

SHRI RAMSWAROOP MEMORIAL UNIVERSITY

End Semester Examination (2021-22)-Odd Semester

BCA/B.Sc.(IT) (All Branches) – I Year (I Sem)

Course Name :Computer Fundamentals

Code: BCS1005

Time: 02 Hours

Max Marks: 60

University Roll No.

(To be filled by the Student)

Note: Please read instructions carefully:

- The question paper has 03 sections and it is compulsory to attempt all sections.
- All questions of Section A are compulsory; questions in Section B and C contain choice.

Section A: Very Short Answer type Questions		BL	CLO	Marks (10)
Attempt all the questions.				
1.	What is a mini computer? Where it is used?	BL1	CLO1	02
2.	Why an operating system is needed in computer? Explain the difficulties you will face if you have to use a computer without operating system.	BL2	CLO2	02
3.	Explain different transmission modes. Write example of each transmission mode.	BL2	CLO2	02
4.	Explain mkdir and cd commands with suitable examples.	BL2	CLO3	02
5.	What is an algorithm? Explain why it is used.	BL2	CLO4	02
Section B: Short Answer Type Questions.		BL	CLO	Marks (30)
Attempt any 03 out of 06 questions.				
1.	Convert the decimal number $(245)_{10}$ to octal, hexadecimal and binary number system. Show each step of your calculations.	BL3	CLO5	10
2.	Explain a time sharing operating system. Discuss its working. Explain the advantages of a time-sharing operating system.	BL3	CLO2	10
3.	Explain network topologies used in LAN. Describe bus topology. Explain advantages and disadvantages of bus topology.	BL2	CLO2	10
4.	Design a flowchart to calculate factorial of a number.	BL3	CLO4	10
5.	Illustrate the different steps used in problem solving.	BL4	CLO4	10
6.	Explain the differences between database management system and file system	BL2	CLO5	10

Section C: Long Answer Type Questions		BL	CLO	Marks (20)
Attempt any 01 out of 03 questions.				
1.	What is generation of computer? Explain the first and second generation of computer. What are the characteristics and limitations of first and second generations of computer? What types of operating systems, I/O devices and programming languages were used in first and second generation of computer?	BL3	CLO1	20
2.	What is a computer network? Why computer network is used? Explain the different types of computer networks with suitable example. What is topology in computer network? Explain the different topologies along with their advantages and disadvantages used in computer network with suitable example. Make suitable comparisons between Internet, Intranet and Extranet.	BL4	CLO2	20
3.	What is software? How software is different from a program? Explain different types of system and application software with suitable example. What is a Linux operating system? How it is different from Windows operating system? Why Linux operating system is popular among developers.	BL3	CLO5	20
