

1128

B.Sc. (Hons.) Bio-Informatics

Third Semester

BIN-3003: Computer Operational System and Organization

Time allowed: 3 Hours

Max. Marks: 60

**NOTE:** Attempt five questions in all, including Question No. I which is compulsory and selecting two questions from each Unit.

x-x-x

I. Attempt the following:-

- a) What is a Hip Hop?
- b) What is an interrupt?
- c) Why assembly language is not a high level language?
- d) List four input devices.
- e) What is a decoder?
- f) What is dynamic RAM?

(6x2)

**UNIT - I**

II. a) How higher order decoders are implemented using low order decoders. Explain with help of an example. (6)

b) Write short notes on:-

- i) Arithmetic and logical operations
- ii) Handling of interrupts

(3,3)

III. a) Discuss computer evolution. Discuss role of gates, multiplexes and bus in computer system.

b) What are interrupts? How interrupts working is different from subroutines? (6,6)

IV. Write short notes on:-

- a) Register transfer language is a type of hardware description language
- b) Role of instruction set as: add, jump, jump if, load

(6,6)

P.T.O.

(2)

**UNIT – II**

V. a) Write short notes on:-

i) Assembly language

ii) Virtual memory organization.

b) Why viruses protection required in a PC? How viruses attack could be avoided in a PC? List steps to inspect a PC. (6,6)

VI. a) Discuss working of subroutines in assembly language. What is handshake based communication?

b) Write short notes on:-

i) I/O programming

ii) Peripheral devices (6,6)

VII. Write short notes on:-

a) Three examples each for internal and external interrupts

b) RAS, CAS, WE, OE operations in dynamic RAM. (6,6)

x-x-x