KARNATAKA STATE PRE-UNIVERSITY EDUCATION
I PU Computer Science Blueprint

| Chapters | Hrs | Description | $\begin{gathered} \text { VSA } \\ \text { (1 Mark) } \end{gathered}$ | $\underset{\text { (2 Marks) }}{\text { SA }}$ | $\begin{gathered} \text { LA } \\ \text { (3 Marks) } \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \text { (5 Marks) } \end{gathered}$ | Total Marks |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 8 | Overview of Computers | 1(mcq) | 1 | ---- | 1 | 08 |
| 2 | 8 | Input Output and Memory units | 2(mcq) | 1 | 1 | ------- | 07 |
| 3 | 9 | Data representation | 1(mcq) | ------ | 1 | 1 | 09 |
| 4 | 5 | Software Concepts | ------ | 1 | 1 | ------- | 05 |
| 5 | 15 | Problem solving Methodology | 2(mcq) | 1 | 1 | 1 | 12 |
| 6 | 2 | Object Oriented Concepts | ------ | 1 | ------- | - | 02 |
| 7 | 12 | Introduction to C++ | $\begin{aligned} & \mathbf{1 ( m c q )} \\ & \text { (1 fill-in } \\ & \text { Blank) } \end{aligned}$ | ------- | 1 | 1 | 10 |
| 8 | 2 | Data types | ------ | 1 | ------- | ------ | 02 |
| 9 | 4 | Input output operators | $\begin{aligned} & \text { 1(mcq) } \\ & \text { (1 fill-in } \\ & \text { Blank) } \\ & \hline \end{aligned}$ | ----- | 1 | ------ | 05 |
| 10 | 10 | Control Statements | $\begin{aligned} & \hline \text { 1(meq) } \\ & (1 \text { fill-in } \\ & \text { Blank) } \end{aligned}$ | ------ | ------ | 2 | 12 |
| 11 | 8 | Arrays | $\begin{aligned} & \hline \text { 1(meq) } \\ & \left(\begin{array}{l} \text { ( fill-in } \\ \text { Blank) } \\ \hline \end{array}\right. \end{aligned}$ | ------ | 1 | 1 | 10 |
| 12 | 2 | Functions <br> (Library functions) | ----- | 1 | ------ | ------ | 02 |
| 13 | 8 | User defined Functions | $\begin{aligned} & \hline \text { 2(mcq) } \\ & \text { (1 fill-in } \\ & \text { Blank) } \\ & \hline \end{aligned}$ | ------ | --- | 1 | 08 |
| 14 | 2 | Structures | ----- | ------ | 1 | ----- | 03 |
| 15 | 5 | Word Processing | 1(mcq) | 1 | ------ | --- | 03 |
| 16 | 15 | Spreadsheets | 2(mcq) | ------ | ------ | 2 | 12 |
| 17 | 5 | Web designing | ---- | --- | ----- | 1 | 05 |
|  |  | Total Marks | 10+10 | 16 | 24 | 55 | 115 |
|  |  | Total No of Questions to be answered | 1x20=20 | $2 \times 4 / 8=8$ | 3x4/8=12 | 5x6/11=30 | 70/47 |

NOTE: 1. Questions should be direct
2. The answers should be present in the prescribed textbook by PUE
3. $40 \%$ - Simple, $40 \%$ - Average and $20 \%$ - Difficult questions
4. Questions should be according to Blueprint

## PART - A

Answer all the questions. Each question carries one mark.
I Select the correct answer from the choices given: (Repeated answers will not be considered)

1. Which of the following is not considered hardware?
a) Operating system
b) CPU
c) Keyboard
d) Hard disk.
2. The following is not an output device.
a) Scanner
b) VDU
c) Speaker
d) Printer
3. What is smallest unit of the information?
a) A bit
b) A byte
c) A block
d) A nibble
4. Which of the following is not an Octal number?
a) 145
b) 178
c) 111
d) A123
5. What is the first step in solving a problem?
a) Analysis
b) Solution
c) Coding
d) Problem definition
6. Algorithm is a
a) Step-by-step process for a program
b) Step-by-step process for a flowchart
c) Step-by-step process for a solution
d) Step-by-step process for Coding
7. Which of the following is a keyword?
a) Person
b) Variable
c) Identifier
d) for
8. Give the header file that holds setw() and endl.:
a) 〈stdio.h>
b) <string.h>
c) <iostream.h>
d) <iomanip.h>
9. The following is a selection statement:
a) if
b) if-else
c) $\operatorname{switch}()$
d) all the above

10 . What is the subscript data type of an array?
a) Integer
b) float
c) double
d) string
11. Select how user defined functions are invoked/called, from the following:
a) input statement
b) assignment statement
c) declaration
d) break statement
12. What does the keyword void represent?
a) returns many values
b) no return value
c) returns a single value
d) returns int or float value
13. Which item is printed at the bottom of each page.
a) Header
b) Foot Note
c) Title
d) Footer
14. Which of the following application software is used for making a resume?
a) MS Excel
b) MS Word
c) $\mathrm{C}++$
d) Java
15. What is the intersection of a row and column in a worksheet called?
a) Column
b) Value
c) Address
d) Cell

## II Fill in the blanks choosing the appropriate word/words from those given in brackets.

## Note: Repeated answers will not be considered

(array, cout, main(), subprogram, break)
16. Every C++ program begins execution at the function $\qquad$ .
17. The result will be displayed using $\qquad$ in $\mathrm{C}++$.
18. $\qquad$ is a control statement.
19. To store many values in the same variable $\qquad$ is used.
20. User defined function is known as $\qquad$ .

## PART - B

Answer any FOUR questions. Each question carries two marks.
21. Write a short note on applications of computers in entertainment.
22. Mention any two types of ROM.
23. What is a system software? Give an example.
24. Define coding and testing.
25. Write any two characteristics of OOPS.
26. What is a variable? Give the declaration syntax for a variable.
27. Distinguish between isupper () and islower() functions in C++.
28. Differentiate between copy-paste and cut-paste options in word processor.

PART - C

## Answer any FOUR questions. Each question carries three marks.

29. Give the characteristics of non-impact printers.
30. Convert $37_{16}$ to Binary and to decimal.
31. Define
a) Assembler
b) Compiler
c) Loader
32. Explain sequence programming construct with an example.
33. Briefly explain any three relational operators in C++.
34. Explain cascading of input output operators with example for each.
35. Write memory representation of one-dimensional array.
36. Define a structure in $\mathrm{C}++$. Explain with syntax and example.

PART - D
Answer any SIX questions. Each question carries five marks.
37. Explain the various functional units of a computer with a neat block diagram.
38. Subtract $16_{10}$ from $23_{10}$ using 1's complement.
39. Write an algorithm to find the sum of the digits in a given number.
40. Explain structure of C++ program with suitable programming example.
41. Explain if..else statement with a suitable programming example.
42. Differentiate between while and do-while loops.
43. What is 2-dimensional array? Give the syntax and example for declaring 2-dimensional array.
44. Explain the working of function with arguments and return value.
45. Mention various applications of spread sheet.
46. Explain any five built-in functions of ESS.
47. What is HTML? Explain any four HTML tags.

