M. Sc. (Sem. IV) (CBCS) (W.E.F. 2016) Examination

April - 2022

Electronics : Paper - 15

(Computer Aided Designing)

(New Course)

Faculty Code : 003
Subject Code : 1154003

Time : **2½** Hours]   [Total Marks : **70**
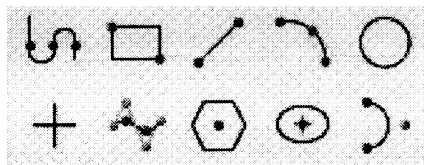
Instruction : All questions carry equal marks.

1   Answer the following : (any seven)   14

(1)   Briefly explain "Modelling environment".

(2)   Briefly explain chamfer feature.

(3)   Briefly explain "drafting environment".

(4)   What are the system requirements for NX 10.0 ?

(5)   What different stages of "Constrains" a sketch attain after applying the constraints to it ?

(6)   How to lock the "automatically applied dimensions" ?

(7)   How to edit Dimension value and other parameters ?

(8)   What are geometric constraints ?

(9)   Write the various form of hole.

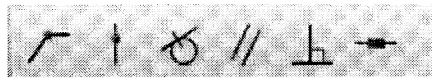(10) What are grooves ? What is the prerequisite for making the grooves ?

2   Answer the following : (any two)   14

(1)   Explain any four tools of direct sketch group from fig. 1.   7

Fig. 1: Direct sketch group

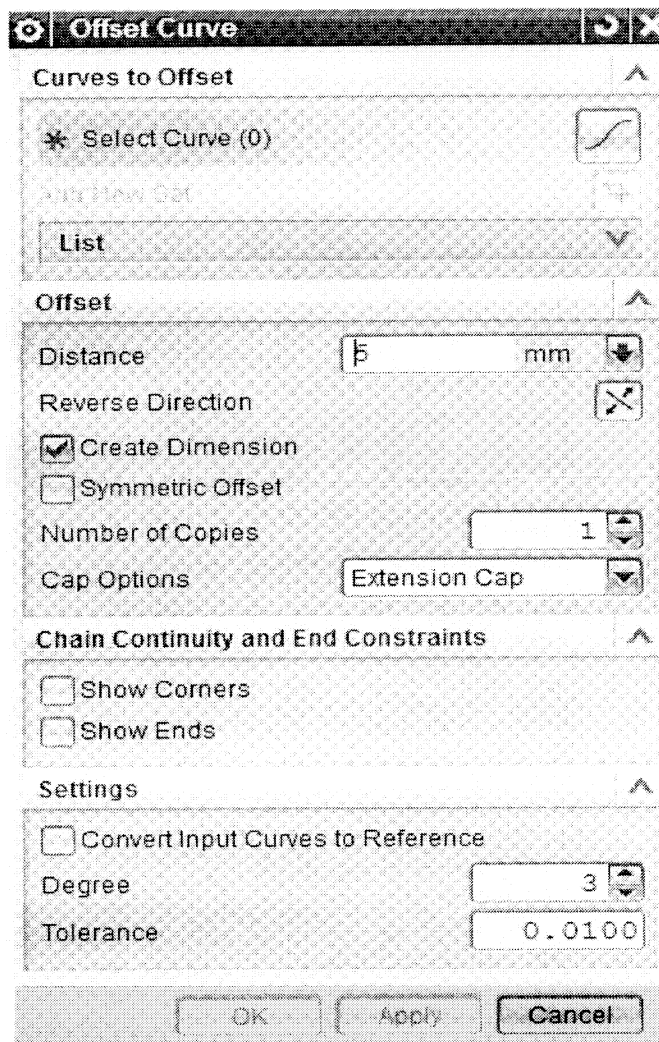(2) Explain geometric constraints from the Fig. 2.   **7**

Fig. 2: Geometric constraints

(3) How one can use "Resize curve" tool and "Offset Move   **7**
Curve" tool ?

3   Answer the following :   **14**

(1) Consider Fig. 3 and explain "Offset Curve" tool.   **7**

Fig. 3: Offset Curve tool

(2) What does the "Quick Trim" tool do ? What are the   **7**
types of trimming ? Explain each one.
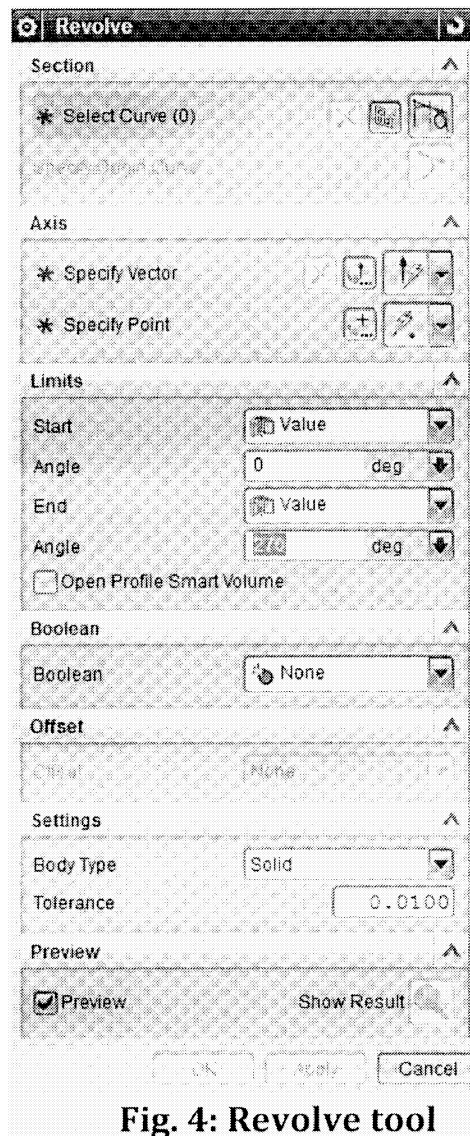
OR

Answer the following :   14

(1) What is a Datum plane ? What are its types ?   7
     Explain how to create relative Datum plane ?

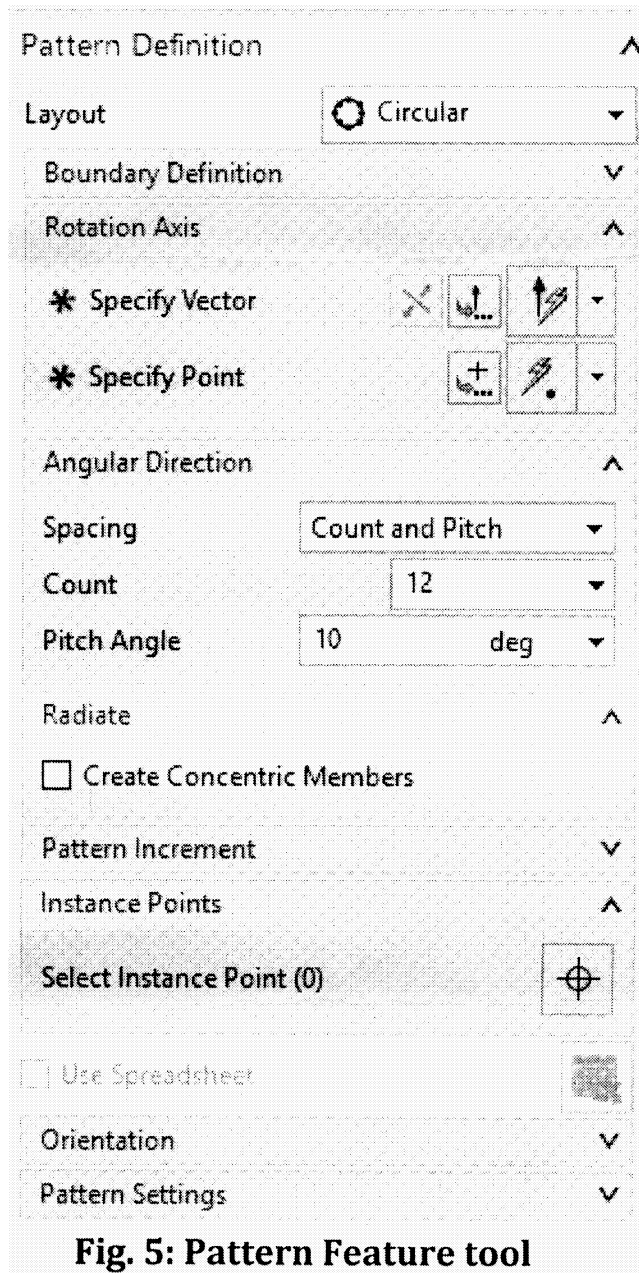(2) Explain the Boolean Operations available in Extrude 7
     tool.

4   Answer the following :   14

(1) Consider the Fig. 4 and explain "Revolve" tool.   7

Fig. 4: Revolve tool

(2) Explain that how one can create rectangular slot ? 7

5 Answer the following : (any **two**)   **14**

  (1) What are Ribs ? Explain the Rib tool in detail.   **7**

  (2) What is Edge Blend ? Explain in detail Edge Blend   **7**
       tool.

  (3) Consider Fig. 5 and explain how on can create a   **7**
       circular pattern using Pattern feature tool.

Fig. 5: Pattern Feature tool

  (4) Explain Mirror feature tool.   **7**