# Sophia Girls' College *(Autonomous)*
# Ajmer

**Semester I – 2023-24**
**End Semester Examination (Nov. 2023)**
**Class : B.C.A.**
**Paper I : [MJBCA-101]: Computer Fundamentals & PC Software**

**Time : 2 ½ Hrs.** **M.M: 70 Marks**

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## Section A [10 Marks]

***Section A contains 10 questions (20 words each) and a candidate is required to attempt all 10 questions. Each question is of one mark.***

## I. Answer the following questions.

1. Write down the major components of computer.
2. What is BCR?
3. What is Digital Computer?
4. What is Hard copy and Soft Copy?
5. What is SRAM & DRAM?
6. Define Clipart.
7. What is Undo and Redo?
8. What is Workbook?
9. What is Animation?
10. What is meant by Pivot?

## Section B [15 Marks]

***Section B contains 6 questions (50 words each) and a candidate is required to attempt 3 questions, at least 1 from each unit. Each question is of 5 marks.***

## II. Answer the following questions.

**UNIT I**

11. Explain the characteristics of Computers?

**OR**

What Is OMR & OCR? Explain them.

**UNIT II**

12. Explain Volatile and Non-Volatile Memory.

**OR**

How many types of Software? What is the difference between application software and System software?

**UNIT III**

13. What is Slide transaction? How to use animation in a single slide?

**OR**

What is formatting? Explain various formatting types in MS Excel.

## Section C [45 Marks]

***Section C – contains 6 questions. Answer any three questions (400 words each), selecting one from each unit. Each question is of 15 marks.***

## III. Answer the following questions.

**UNIT I**

14. Explain the classification of Computer on the basis of size and speed.

**OR**

Write short Notes on: -

a) Touch pad
b) Data Scanning Devices
c) Touch Screen

**UNIT II**

15. Describe the impact and non-impact printers.

**OR**

What is MS-Word? Explain the application areas and uses in detail?

**UNIT III**

16. Write short Notes on :-

a) Sort
b) Filters
c) Validation
d) Auditing & Tracing

**OR**

What is power point? Describe the feature and views of MS Power Point in Detail.

***--The End--***

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**Semester I – 2023-24**
**End Semester Examination (Nov. 2023)**
**Class : B.C.A.**
**Paper II :[MJBCA-102]: 'C' Programming**

**Time : 2 ½ Hrs.** **M.M: 50 Marks**

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## Section A [10 Marks]

***Section A contains 10 questions (20 words each) and a candidate is required to attempt all 10 questions. Each question is of one mark.***

## IV. Answer the following questions.

1. Define Variable in C.
2. Write and explain any 2 logical operators available in C.
3. What is the use of Break Statement?
4. Define 1 Dimensional Array.
5. What is the concept of local Variable?
6. Define Sorting.
7. Define Pointer.
8. What is meant by a string?
9. What is the use of STRCMP function? Explain by giving suitable example.
10. Explain Array of structure giving suitable example.

## Section B [10 Marks]

***Section B contains 6 questions (50 words each) and a candidate is required to attempt 3 questions, at least 1 from each unit. The first two UNITS are of 3 marks each and the last UNIT is of 4 marks.***

## V. Answer the following questions.

**UNIT I (3 Marks)**

11. Explain the use of the following giving suitable examples in C:
    a. IF-else ladder
    b. Continue statement

**OR**

Explain use of following giving suitable examples in C:
a. Switch Case
b. Relational Operators

**UNIT II (3 Marks)**

12. Write a program in C which accepts η integers from user in 1D array. Write the suitable code to calculate SUM and AVERAGE or these η integers numbers.

**OR**

Explain following:
a. Storage Class

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b. Call by Value by giving suitable example.

**UNIT III (4 Marks)**

13. Write a program in C which accepts a string from used and perform following 2 tasks:
    a. Reverse the string using suitable function available
    b. Find the length of string using suitable function available.

**OR**

Write a program in C which defines a structure containing (Roll no, Name, age, mobile no.) and perform following 2 tasks:
You can use Array of structure
a. Accepts roll no, name, age, and mobile no. of at least 3 students using structure.
b. Print roll no, age and mobile no. of students just accepted in above (i) using structure.

## Section C [30 Marks]

***Section C – contains 6 questions. Answer any three questions (400 words each), selecting one from each unit. Each question is of 10 marks.***

## VI. Answer the following questions.

**UNIT I**

14. Write short note on following:
    a. Constant
    b. Keywords
    c. List of Conditional Operators
    d. For Loop
    e. While Loop

**OR**

Write short note on following:
a. Datatypes
b. Nested if
c. Do-while loop
d. List of Arithmetic operators
e. goto statement

**UNIT II**

15. Explain following in C:
    a. Pointers using suitable code to be written in C language.
    b. Bubble sort using suitable Code to be written in C language.

**OR**

Explain following in C:
a. Recursion using suitable code to be written in C language.
b. Selection sort using suitable code to be written in C language.

**UNIT III**

16. Write short note on the following:
    a. Pointer as function Argument.
    b. Union definition and its use

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**OR**

Write short note on the following:

a. Pointer Address Arithmetic
b. Strcat and Strcpy.

***--The End—***

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**Semester I – 2023-24**
**End Semester Examination (Nov. 2023)**
**Class : B.C.A.**
**Paper III :[MJBCA-103]: Multimedia Basics**

**Time : 2 ½ Hrs.** **M.M: 50 Marks**

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## Section A [10 Marks]

***Section A contains 10 questions (20 words each) and a candidate is required to attempt all 10 questions. Each question is of one mark.***

## I. Answer the following questions.

17. Define Multimedia Technology.
18. Write any 4 applications areas of multimedia.
19. List out any 2 sound editing softwares.
20. What are the types of image compression?
21. Elaborate the patient law for multimedia.
22. Write the full form of JPEG, MIDI, TIFF, SGML.
23. How is pixel density related to the quality of an image?
24. What is Frame rate?
25. Define layer and what is its advantage in flash?
26. Discuss any two tools of flash?

## Section B [10 Marks]

***Section B contains 6 questions (50 words each) and a candidate is required to attempt 3 questions, at least 1 from each unit. Each question is of 5 marks.***

## II. Answer the following questions.

**UNIT I** **(3 marks)**

27. What is User Interface? Write its features of user interface. What are its types.

**OR**

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Explain the various hardware & software requirements for using Multimedia.

**UNIT II (3 marks)**

28. Write the basics of Audio compressions. List advantages of audio compression.

**OR**

Elaborate the following:

a. Trade Secret Law.
b. Copy Right Law.

**UNIT III (4 marks)**

29. Differentiate between Motion twinning and shape twinning in flash. What are key frames in flash?

**OR**

Explain the term morphing with the help of an example. Write down the functions to create line & curve in flash.

## Section C [30 Marks]

***Section C – contains 6 questions. Answer any three questions (400 words each), selecting one from each unit. Each question is of 10 marks.***

## III. Answer the following questions.

**UNIT I**

30. What are media elements.? Discuss. Write down the advantages and dis-advantages of multimedia.

**OR**

Write down the features of multimedia system. Discuss various challenges and applications of multimedia.

**UNIT II**

31. Explain the methodology and designing of developing applications using multimedia. Explain the process of JPEG image compression.

**OR**

Explain the basics of Compressions in detail taking an example. Explain P, B, I frame coding in video compression. Discuss in detail.

**UNIT III**

32. Discuss the usage of the following Flash tools: -

a. Spray Brush
b. 3D Rotation
c. Deco Tool
d. Creating Objects
e. Stroke & Fill

**OR**

Describe the basic objects in flash. Discuss the principles of animation in detail. Write down the steps for creating an application illustrating bouncing of a ball in a scene.

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***--The End--***

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