



COMPUTER SCIENCE HSSC-I

Time allowed: 2:40 Hours

Total Marks Sections B and C: 60

NOTE: The Questions of sections B and C are to be answered on the separately provided answer book. Use supplementary answer sheet i.e. Sheet-B if required. Write your answers neatly and legibly.

SECTION – B (Marks 36)

Q. 2 Answer any TWELVE parts. All parts carry equal marks.

(12 x 3 = 36)

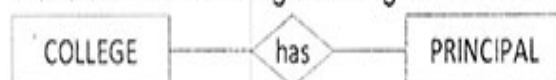
- Briefly explain any two types of system software with examples.
- Write down any two differences between hardware and software with examples.
- What is printer? Briefly explain Laser Printer.
- Write down two advantages and one disadvantage of flash memory.
- Briefly explain the Sequential and Direct Access Memory.
- Identify the role of Database Administrator (DBA).
- Briefly describe CISC and RISC CPU architectures with one example each.
- Write down the purpose of following ports:
a) Fire wire port b) Serial Port c) USB Port
- Write down any two differences between Synchronous and Asynchronous Transmission with the help of diagram.
- If a college wants to setup a computer lab, which topology is best and why? Support your answer with two reasons.
- Write down the protocol and its purpose used on following layers of OSI Model.

Sr. No.	Layers of OSI Model	Protocol Used	Function/Purpose of Protocol
i	Data Link Layer		
ii	Network Layer		
iii	Session Layer		

- Write down one advantage and two disadvantages of wireless communication.
- What is Infrared (IR)? Write its importance in wireless communication.
- Observe the E-R diagram and answer the following questions:



- Identify the cardinalities b) Identify the modality c) Identify the degree of relationship
- Transform the following E-R diagram to the Relational Schema.



- Transform Entities b) Transform Relationship
- Briefly describe the following types of Form Layouts:
a) Tabular b) Columnar

SECTION – C (Marks 24)

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

(3 x 8 = 24)

Q. 3 Describe the following Motherboard components:

(2+2+2+2)

- BIOS ii) Ports
- PCI Expansion Slot iv) Cooling system

- Write down any three differences between static and dynamic RAM.
- Compare the TCP suite with OSI model.

(2+2)

(04)

- What is the difference between data bus and address bus?
- Describe instruction cycle with the help of diagram.

(2+2)

(3+1)

- A company has a number of employees. Each employee may be assigned to one or more projects. A project must have at least one employee assigned and may have several employees assigned.

- Draw an ER Diagram ii) Identify cardinalities iii) Identify modalities (2+1+1)
- Elaborate primary and Alternate key with the help of pictorial example. (2+2)