

PD-491-CV-19
M.Sc. (4th Semester)
Examination, June-2021
PHYSICS
Paper-IV
ELECTRONICS-IV

Time : Three Hours]

[Maximum Marks : 80
[Minimum Pass Marks : 29

Note : Answer from both the Sections as directed. The figures in the right-hand margin indicate marks.

Section-A

1. Answer the following:- (Very short answer type questions) 1x10=10
Answer the following Very short-answer type questions:
(a) What is nibble? (b) Write name of any two 32 bits MP.
(c) What do you mean by registers?
(d) How many bits are not defined in flag register of 8085 mp.
(e) Which memory is called volatile type of memory?
(f) Give any one instruction of logic group. (g) What is called assembly language?
(h) Write Snell's law for refraction. (i) What do you mean by OFC?
(j) What is INTA?
2. Answer the following short answer type questions:- 2x5=10
(a) Write any two difference between RAM and ROM.
(b) What is OP code and operand in instructions of 8085?
(c) What is register indirect addressing mode, write one example.
(d) Define magnetic bubble memory.
(e) Which phenomenon of light rays are used in OFC?

Section-B

15x4=60

Answer the following long answer type question.

UNIT-I

3. What do you mean by networking? Explain various LAN topology und in networking with one example of each.

OR

What is semiconductor memory? How it is better than other memory devices?
Explain various types of ROM.

UNIT-II

4. Explain the followings:-
(i) Flag register (ii) Data and address bus (iii) Fetch operation

OR

How many general purpose registers are used in 8085 mp? Can they used in pair?
Discuss about function of program counter and stuck pointer in 8085mp.

UNIT-III

5. Describe various type of instruction set groups used in 8085 with two examples of each groups.

OR

What do you mean by low level language? Write a program for addition of two 8 bit numbers.

UNIT-IV

6. Explain the propagation of light rays through optical fiber. Discuss about number of modes and cut off parameter for propagation.

OR

Discuss about various types of optical fiber and compare them in view of their advantages and disadvantages.