ASP-2226

M.A./M.Sc. (Final) Examination, 2019

MATHEMATICS

Paper – Opt-X

(Computer Applications)

(Only for Regular)

Time allowed : Three hours
Maximum Marks : 70

SECTION – A   **(Marks : 2 × 10 = 20)**

Answer all **ten** questions (Answer limit 50 words). Each question carries 02 marks.

खण्ड – अ   **(अंक : 2 × 10 = 20)**

समस्त **दस** प्रश्नों के उत्तर दीजिए (उत्तर सीमा 50 शब्द) । प्रत्येक प्रश्न 02 अंक का है ।

SECTION – B   **(Marks : 4 × 5 = 20)**

Answer all **five** questions. Each question has internal choice. (Answer limit 200 words). Each question carries 04 marks.

खण्ड – ब   **(अंक : 4 × 5 = 20)**

समस्त **पाँच** प्रश्नों के उत्तर दीजिए । प्रत्येक प्रश्न में विकल्प का चयन करें (उत्तर सीमा 200 शब्द) । प्रत्येक प्रश्न 04 अंक का है ।

SECTION – C   **(Marks : 10 × 3 = 30)**

Answer any **three** questions out of five. (Answer limit 500 words). Each question carries 10 marks.

खण्ड – स   **(अंक : 10 × 3 = 30)**

पाँच में से किन्हीं तीन प्रश्नों के उत्तर दीजिए (उत्तर सीमा 500 शब्द) । प्रत्येक प्रश्न 10 अंक का है ।

SECTION – A

1. (i) Write a short note on the variable with one example.

   (ii) What is a flow-chart ?

   (iii) Explain the Data Hinding Concepts.

   (iv) Write short note on object oriented programming.

   (v) Write 9 short note on input and output with one suitable example.

(vi) Explain the type conversion.

(vii) Explain the Array.

(viii) Define operator overloading.

(ix) Write a brief description on types of pointers.

(x) Explain the constructions-Needs.

SECTION – B

2. What is the role of algorithm in developing Software ?

OR

Explain the working of input & output devices with example.

3. What is an Operator ? List out the various operator in C++ with suitable example.

OR

Define object oriented paradigm and explain the role of inheritance in OOP's.

4. Write the difference between passing by value and reference.

OR

Write down difference between operators and expression. Discuss various types of expression in C-Language.

5. How do you perform two dimensional arrays and multidimensional arrays ?

OR

Explain the difference between passing arguments by value and by reference.

6. What are static members of a class ? When and how are they useful ? Explain with suitable example.

OR

What are static members of a class ? When and how are they useful, explain with suitable example.

SECTION – C

7. (a) Write short notes relating to computer input and data capture.

   (b) Write a brief note on Block diagram of Computer System.

8. What is object oriented programming approach ? Explain its advantage and disadvantage of object oriented programming.

9. Write down difference between operators and expression. Discuss various type of expression in C-Language.

10. Explain the following :

    (i) Gota function

    (ii) Declining function

    (iii) While and do while loops

    (iv) Pointers and function

11. (a) Discus the importance of destructor and list some of special properties of it.

    (b) Explain inheritance giving suitable examples.

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