



COMPUTER SCIENCE P330-1

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. 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)

- (i) How is supercomputer different from microcomputer? Justify your answer with at least three reasons.
- (ii) What is a scanner? Write down any one application of the following scanner types:
 - (a) Handheld
 - (b) Flatbed
- (iii) Why is LCD better than CRT? Support your answer with at least three reasons.
- (iv) What is a port? Briefly explain the purpose of any two types of ports.
- (v) Complete the following table by identifying registers as General or Special purpose. Also write down their use:

Register	General/Special Purpose	Use
Base Register		
Program Counter		
Instruction Register		

- (vi) Why do computers have expansion slots? Name the most common expansion slot. Give reason to support your answer.
- (vii) Write down three differences between PROM and EPROM.
- (viii) How is data bus different from address bus? Give three reasons.
- (ix) Write down any three differences between Circuit Switching and Packet Switching Networks.
- (x) How is SATA ribbon cable interface better than IDE? Support your answer with at least three reasons.
- (xi) Give any three advantages of wireless network.
- (xii) Write down the purpose and distance from the earth of the following satellites:

Satellite	Purpose	Distance from the earth
LEO		
MEO		
GEO		

- (xiii) Write down the suitable data types for the following fields in MS-Access.

Employee ID	Employee name	On leave	Joining date	Gross pay (Rs)	Review comments
100	Akbar	No	2-Dec-2014	63000	Employee is a
101	Saima	Yes	15-Jun-2016	57000	Employee is a
102	Manan	No	3-Aug-2018	51000	Employee is a

- (xiv) Differentiate 'Entity' and 'Attribute' with one example of each
- (xv) How are queries useful in database? Give any three reasons.
- (xvi) Students enroll in different courses and each course is registered by multiple students. Draw an ER diagram that shows cardinality and modality for the said situation.

SECTION – C (Marks 24)

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

(2 x 12 = 24)

- Q. 3**
- (a) Explain three instruction formats with one example of each.
 - (b) Explain the function of the following layers of OSI model in detail. Also write down the name of protocol used at each layer.

Layer name	Function	Protocol
Data Link		
Network		
Session		

- Q. 4**
- (a) Explain the following types of System Software with one example each.
 - i. Operating System
 - ii. Utility Software
 - iii. Language Processor