

**BACHELOR OF SCIENCE (CBCS-2018 COURSE)**  
**T. Y. B. Sc. Sem-VI :SUMMER- 2022**  
**SUBJECT : PHYSICS : COMPUTATIONAL PHYSICS**

Day : Saturday  
Date : 9/7/2022

**S-18465-2022**

Time : 11:00 AM-02:00 PM  
Max. Marks : 60

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**N.B.:**

- 1) All questions are **COMPULSORY**.
  - 2) Figures to the **RIGHT** indicate full marks.
  - 3) Draw neat diagrams **WHEREVER** necessary.
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**Q. 1** Attempt any **Two** of the following. **(12)**

- (a) What is function? How the function is called by value? Explain with suitable example.
- (b) Write a program to sum the odd integers from 11 to 18
- (c) Write a program to display the integers from 1 to 10. Draw the flowchart.

**Q. 2** Attempt any **Two** of the following. **(12)**

- (a) What is flowchart? Explain the symbols used in the flowchart.
- (b) Write a program to find the roots of a differential equation
- (c) Write a program to convert the temperature in degree Celsius to degree Fahrenheit. Draw the flowchart.

**Q. 3** Attempt any **Two** of the following. **(12)**

- (a) Write a program to convert the decimal number into binary system
- (b) Explain the DO WHILE statement with suitable example
- (c) What is computer? Draw its labeled block diagram and explain it.

**Q. 4** Attempt any **Three** of the following. **(12)**

- (a) Define (i) program (ii) command
- (b) Write a program to find the percentage of the marks of a student. Draw the flowchart.
- (c) Write a program to find factorial of a given number. Draw the flowchart.
- (d) Write a program for the addition of two matrices

**Q. 5** Attempt any **Four** of the following. **(12)**

- (a) Explain the conditional operator.
- (b) Write a program to find whether the given number is prime or not.
- (c) Explain the pointer with suitable example.
- (d) Explain the keywords with suitable example.
- (e) Explain the relational operators.
- (f) Explain the BREAK statement with suitable example.

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