

Reg No:.....
Name :.....

K24FY 1318 (C)

First Semester FYUGP Computer Science Examination
NOVEMBER 2024 (2024 Admission onwards)
KU1DSCCSC103 (FUNDAMENTALS OF COMPUTERS
AND PROGRAMMING)
(DATE OF EXAM: 6-12-2024)

Time : 90 min

Maximum Marks : 50

Part A (Answer any 6 questions. Each carries 2 marks)

1. What are the key components of a computer system, and what role does each play? 2
2. Subtract 1010 from 1100 using binary subtraction. 2
3. Define MAN 2
4. What do you mean by software acquisition 2
5. What is an algorithm? 2
6. what is the use of variables in programming and differentiate between integers, floats, and strings in the usage of memory. 2
7. Compare assembly language and high level language 2
8. What is linker? 2

Part B (Answer any 4 questions. Each carries 6 marks)

9. Describe the history of computers. 6
10. Explain the differences between decimal, binary, hexadecimal, and octal number systems. Discuss the base of each number system and how they represent numbers. 6
11. Compare and contrast different types of software licensing models, including retail, OEM, and demo software. Provide definitions and examples of each model. 6
12. Describe the roles of a linker and a loader in the program development life cycle. 6
13. Explain flow chart with its symbols 6
14. Discuss conditional execution using if statements. Write an example program that checks number even or odd. 6

Part C (Answer any 1 question(s). Each carries 14 marks)

15. (a) Perform binary addition, subtraction, illustrating each operation with examples. Show the steps involved in each operation. 7

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- (b) Convert a decimal number to its binary, hexadecimal, and octal equivalents. Explain the process with an example. Include step-by-step instructions for the conversion. 7

16. (a) Explain the components of a computer system and their functions. 7
- (b) Explain the major characteristics of computer. 7