No. of Printed Pages—2

560 (BE)

[18–HRGPKAC–BPP-OY(O)]

BPP One Year (Old) Exam., 2018

BASIC ELECTRONICS

Full Marks : 50

Time : 2 hours

The figures in the margin indicate full marks for the questions

1. Answer any *four* from the following questions : 1×4=4

(a) What is a valence electron?

(b) What is electric noise?

(c) Mention the range of resistivity of a semiconductor.

(d) Give the full form of FET.

(e) Convert 10110 to decimal number.

2. Answer any *six* from the following questions : 2×6=12

(a) What is charge?

(b) Why do we need a function generator?

(c) Write about mica capacitors.

(d) What is a depletion region?

(e) Mention about the function of a shunt capacitor.

(f) Name the two most commonly used electronic display devices.

(g) What is voltage regulation?

3. Answer any *four* from the following questions : 4×4=16

(a) Describe about colour coding of a resistor. Give example.

(b) State and describe Ohm's law.

(c) State the applications of *P-N* junction diode.

(d) State the difference between BJT and FET.

(e) Draw the graphical symbol of 3-input OR gate with its truth table.

4. Answer any *two* from the following questions : 5×2=10

(a) Describe about the current reading in mA and its corresponding effect while shock.

(b) State and explain current-division rule.

(c) Describe the *VI* characteristic of *P-N* junction diode.

(d) What is a liquid-crystal display? How does it work?

5. Answer any *one* from the following questions : 8

(a) Write a note on inductors.

(b) Write a note on IC (Integrated Circuit).

★ ★ ★