16508

LIBRARY
Brainware University
Barasat, Kolkata -700125

BRAINWARE UNIVERSITY

Term End Examination 2025-2026
Programme – Dip.CE-2024/Dip.CSE-2024/Dip.EE-2024/Dip.ME-2024/Dip.RA-2024/Dip.CSE-2025/Dip.EE-2025/Dip.ME-2025
Course Name – Introduction to IT Systems
Course Code - DES00001
(Semester I)

Full Marks : 60 **Time : 2:30 Hours**

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

Group-A

(Multiple Choice Type Question) 1 x 15=15

1. *Choose the correct alternative from the following :*

(i) Identify the input device.
a) Key board b) Speaker
c) Monitor d) Printer

(ii) Select the secondary memory from the following.
a) RAM b) Hard Disk
c) SRAM d) DRAM

(iii) Choose the generation of computers that introduced the use of transistors, replacing vacuum tubes.
a) First Generation b) Second Generation
c) Third Generation d) Fourth Generation

(iv) Identify the type of memory that is fastest but also the most expensive per unit of storage.
a) Hard Disk Drive (HDD) b) Random Access Memory (RAM)
c) Cache Memory d) Solid-State Drive (SSD)

(v) Choose the type of computer that is designed to perform complex calculations and simulations at extremely high speeds, often used in scientific research and weather forecasting.
a) Supercomputer b) Personal Computer
c) Workstation d) Minicomputer

(vi) Select the correct symbol for taking input in the flowchart.
a) Square b) Circle
c) Parallelogram d) Rectangle

(vii) Select the type of error-Missing semi-colon (;) in program.
a) logical b) syntax
c) grammar d) semantic

(viii) Select the equivalent decimal of the binary number 1010 from the below options.

a) 8 b) 10
c) 12 d) 14

(ix) Choose the universal gate from the following.

a) AND b) NAND
c) EX-OR d) Ex-NOR

(x) Choose the correct option for 2's complement of 0101.

a) 1010 b) 1011
c) 1100 d) 1001

(xi) Identify from the following options applied to terminate a statement in C.

a) , b) ;
c) \ d) :

(xii) Identify the specifier used for character.

a) %d b) %f
c) %c d) %a

(xiii) Identify the relational operator from the following.

a) + b) =
c) > d) ? :

(xiv) Select an example of post increment.

a) w++ b) ++w
c) w-- d) --w

(xv) Choose the modulus operator.

a) + b) %
c) & d) *

Group-B

(Short Answer Type Questions) 3 x 5=15

2. Write down the different types of "Operators" used in C programming. (3)
3. Discuss System software and Application software with example. (3)
4. Describe the primary purpose of an operating system, and name two key functions it performs. (3)
5. Compute $(2AC9)_{16} = (?)_7$. (3)

6. Write the classification of computers. (3)

OR

Write the difference between main memory and secondary memory. (3)

Group-C

(Long Answer Type Questions) 5 x 6=30

7. Describe the role of vacuum tubes in the first generation of electronic computers. Describe the limitations associated with their use in the computer system. (5)
8. Describe different types of error in programming. (5)
9. Describe Batch operating Systems. (5)
10. Express why are Operating Systems Important. (5)
11. Explain the types of operating systems and how they differ from one another. (5)
12. Illustrate what is the Boolean data type, and what are its two possible values? (5)

OR

Illustrate increment and decrement operators in C with examples. (5)

LIBRARY
Brainware University
Barasat, Kolkata -700125