

SECTION - B (Marks 39)

Note: Section - B consists of following topics of the syllabus:

1. Overview of computer
2. Computer Memory
3. Central Processing Unit
4. Inside System Unit

Q.2 Answer any SEVEN parts. All parts carry equal marks. (7 × 3 = 21)

- (i) Give any three application areas of supercomputers.
- (ii) What is IoT (Internet of Things)?
- (iii) Write any three differences between DRAM and SRAM.
- (iv) Why data access time in sequential access devices is more than that in random access devices.
- (v) Give any three advantages of using flash memory.
- (vi) What is the function of control unit in a computer?
- (vii) Give any three differences between CISC and RISC architectures.
- (viii) What is the function of BIOS in a computer?
- (ix) What is the function of SATA interface on the motherboard?
- (x) Give any three differences between SIMM and DIMM.

SECTION-C (Marks 21)

Note: Section - C consists of following topics of the syllabus:

5. Network communication Protocol
6. Wireless Communication
7. Database Fundamentals
8. Database Development

Q.3 Answer any SEVEN parts. All parts carry equal marks. (7×3 = 21)

- (i) Define any three basic network components.
- (ii) Give one example each of simplex, half – duplex and full – duplex communication modes.
- (iii) Give any three characteristics of VPN (Virtual Private Network).
- (iv) Give any three advantages of wireless networks.
- (v) What is Wi-Max?
- (vi) Give any three limitations of mobile communication systems.
- (vii) Give any three advantages of DBMS over file management system.
- (viii) A company sells many products to their customers. There are many suppliers who supply various products. Draw an ER-diagram of entities: Company, Supplier and Customer.
- (ix) Differentiate between cardinality and modality.
- (x) Give any three advantages of using Forms in Access database.

SECTION-D (Marks 18)

Note: Attempt any THREE questions. All questions carry equal marks.

(3×6 = 18)

Q. 4 What is a computer software? Explain System software and Application software in detail by giving examples.

(1+5)

Q. 5 What is secondary memory? Explain any two secondary memory devices in detail.

(1+5)

Q. 6 Describe the purpose of the following types of ports in a computer system,

(2+2+2)

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Q. 5 What is secondary memory? Explain any two secondary memory devices in detail.

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Q. 6 Describe the purpose of the following types of ports in a computer system,

(2+2+2)

- i. USB port
- ii. Fire Wire port
- iii. HDMI port

Q. 7 What is network topology? Explain Star, Ring and Bus topologies with suitable diagrams.

(01+03+02)