4005-4 **Printed Pages : 4**

Degree (Part-II) (Vocational) Examination, 2020

(Honours)

INFORMATION TECHNOLOGY

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

Time : Three Hours] [Maximum Marks : 75

113

Note : All the questions are of equal value. Answer **five** questions, selecting at least one from each group.

GROUP-A

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

   (a) Class

   (b) Scope Resolution Operator

   (c) Friend Function

2. (a) Explain Polymorphism and data hiding in C++ with suitable examples.

(b) 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.

3. (a) Explain operator overloading with 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) ATM

(b) Router

(c) HTTP

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

(b) Explain the ISO-OSI Model with the help of a neat labelled diagram and the function of its various layers.

6. (a) What are the differences between Hub, Switch, and Gateway network devices ?

(b) What are the different classes of addresses used in IPv4 ? List their ranges in dotted decimal notation.

GROUP-C

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

(a) ALU

(b) Handshaking

(c) Page Table

8. (a) What is Instruction Cycle ? How are different kinds of instructions interpreted ?

(b) What are the differences between Synchronous and Asynchronous data transfer techniques ?

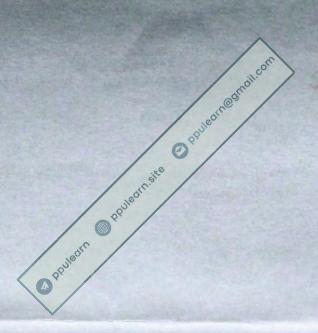9. (a) Explain the functioning of magnetic disk storage device.

(b) 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.

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