### TERTIARY AND VOCATIONAL EDUCATION COMMISSION



## NVQ LEVEL 05 -SEMESTER I



### CONSTRUCTIONTECHNOLOGY

TECHNICAL DRAWING-DRAWING ROOM

F45C001M02

**TWO HOURS** 

Answer All Questions in Section A and B.

#### **INSTRUCTIONS:**

- 1. This question paper consists of two sections
- 2. Provide answers for
  - a) Section-A in given answer book,
  - b) Section-B in given A2sheets.

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### Section-A

### Question No. 01

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

- i). Briefly discuss the importance of engineering drawing in construction field as a universal language. (05 marks)
- ii). **Identify** the symbols mentioned below and **state the dimensions relationship** with the external diameter,  $\emptyset$ . (04 marks)

a) (

b) 💮 💮

[Figure Q1\_a]

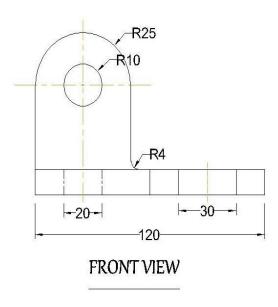
[Figure Q1\_b]

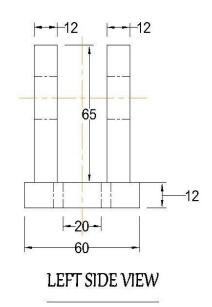
- iii). Express the standers dimensions (ISO) for paper sizes mentioned below.
  - A2
  - A3
  - A4
  - A1 (04 marks)
- iv). Discuss the relationship of "Eccentricity" with Ellipse, Parabola and Hyperbola separately. (03 marks)
- v). Draw and name four (04) different line types used in engineering drawings. (04 marks)

# **Section-B**

## Question No. 02

i). Draw the "Isometric View" of the Figure Q2\_a given below.





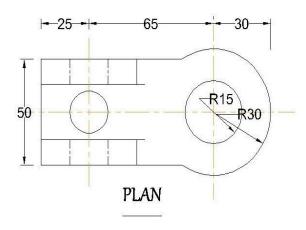


Figure Q2\_a

- ii). Draw a single Helix for 90mm height cylinder and consider the diameter as half of the height. (10 marks)
- iii). Draw an Archimedean spiral within 35mm radius circle. (10 marks)
- iv). Draw a Cycloid for 1m diameter wheel according to the 1:20 scale. (10 marks)

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## NVQ LEVEL 05 –SEMESTER I

### CONSTRUCTIONTECHNOLOGY



## TECHNICAL DRAWING COMPUTER LAB

F45C001M02

**ONE HOUR** 

### **INSTRUCTIONS:**

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

### Question No. 01

Draw the given drawing (Figure Q1-c) according to the correct dimensions mentioned below. (20 marks)

