



PAT-003-1276004

Seat No. _____

M. Sc. (E.C.I.) (Sem. VI) (CBCS) (W.E.F. 2016)

Examination

August - 2020

Computer Aided Designing : Paper - 24

(New Course)

Faculty Code : 003

Subject Code : 1276004

Time : $2\frac{1}{2}$ Hours]

[Total Marks : 70

- Instructions :** (1) All questions carry equal marks.
(2) Figures on right hand side indicate marks.

1 Answer the following : (Any Seven) 14

- (i) What is NX 10.0 ?
- (ii) Briefly explain "Modelling environment".
- (iii) Briefly explain "assembly environment".
- (iv) What is under constrains sketch?
- (v) What is "dimensioning sketches"?
- (vi) How to edit Dimension value and other parameters of sketch?
- (vii) Write very briefly on Advanced Modelling Tools.
- (viii) What are grooves? What is the prerequisite for making the grooves?
- (ix) What are slots? Which are the types of slots?
- (x) Write on editing a Hole Feature.

2 Answer the following : (Any Two) 14

- (a) Explain the following terms: 7
- (1) Feature-based modeling
 - (2) Parametric modeling
 - (3) Bidirectional associativity
 - (4) .prt

- (5) Roles
 - (6) Part navigator
 - (7) Constraints
 - (b) Explain the functions of the mouse in NX. 7
 - (c) What is a "Profile tool"? How is it invoked? How to draw lines and arcs using this tool? 7
- 3 Answer the following : 14**
- (a) Explain the "Rectangle" tool of Direct Sketch group. 7
 - (b) How to use following "Drawing Display Tools"? 7
 - (1) Zoom
 - (2) Pan
 - (3) Fit
 - (4) Orient View to Sketch
- OR**
- 3 Answer the following : 14**
- (a) What are the methods to measure the distance between the objects? 7
 - (b) Explain the following geometric constraints: 7
 - (1) Fixed constraint
 - (2) Fully fixed constraint
 - (3) Horizontal constraint
 - (4) Coincident constraint
 - (5) Midpoint constraint
- 4 Answer the following : 14**
- (a) What are Ribs? Explain the Rib tool in detail.
 - (b) What is Chamfer feature? What are its types? Explain in detail the Chamfer tool.
- 5 Answer the following : (Any Two) 14**
- (a) Explain Mirror Feature Tool and Mirror Face Tool.
 - (b) Explain how one can create tubes or cables in NX?
 - (c) Explain how to create threads in NX?
 - (d) What is Draft? What are the types of drafts? Explain how to create drafts on existing models.