

II semester 2017 – 18
Computer science – II

Std: XI Science Marks:50

Date:

Time:

Q.1.A) Select the correct alternative and rewrite the following: 4

1) The resistance of the resistor having color bands as Red, Black, Orange Gold is _____.

a)20K b) 2K c) 200 d) 25K

2) In case of AND gate, if A is true or B is true then Y is _____.

a) true b) false c) high d) low

3) The width of a data bus is _____ bits .

a) 8 b) 16 c) 4 d) none of these

4) Floppy disk is a _____ device

a) input b) output c) I/O d) none of these

B) Answer any two of the following: 6

1) Differentiate between N type and P type semiconductor.

2) Explain concept of multimedia.

3) What are logic gates? Give its importance.

Q.2.A) Answer any two of the following: 6

1) Explain carbon composition resistor.

2) Give significance of logic gates.

3) Explain keyboard.

B) Answer any one of the following: 4

1) Explain half wave rectifier with the help of proper diagram. Draw waveforms.

2) Explain MOUSE and its actions.

Q.3.A) Answer any two of the following: 6

- 1) List and explain video monitor characteristics.
- 2) Explain concept of interrupts.
- 3) Explain Half adder.

B) Answer any one of the following: 4

- 1) Explain working of a decade counter.
- 2) Explain charging and discharging of a capacitor.

Q.4.A) Answer any two of the following: 6

- 1) Explain hard disk drive
- 2) Differentiate between active and passive components.
- 3) Explain EXOR gate.

B) Answer any one of the following: 4

- 1) What is ROM? Explain any three types of ROM.
- 2) Explain D flipflop.

Q.5.A) Answer any two of the following: 10

- 1) Explain transformer. Explain its principle of working
- 2) Explain concept of MODEM with the help of diagram. Give its steps of working.
- 3) State and explain I rule of Demorgans theorem.

OR

- 1) "NAND and NOR are called universal building blocks". Explain with three examples.
- 2) Explain Dot matrix printer.
- 3) What is an inductor? Explain three types of an inductor.