

PC-491
(524) M.Sc. PHYSICS (FOURTH SEMESTER)
Examination JUNE 2020
Compulsory/Optional
Group -
Paper - IV
ELECTRONICS-IV

Time:- Three Hours]

Maximum Marks : 80
Minimum Passing Marks: 29

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

Note: Answer From Both the Section as Directed. The Figures in the right-hand margin indicate marks.

Section -A

1. Answer the following very short type questions :- **1X10 = 10**

- (a) Write the how of first 4 bits microprocessor.
- (b) Give how of any two magnolia memory device.
- (c) Write function of programme counter in 8085 (Microprocessor)
- (d) What is direct addressing mode?
- (e) What do you mean by op-code?
- (f) What do you mean by MSB and LSB.
- (g) What is OFC?
- (h) Write shell's law for refraction.
- (i) What do you mean by machine cycle.
- (j) What is role of accumulate in 8085 (Microprocessor)

2. Answer the following questions:- **2x5 = 10**

- (a) What any two advertise of semi condoner memory over magnetic memory.
- (b) What do you mean by R/W memory?
- (c) What is assembly language?
- (d) Give deference between HPSUV and HPSIR
- (e) Write any two advantage of optical fiber.

Section -B

Answer the following long answer type questions. **12x5 = 60**

Unit-I

3. What is difference between microprocessor and micro computer? Describe the evolution of microprocessor.

Or

What do you mean by Network topology? Explain various types of heelwork topology used for LAN.

Unit-II

4. Give the architecture of 8085 mp. and describe the functions of its each part with each bit of blog register.

Or

What do you mean by institution cycle? Describe the fetch operation and. Explain operation.

Unit-III

5. What is instruction set? Explain various types of instruction group ward in 8085 with giving time example of each.

Or

Write a programme is assembly language for addition and summation of two 8 bits number.

Unit-IV

6. Describe apical fibbers on the bares of their structure and clarification. Explain total internal refraction regarding the propagation of lisle ware.

Or

Discuss the various types of optical fibers with their advantages and disadvantages.