

NTK/KW/15 –5842

**Third Semester Bachelor of Science (B. Sc.)
Examination**

ELECTRONICS

Paper – II

Electronics Circuit Design

Time : Three Hours] [Max. Marks : 50

N. B. : (1) All questions are compulsory and carry equal marks.
(2) Draw neat diagram wherever necessary.

EITHER

1. (A) Define following terms with suitable example
(i) Range (ii) Resolution
(iii) Linearity (iv) Sensitivity
(v) Bandwidth 10

OR

(B) What are the different processes involved in design and development of analog system . Explain any fine of them. 10

EITHER

2. (A) What is the function of following tools in tool bar of circuit maker :—
(i) Arrow tool (ii) Probe tool

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Contd.

(iii) Rotate tool	(iv) Delete tool	
(v) Mirror		10

OR

(B) State various file extensions used in circuit maker.

(C) Explain 6 basic procedure involved in drawing schematic. 3 + 7

EITHER

3. (A) State differences between analog and digital simulation. Explain the steps to set logic simulation. How is probe tool useful to detect the state of logic in digital circuit. 2 + 5 + 3

OR

(B) State the function of Run/pause button and step button. Explain digital instruments pulses and Data sequences. 3 + 7

EITHER

4. (A) What is virtual instrumentation system ?
State the advantages of virtual instrumentation. Explain the role of software in virtual instrumentation. 4 + 4 + 2

OR

(B) What is graphical user interface ? How does it differ from control panel.

State application of virtual instrumentation.

5 + 5

5. Attempt any **ten** :—

- (A) Define the term Hysteresis.
- (B) What is prototyping ?
- (C) What does CAD and EDA stand for ?
- (D) What is meant by workspace ?
- (E) What is grid and snap to grid in workspace ?
- (F) How is value of component changed in circuit makes ?
- (G) What is break point ?
- (H) What is meant by Tick ?
- (I) What is meant by wire bards ?
- (J) What is the function of Transducer ?
- (K) State the sole of hardware in VI ?
- (L) State the sole of computes in VI ?

10×1=10