

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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(1)

[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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