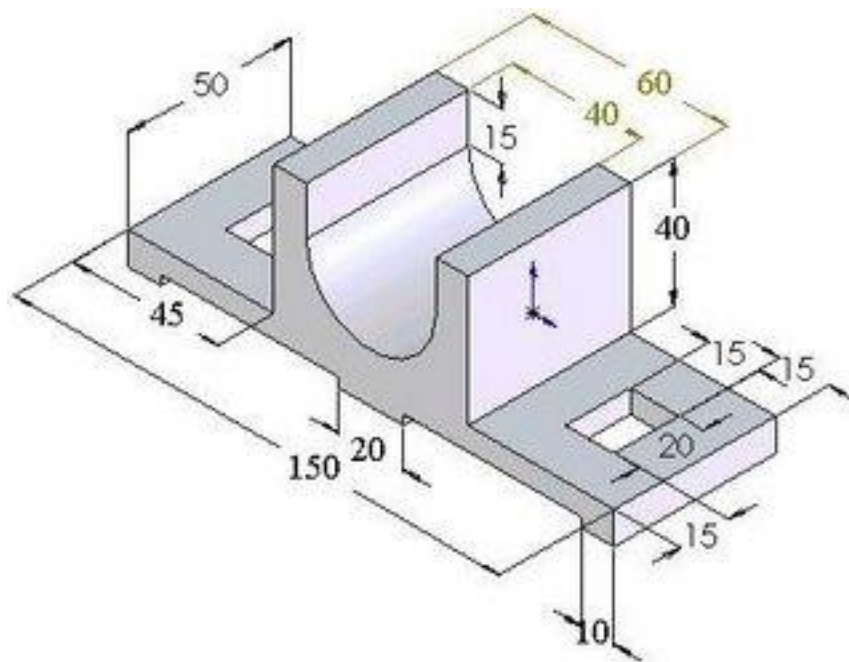
(4 marks)

- 3) State 3 types of paper series and provide two examples for each with standard dimensions. (4 marks)
- 4) Name main 3 distinct part describing under “projections”. (3 marks)
- 5) Draw and name 5 different line types use in Engineering drawings. (5 marks)

Section-B

1. Draw the “third angle projection” drawing of the machine part showing below figure (Figure Q1_b).

(30 marks)



[Figure Q1_b]

2. Draw a single Helix for 110mm height cylinder and consider the diameter as half of the height. (10 marks)
3. Draw an Archimedean’s spiral **within** 40mm radius circle. (10 marks)
4. Draw a Cycloid for 1m diameter wheel according to the 1:20 scale. (10 marks)

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Technical Drawing	F45C001M02	01 Hour
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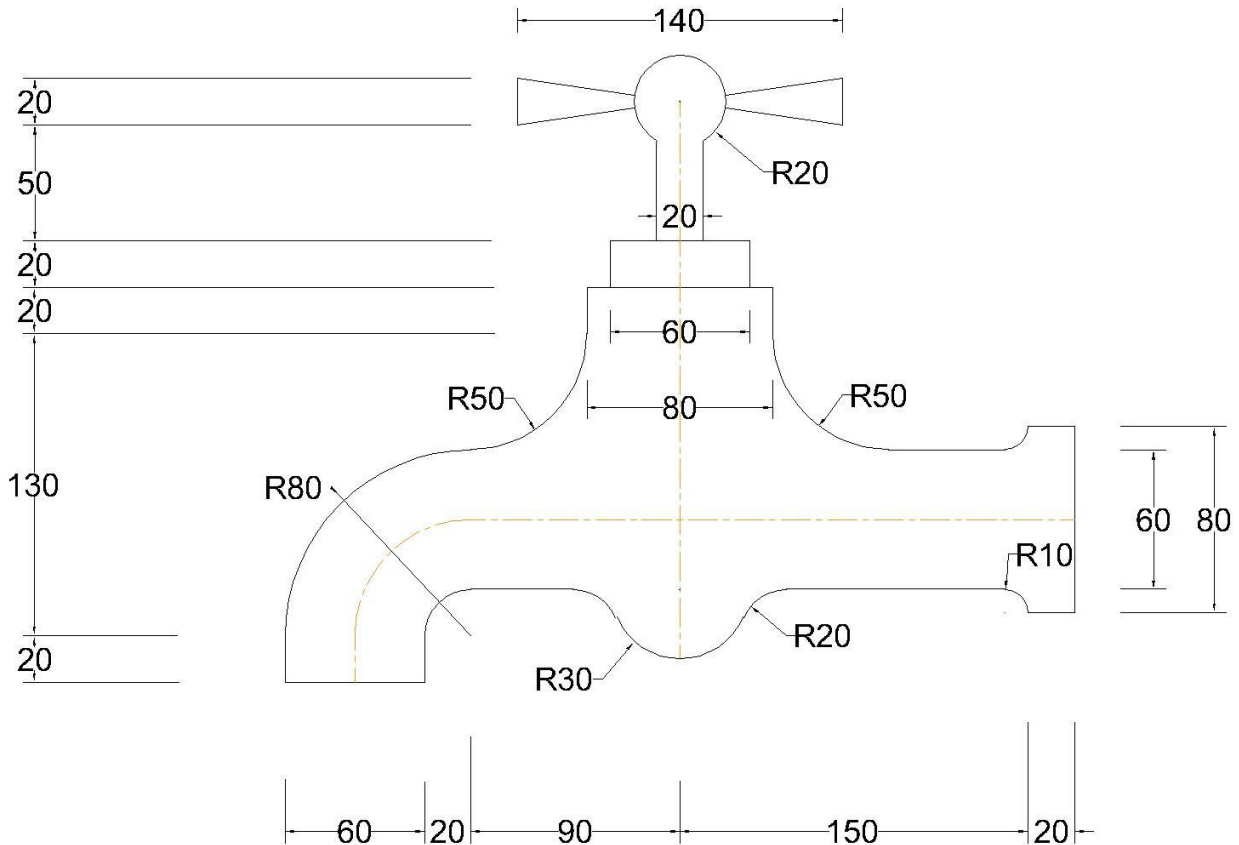
Section-C

Instructions:

1. You have to draw this drawing by using AutoCAD software in IT laboratory.
2. Complete your works within 1 hour and save as pdf (A-4 size) file in separate folder name by your NIC number.
3. Keep both CAD and pdf files in same folder.
4. All dimensions are given in 'mm'.

1. Draw the given drawing (Figure Q1-c) according to the correct dimensions mentioned below.

(20 marks)



[Figure Q1-c]