

4005-04

Total Pages : 4

Degree (Part-II) (Vocational)  
Examination, 2023

(Honours)

**INFORMATION TECHNOLOGY**

[ Paper : Fourth ]

[ PPU-D-II-(V)-(H)-(IT)-4 ]

Time : Three Hours]

[Maximum Marks : 75

**Note :** Candidates are required to give their answers in their own words as far as practicable. All the questions are of **equal** value. Answer **any five** questions, selecting at least **one** from each group.

**Group-A**

1. Write short notes on the following terms/keywords :

- (a) Making a function outline and inline
- (b) Virtual function
- (c) Scope Resolution Operator

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[P.T.O.]

2. (a) Write a program for class implementation which takes an age, name and salary of employee. Use a constructor for initialization of objects. Define a destructor.

(b) Explain Encapsulation with suitable example.

3. (a) Explain polymorphism with suitable example.

(b) Explain the difference between private, protected and public access scope with respect to the class itself, its derived class and its object.

#### Group-B

4. Write short notes on the following terms/ keywords :

(a) Repeater

(b) OSI Model

(c) Router

5. (a) Write difference between Internet and Intranet.

(b) With respect to transmission media, compare Guided and Unguided media.

6. (a) What are the different classes of addresses used in IPv4 ? List their ranges in dotted decimal notation.
- (b) Explain IEEE 802 model with neat diagram.

### Group-C

7. Write short notes on the following terms/keywords:
- (a) Synchronous and Asynchronous Data Transfer
  - (b) Page Table
  - (c) Handshaking
8. (a) What is Instruction Cycle ? How are different kinds of instructions interpreted ?
- (b) Explain I/O interfaces with diagram.
9. (a) The transformation of data from main memory to cache is referred as mapping process. Taking a suitable example, explain direct mapping from main memory to cache.
- (b) Explain I/O processor with a labelled diagram.

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