

PE – 491
(491) M.SC. PHYSICS (Fourth Semester)
Examination June 2022 Compulsory/Optiona
Group -
Paper -IV
ELECTRONICS-IV

Time : Three Hours]

[Maximum Marks : 80

[Minimum Pass Marks :

नोट : दोनों खण्डों से निर्देशानुसार उत्तर दीजिए। प्रश्नों के अंक उनके दाहिनी ओर अंकित हैं।

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

Section-A

Q 1. Answer the following questions .

1x10=10

(Very short answer type questions.)

- a. Which technology is used in IInd generation computers?
- b. How many bits are there in a nibble?
- c. Give name of list 4 bit MP.
- d. Write function of data bus.
- e. Name the device which is used to shift data from left to right.
- f. How many pins are there in a 8085 mp.
- g. Give one example of two byte instruction.
- h. Write any one disadvantage of OFC.
- i. What is use of assembler.
- j. What do you mean by total internal reflection.

Q 2. Answer the following short answer type questions

2x5

- a. Write the name of first electronics digital computer? In which year it was built?
- b. Write difference between primary and secondary memory.
- c. What is fetch operation? Give its truth table.
- d. Differentiate between step and graded index fibers.
- e. Why a 16 bit address bus is used in 8085 microprocessor.

Section-B

Answer any five of the following long answer questions.

15x4=60

3. Describe the Evolution of microprocessor with examples.

OR

What is Networking? Explain LAN topology With necessary diagram.

4. Draw block diagram of 8085mp and explain function of each block.

OR

Draw the pin diagram of intel 8085mp and explain the function of each pin.

5. Describe data transfer group of instruction set with one example of each type.

OR

Explain assembly Language and write a program for subtraction of two 8 bit number.

6. Explain optical fiber cable in view of its structure and classifications.

OR

Write short notes on-

- a. Halide fiber.
- b. Splicing of cable and connectors.