



**JAH-003-1273003**

Seat No. \_\_\_\_\_

**M. Sc. (ECI) (Sem. III) (CBCS)**

**(W.E.F. 2016) Examination**

**November - 2019**

**Circuit Simulation & PCB Designing Tools : Paper - XII**  
(*New Course*)

**Faculty Code : 003**

**Subject Code : 1273003**

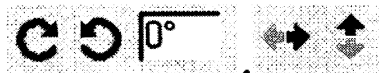
Time :  $2\frac{1}{2}$  Hours]

[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**

- (1) What is ISIS editor?
- (2) Write the names of various device libraries.
- (3) What is Real Time Annotation in ISIS?
- (4) What is the use of property assignment tool (PAT)?
- (5) Write the function of mode selector toolbar.
- (6) Write the functions of following tools :



- (7) Write about variable zoom feature.
- (8) What is the use of object selector?
- (9) Write function of the Rounding Functions E12 () and E24 ().
- (10) What is the use of junction dots?

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

- (1) Explain False Origin, Dot Grid, Snapping to a Grid and Real Time Snap in detail. 7
- (2) Write the basic steps for placing an object in ISIS editor. 7
- (3) Write about dragging an object label, resizing an object and reorienting an object in editing window. 7

- 3** Answer the following : **14**
- (1) Give detailed introduction of sheet properties and defining sheet properties. **7**
  - (2) Explain parameterized circuit with appropriate example. **7**

**OR**

- 3** Answer the following : **14**
- (1) Write the required steps for placing and replacing components in ISIS. **7**
  - (2) Write the steps to place or edit a bus label. **7**
- 4** Answer the following : **14**
- (1) Explain basic keywords like Pattern, Pad, Symbol, Component, Part, Schematic and Net of DIP Trace in brief. **7**
  - (2) Explain direct connection, connecting with net ports, connection without wires, global nets and connection with buses in context of nets and busses. **7**
- 5** Answer the following : (any **two**) **14**
- (1) Write a note on component properties in DIP Trace. **7**
  - (2) Explain hierarchical schematic in DIP Trace. **7**
  - (3) Explain adding connection between pads of PCB layout and switching schematic to layout in DIP Trace. **7**
  - (4) Explain single layer board, double layer and multi-layer boards in DIP Trace setting up layers environment. **7**
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