Annual Examination, 2022

B.Sc. Part I

COMPUTER SCIENCE

Paper I

(Computer Fundamentals)

Time: 3 Hours | [MAXIMUM MARKS: 50

Note: Section 'A' is Objective type and is compulsory. It should be written on the **first page** of Answerbook. Section 'B' is Short answer type and Section 'C' is Long answer type.

SECTION 'A'

(Multiple Choice Questions)

Choose the correct answer: $1 \times 10 = 10$

- (i) A is an interconnected set of processing elements which cooperate by communicating with one another to solve large problem.
 - (a) Parallel Computer
 - (b) Laptop Computer

P.T.O.

- (c) Personal Computer
- (d) None of the above
- (ii) The silicon chips used for data processing are called:
 - (a) RAM Chip
 - (b) ROM Chip
 - (c) Micro processors
 - (d) PROM Chip
- (iii) When arithmetic, logic and control unit of a computer are combined into a single unit, it is known as:
 - (a) Central processing unit
 - (b) Memory unit
 - (c) I/O unit
 - (d) Operating unit
- (iv) addressing mode is most suitable to change the normal sequence of execution of instructions :
 - (a) Relative
 - (b) Indirect
 - (c) Index with Offset
 - (d) Immediate

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(v)	Which of the following memories must be		
	refreshed many times per second?		
	(a) EPROM	(b) ROM	
	(c) Static RAM	(d) Dynamic RAM	
(vi)	(vi) Which of the following is the fastes		
	of memory access for CPU?		
	(a) Registers	(b) Cache	
	(c) Main memory	(d) Virtual memory	
(vii)	i) In long distance data transmission system, the most preferable mode of communication		
	is:		
	(a) Serial transmission(b) Parallel transmission		
	(c) Either serial or parallel transmission		
	(d) None of the above		
(viii) A USB port is a channel.			
	(a) Simplex	(b) Half-Duplex	
	(c) Full-Duplex	(d) None of these	
(ix)	Which of the following is designed to control		
	the operations of a computer ?		
	(a) Application Software(b) System Software		
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[4](c) Utility Software (d) User (x) The provides pictorial representation of given problem. (b) Flowchart (a) Algorithm (c) Pseudocode (d) All of these SECTION 'B' (Short Answer Type Questions) 3×5=15 **Note:** Attempt five questions from this Section by selecting one question from each question. 1. Define word length. Or What is Microprocessor? 2. What do you know about control unit? Or Define Interrupt. **3.** What is virtual memory?

Or

Write the full form of PCMCIA?

4. Discuss plotter in brief.

Or

What is AGP?

5. Define stack subroutine.

Or

What do you understand by multiprogramming?

SECTION 'C'

(Long Answer Type Questions) $5 \times 5 = 25$

Note: Attempt five questions from this Section by selecting one question from each question.

1. Explain the memory addressing capacity of CPU in detail.

Or

Define hardware, software and firmware.

2. Explain the register in detail.

Or

Describe the instruction cycle, fetch and execute operation.

3. Discuss the primary and secondary memory in detail.

Or

Explain Memory management unit in detail.

4. Describe the CRT controller.

Or

Explain the arithmetic processor.

5. Write the differences between application software and system software.

Or

Explain the utility program.

