

FIRST QUARTERLY TEST AUGUST 2024

CLASS : I PUC SUBJECT : COMPUTER SCIENCE (41) Max. Marks : 35
TIME : 1 Hr. 30 mins.

PART-A

I Answer the following questions. Each question carries ONE mark : 1x10=10

- 1) A nibble is a group of _____ bits.
a) 4 bits b) 8 bits c) 16 bits d) 32 bits
- 2) _____ device is considered as first computing device
a) Pascaline b) EDVAC c) Abacus d) Analytical Engine
- 3) Which of the following is temporary memory
a) ROM b) RAM c) SSD d) HDD
- 4) _____ Generation of Microprocessors introduced Multicore Processors
a) V Generation b) II Generation c) I Generation d) IV Generation
- 5) What is the base value of the Binary Number System ?
a) 8 b) 16 c) 2 d) 10
- 6) The _____ encoding scheme is a superset of ASCII.
a) UTF-8 b) ISCII c) Unicode d) EBCDIC
- 7) ISCII stands for
a) Indian Script Code for Information Interchange
b) Indian System Code for Information Interchange
c) Indian Standard Code for Internet Interchange
d) Indian System Code for Internet Interchange

**II Fill in the blanks by choosing appropriate word from those given in brackets:
(Unicode, 7 bits, ISCII, ASCII, 4 bits)**

- 8) _____ number of bits are used in ASCII.
- 9) _____ encoding scheme is known for representing text in Indian Languages.
- 10) _____ encoding scheme can represent over a million character.

PART-B

Answer any THREE questions. Each question carries TWO marks : 2x3=6

- 11) Why do smart home appliances have a micro controller instead of a microprocessor embedded in them ?
- 12) Differentiate between proprietary software and freeware.
- 13) Name any two system softwares that can be installed in a computer.
- 14) Give the binary equivalent of $32_{(10)}$.
- 15) What is meant by Radix of a number system ? Give an example.

PART-C

Answer any THREE questions. Each question carries THREE marks: 3x3=9

- 16) Explain the need of cache memory.
- 17) Write any three differences between Compiler and Interpreter.
- 18) Briefly explain i) Address Bus ii) Data Bus iii) Control Bus.
- 19) $DAD_{(16)} = ?()_8 = ?()_2$
- 20) What is the role of encoding scheme in computer communication ?

PART-D

Answer any TWO questions. Each question carries FIVE marks : 5x2=10

- 21) Draw and explain the block diagram of a computer.
- 22) Explain any five functions of operating system.
- 23) Describe with example for each, the structured, semi-structured and un-structured data.
- 24) Explain user Interfaces.
- 25) Convert $312_{(10)} = (?)_2 = (?)_8 = (?)_{16}$.
