



GOVERNMENT OF KARNATAKA

**COMPUTER SCIENCE**

**PRESCRIBED**

**QUESTION BANK FOR FIRST PUC**

**2017 - 18**

**Department of Pre–University Education**  
**Malleswaram, Bengaluru – 560 012.**

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## Design of Question Paper

**Subject: Computer Science Code: 41**

*Time: 3 hours 15 minutes (of which 15 minutes for reading the question paper).*

*Max.Marks:70*

*The weightage of the distribution of marks over different dimensions of the question paper shall be as follows:*

A. *Weightage to Objectives:*

<b>Objective</b>	<b>Weightage %</b>	<b>Marks</b>	<b>Total No of Questions</b>
<b>Knowledge</b>	<b>30%</b>	<b>31</b>	<b>12</b>
<b>Understanding</b>	<b>40%</b>	<b>43</b>	<b>17</b>
<b>Application</b>	<b>20%</b>	<b>21</b>	<b>5</b>
<b>Skill</b>	<b>10%</b>	<b>10</b>	<b>3</b>
<b>Total</b>	<b>100%</b>	<b>105</b>	<b>37</b>

B. *Weightage to Content/Subject units: Computer Science (41)*

<b>Unit</b>	<b>Description</b>	<b>VSA (1 mark)</b>	<b>SA (2 marks)</b>	<b>LA (3 marks)</b>	<b>E (5 marks)</b>	<b>Total marks</b>
<i>A</i> <i>30 Hrs</i>	<i>FUNDAMENTALS OF COMPUTERS</i>	<i>2</i>	<i>3</i>	<i>2</i>	<i>2</i>	<i>24</i>
<i>B</i> <i>15Hrs</i>	<i>PROBLEM SOLVING METHODOLOGY</i>	<i>1</i>	<i>1</i>	<i>2</i>	<i>2</i>	<i>19</i>
<i>C</i> <i>50Hrs</i>	<i>PROGRAMMING IN C++</i>	<i>5</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>48</i>
<i>D</i> <i>25Hrs</i>	<i>ELEMENTARY CONCEPTS OF WORD PROCESSING, SPREADSHEET AND WEB DESIGNING</i>	<i>2</i>	<i>2</i>	<i>--</i>	<i>2</i>	<i>14</i>
	<i>Total Marks</i>	<i>10</i>	<i>16</i>	<i>24</i>	<i>55</i>	<i>105</i>
<i>120 Hrs</i>	<i>Total No of Questions to be answered</i>	<i>1X10=10</i>	<i>2X5/8=10</i>	<i>3X5/8=15</i>	<i>5X7/11=35</i>	<i>70/37</i>

Note : Variation of 1(one) mark per chapter is allowed, however the total marks should not exceed 105.

Question Type	Total No of questions	Total No of questions with <b>one</b> mark	Total No of questions with <b>two</b> marks	Total No of questions with <b>three</b> marks	Total No of questions with <b>five</b> marks	Total marks allocated
Knowledge	12	5	2	2	3	30
Understanding	17	5	5	3	4	44
Application	5	-----	-----	2	3	21
Skill	3	-----	1	1	1	10
Total	37	10	8	8	11	105

Note : One mark variation in Knowledge and Understanding can be accepted !!

C. Weightage to forms of Questions:

Level	Weightage%	Marks
Easy	30	31
Average	60	64
Difficult	10	10

**General instructions:**

- Questions should be clear, unambiguous understandable and free from grammatical errors.
- Questions which are based on same concepts, law, fact etc. and which generate the same answer should not be repeated under different forms (VSA, SA and LA)
- Questions must be based on the contents of the prescribed text books.

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Total number of hours : 120Hrs,		Total mark : 105mark,	Number of mark per hour : 0.875mph															Total	
No.	Chapter Name	hrs	Knowledge 20%					Understanding 40%					Application 30%					Skills 10%	Total
			1	2	3	5	1	2	3	5	1	2	3	5	1	2	3	5	
			VSA	SA	LA	E	VSA	SA	LA	E	VSA	SA	LA	E	VSA	SA	LA	E	
1	Overview of computer	8	1					1						1					
2	Input, Output and Memory devices	8	1				1	1											6
3	Data Representation	9															1	1	8
4	Software Concepts	5		1					1										5
5	Problem Solving Methodology	15	1				1	1		1									11
6	Object oriented concepts	2						1											2
7	Introduction to C++	12	1		1					1									9
8	Data types	2								1									2
9	Input and Output operators	4								1									4
10	Control Statements	10								2	1								11
11	Arrays	8	1														1	1	9
12	Functions	2		1															2
13	User defined Functions	8								1								1	6
14	Structures	2				1													3
15	Word Processing	5				1													3
16	Spreadsheets	15								1				1					11
17	Web Designing	5								1									5
	<b>TOTAL :</b>	<b>120</b>																	<b>105</b>

Question paper pattern : Part - A : VSA( very short answer ) . Each carries ONE mark.  
 Part - B : SA(short answer). Each carries TWO marks.  
 Part- C:LA(Long Answers). Each carries THREE marks  
 Part - D : E (Essay type)Each carries FIVE marks.

## MODEL QUESTION PAPER 1

### PART A

**Note: Answer ALL the following questions.**  
Each question carries ONE mark.

[10x1=10]

1. What is a computer? (K)
2. What is the use of input unit? (K)
3. Define problem solving. (K)
4. Define an identifier. (K)
5. What is the purpose of manipulators? (K)
6. What is compound statement? (K)
7. How is a function invoked? (K)
8. What is a header? (U)
9. Define coding. (K)
10. What is a relative reference? (K)

### PART B

**Note: Answer any FIVE of the following questions.**  
Each question carries TWO marks.

[5x2=10]

11. Write a note on Abacus. (U)
12. Give different types of ROM. (U)
13. What is a translator? (U)
14. What is difference between program and system flowcharts? (U)
15. Explain about Data Encapsulation. (U)
16. Explain lvalue and rvalue with an example. (K)
17. What is standard library? (U)
18. What are tables in word processor? (U)

### PART C

**Note: Answer any FIVE of the following questions.**  
Each question carries THREE marks.

[5x3=15]

19. Explain output unit in detail. (U)
20. Write the difference between ROM and RAM. (A)
21. Explain different types of operating systems. (U)
22. Write an algorithm to convert temperature in Fahrenheit to Celsius. (U)
23. What are short hand operators? (K)
24. Write a C++ program to demonstrate the cout. (S)
25. Explain memory representation of one-dimensional array. (A)
26. What is the use of dot operator? Give an example (A)

**PART D**

**Note: Answer any SEVEN of the following questions.**

**Each question carries FIVE marks.**

**[7x5=35]**

27. Explain the functional units of a computer with a neat block diagram. (A)
  28. Give the Radix of: (A)
    - (a) Decimal system
    - (b) Binary system
    - (c) Octal system
    - (d) Hexadecimal system
  29. Explain different forms of **if** statement. (A)
  30. Explain the structure of the function with an example program. (U)
  31. Write a C++ program to find the minimum and maximum element of an array. (S)
  32. Compare break and continue statements. (U)
  33. Explain in detail the services of internet. (U)
  34. Explain the screen layout of a worksheet in detail. (A)
  35. Write algorithm and flowchart to find sum of odd and even numbers upto N. (S)
  36. Find  $(572)_8 = (?)_{16} = (?)_{10}$  (S)
  37. Give the features of the generations of computers. (U)
  38. Explain any five HTML tags with example.
-

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Total number of hours : 120Hrs,		Total mark : 105mark,	Number of mark per hour : 0.875mph															Total					
No.	Chapter Name	hrs	Knowledge 20%					Understanding 40%					Application 30%					Skills 10%					
			1	2	3	5	1	2	3	5	1	2	3	5	1	2	3	5	1	2	3	5	
			VSA	SA	LA	E	VSA	SA	LA	E	VSA	SA	LA	E	VSA	SA	LA	E	VSA	SA	LA	E	
1	Overview of computer	8	1					1		1													8
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5	Problem Solving Methodology	15						1		1				1									9
6	Object oriented concepts	2	1					1															3
7	Introduction to C++	12	1		1					1													9
8	Data types	2								1													2
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11	Arrays	8	1															1			1		10
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	TOTAL:	120																					105

Question paper pattern : Part - A : VSA( very short answer) . Each carries ONE mark.

Part - B : SA(short answer). Each carries TWO marks.

Part- C:LA(Long Answers). Each carries THREE marks

Part - D : E (Essay type)Each carries FIVE marks.



## MODEL QUESTION PAPER 2

### PART A

**Note: Answer ALL the following questions.**

**Each question carries ONE mark.**

**[10x1=10]**

1. Expand ENIAC. (K)
2. What is cache memory? (K)
3. Define stepwise refinement. (K)
4. What are escape sequence? (K)
5. Give the header file that holds setw() and endl. (U)
6. What is the purpose of switch statement? (U)
7. What is the datatype of the array subscript? (K)
8. Give the syntax of function prototype. (U)
9. How to convert data to bold using formatting toolbar in MS-word? (U)
10. How do we include a formula in a worksheet? (U)

### PART B

**Note: Answer any FIVE of the following questions.**

**Each question carries TWO marks.**

**[5x2=10]**

11. What is the role of computers in Education? (U)
12. Give the different types of ROM.(U)
13. Differentiate between interpreter and compiler. (K)
14. Define Inheritance and Polymorphism with respect to OOP. (U)
15. Give the classification of data types in C++. (U)
16. Explain the various types of errors detected during testing. (U)
17. Write any two library functions of header file String.h (K)
18. Explain the process of COPY and PASTE. (S)

### PART C

**Note: Answer any FIVE of the following questions.**

**Each question carries THREE marks.**

**[5x3=15]**

19. Give the applications of OCR, OMR and MICR. (K)
20. Convert 36B.DEF<sub>(16)</sub> to binary. (S)
21. What are the functions of operating system? (K)
22. Give the syntax, flowchart for the variations of **if** command. (U)
23. Mention the types of constants in C++. (K)
24. Explain cascading of input, output operators. (U)
25. Give the initialization and declaration of two-dimensional arrays. (A)
26. What are nested structures? Give an example. (U)

**PART D**

**Note: Answer any SEVEN of the following questions.**

**Each question carries FIVE marks.**

**[7x5=35]**

27. Compare the features of all the generations of computers? (U)
  28. Explain 2's complement subtraction using an example. (S)
  29. Explain the working of FOR loop with a programming example. (A)
  30. Write a program to print Fibonacci series of N number. (A)
  31. Explain DO-WHILE and WHILE in detail. (U)
  32. Explain implicit and explicit type conversions with examples. (K)
  33. Write a C++ program to find the position of an element in the array. (A)
  34. Write the purpose of any five string functions. (K)
  35. Explain the steps involved in drawing a chart. (U)
  36. Give the features of a spreadsheet. (U)
  37. Explain any five tags in HTML. (K)
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			VSA	SA	LA	E	VSA	SA	LA	E	VSA	SA	LA	E	VSA	SA	LA	E			
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Part - D : E (Essay type)Each carries FIVE marks.																					

### MODEL QUESTION PAPER 3

#### PART A

**Note: Answer ALL the following questions.**

**[10x1=10]**

**Each question carries ONE mark.**

1. Expand VLSI. (U)
2. What is the use of input device? (U)
3. Define operating system. (U)
4. What is unary operator? (K)
5. What is keyword? (U)
6. Define the term looping. (K)
7. What are subscripts? (K)
8. What is a function? (K)
9. What is header in word processor? (U)
10. Mention one application of ESS. (K)

#### PART B

**Note: Answer any FIVE of the following questions.**

**[5x2=10]**

**Each question carries TWO marks.**

11. Mention any two features of ENIAC. (U)
12. Compare static and dynamic RAM. (U)
13. Mention different types of software. (U)
14. Write any two symbols used in flowchart. (U)
15. Mention any two advantages of OOP. (U)
16. Write the syntax for variable declaration with example. (S)
17. Write any two library functions of C++. (K)
18. Give shortcut command for copy and paste command in word processor. (K)

#### PART C

**Note: Answer any FIVE of the following questions.**

**[5x3=15]**

**Each question carries THREE marks.**

19. Explain types of primary memory. (U)
20. Explain impact and non-impact printers in detail. (U)
21. Explain any three types of operating system. (K)
22. Write an algorithm to check whether a given number is even or odd. (S)
23. Write the rules for naming the identifier. (K)
24. Mention the different types of expressions in C++. (K)
25. What is a string? Give any two string operations. (U)
26. Define structure. Write syntax and example for declaration of structure. (A)

**PART D**

**Note: Answer any SEVEN of the following questions.**

**[7x5=35]**

**Each question carries FIVE marks.**

27. Write the features of I and II generation of computers. (U)
  28. Subtract  $9_{(10)}$  from  $24_{(10)}$  using 2's compliment. (S)
  29. Mention advantages and disadvantages of an algorithm. (U)
  30. Explain general structure of C++ program. (A)
  31. Write a C++ program to find sum of digits of a number using while loop. (A)
  32. Explain working of SWITCH statement with syntax and example. (K)
  33. Write a C++ program to read and print a matrix of order MxN. (A)
  34. What are the different types of functions? Explain any one. (K)
  35. What is mail merge? Write steps involved in creating mail merge document. (U)
  36. Explain any five built in functions used in ESS with example. (U)
  37. Explain any five HTML tags with example. (K)
-

**CHAPTER 1**  
**FUNDAMENTALS OF COMPUTERS**

**One mark questions:**

1. What is a computer? (K)
2. What are the advantages of learning computers? (A)
3. Which is the earliest computing machine? (K)
4. Who invented the Pascaline? (K)
5. What are the advantages of the machine by Leibnitz over Pascaline? (U)
6. What is Charles Babbage known as? (K)
7. What is the machine proposed by Babbage, to perform differential equations called as? (U)
8. Who is the father of computers? (K)
9. What concept of computing did Herman Hollerith used to find a faster way to compute U.S. census. (U)
10. Who developed the first all-electronic computer? (K)
11. What is the electronic relay computer Mark-I also called as? (U)
12. Expand the term ENIAC? (K)
13. Expand the term EDVAC. (K)
15. Expand the term UNIVAC. (K)
16. Which is the basic electronic component of the first generation computers? (U)
17. Which is the basic electronic component of the second generation computers? (U)
18. What does IC stand for? (K)
19. How internet is used? (A)
20. How computer helps in publishing? (U)
21. Name any one Super Computer made in India. (K)
22. Who invented first "Read only Memory"? (U)
23. What was Napier's Bones used for? (U)
24. Who is the First Programmer? (U)
25. Who invented Slide Rule? (U)
26. Expand CPU. (K)
27. Name a non-volatile memory. (A)
28. What is slide rule? (U)
29. Which is the basic electronic component of the third generation computers? (U)
30. Which is the basic electronic component of the fourth generation computers? (U)
31. Expand VLSI. (U)

**Two Marks Questions:**

1. What are the fields where computers are used today? (A)
2. Write a note on Abacus? (U)
3. Write a note on Pascaline? (U)
4. Explain the important features of difference engine. (U)
5. Explain Charles Babbage's role in the history of modern computers? (U)
6. Mention any two features of ENIAC? (U)
7. Mention any two features of EDVAC? (U)
8. What are the importance features of the III generation computers? (U)

9. Explain the role of computers in education? (U)
10. Why are computers used in the industry? (U)
11. How are computers important in communication? (U)
12. Mention any two uses of Super Computers? (U)
13. Write two significant inventions by Charles Babbage. (K)
14. Explain Analog Computers. (U)
15. Explain Digital Computers. (U)
16. Explain Hybrid Computers. (U)
17. Write the type of computers based on usage or purpose. (K)
18. Differentiate mainframe and super computer. (K)
19. Give two examples for Input devices. (A)
20. Give two examples for output devices. (A)
21. What is CAM? (K)

**Three marks questions:**

1. Explain the history of computers. (U)
2. Give the features of first generation computers. (U)
3. Write the features of Second generation computers. (U)
4. State the features of third generation computers. (U)
5. Give the features of fourth generation computers. (U)
6. Explain the importance and usage of computers in education and industry. (K)
7. Discuss the characteristics of a computer in detail. (U)
8. Draw a neat block diagram of the functional units of a computer and label it. (A)
9. Explain the role of computers in science and engineering. (K)
10. Explain the latest implementation of computers. (A)
11. How does the computer help mankind? (A)
12. What is the concept of e-governance? (U)
13. Explain the use of computer in email? (K)

**Five marks questions:**

1. Briefly explain the history of computers. (U)
2. Give the features of the Generations of computers. (U)
3. Discuss the characteristics of a computer in detail. (U)
4. Explain the functional units of a computer with a neat block diagram? (A)
5. What are the latest developments in the field of computers, list the areas and explain. (K)
6. Explain the application of Computers. (K)
7. Compare the features of micro and mini computers? (U)
8. Compare mainframe and supercomputers(U)
9. Explain Classification of Digital Computers. (K)

**CHAPTER 2**  
**INPUT/ OUTPUT AND MEMORY UNITS**

**One mark questions:**

1. What is PC? (K)
2. What is the use of input unit? (K)
3. What happens to the data in the input unit? (U)
4. What is the use of memory? (U)
5. What is ROM and RAM? (U)
6. Classify various units of memory. (U)
7. What is cache memory? (U)
8. What is MICR? (K)
9. Define the resolution of a monitor (K)
10. What is the use of speakers? (K)
11. Expand OMR. (K)
12. Expand OCR. (K)
13. Expand PROM (K)
14. Expand EPROM. (K)
15. Expand EEPROM. (K)

**Two marks questions:**

1. Compare input and output units. (U)
2. What is difference between volatile and non-volatile memory. (U)
3. Compare static and dynamic Ram (U)
4. Give different types of ROM. (U)
5. Explain the different types of keyboard. (U)
6. Give the difference between hard copy and soft copy. (K)
7. Explain different types of printers. (U)
8. Explain the structure of CD-ROM. (U)
9. Write the difference between ROM and RAM. (K)
10. Define track and sector. (U)

**Three marks questions:**

1. Give the applications of OCR, OMR, and MICR. (U)
2. Explain impact and non-impact printers in detail. (U)
3. Explain the storage medium. (U)
4. Explain input unit in detail. (U)
5. Explain output unit in detail. (U)
6. Explain storage medium in detail. (U)
7. Illustrate the latest configuration of computers for today. (A)
9. Write the difference between ROM and RAM. (A)
10. Explain different types of ROM. (U)
11. Mention different types of mouse. (u)
12. Write a short note on plotter. (U)
13. Write a note on monitor. (U)



14. Explain cache memory in detail. (U)
15. Mention any three portable storage devices. (U)

**Five marks questions:**

1. What are input devices? Explain in detail. (U)
2. What are output devices? Explain in detail. (U)
3. Write a note on storage devices. (K)
4. Explain hard disk. (U)
5. Write a note on printers. (U)

**CHAPTER 3**  
**DATA REPRESENTATION**

**One mark questions:**

1. Define the **base** of the number system. (U)
2. What is the expansion of **BIT**? (K)
3. Define MSB (U)
4. Define LSB. (U)
5. What is the weight of the LSB of an 8-bit number? (S)
6. What is the weight of the MSB of a 16-bit number? (S)
7. What does BCD stand for? (K)
8. What is the expansion of ASCII? (A)
9. What is the expansion of EBCDIC? (A)
10. What is binary system? (U)
11. What is octal system? (U)
12. What is hexadecimal system? (U)
13. How are negative numbers represented? (S)
14. Write 1's complement of  $11010111_{(2)}$  (S)
15. Write 2's complement of  $11011011_{(2)}$  (S)

**Two marks questions:**

1. Specify the general rule for representing number using positional notation in any number system. (K)
2. Mention different types of positional number system. (U)
3. Explain the need of binary number system in computers. (U)
4. What is the importance of hexadecimal system? (U)
5. What is 1's complement? Give an example. (A)
6. What is 2's complement? Give an example. (A)
7. What are computer codes? Give example. (K)
8. Mention the different types of number systems. (U)
9. What is the use of binary number system over decimal number system? (U)
10. Convert  $97.188_{(10)}$  to binary. (S)
11. Convert  $728.45_{(10)}$  to binary. (S)
12. Convert  $1101111.101_{(2)}$  to decimal (S)
13. Convert  $2835_{(16)}$  to decimal. (S)
14. Convert  $789.625_{(10)}$  to octal. (S)
15. Convert 4563 in octal to binary. (S)
16. Convert  $BED_{(16)}$  to binary. (S)
17. Convert  $1101.01101_{(2)}$  in binary to octal. (S)
18. Convert  $A492.B$  in hexadecimal to decimal. (S)
19. Convert  $512.45_{(10)}$  to hexadecimal. (S)
20. Convert  $11011110_{(2)}$  to hexadecimal. (S)

21. Convert  $6A9.ABC_{(16)}$  to binary. (S)
22. Add  $1010101$  and  $1010111$  (S)
23. Explain ASCII code. (U)

**Three marks questions:**

1. Define MSB and LSB. What is the weight of the LSB of an 8-bit number and MSB of a 16-bit number? (S)
2. Write 1's complement of  $11010011_{(2)}$  and 2's complement of  $1111011_{(2)}$  (S)
3. Convert  $193.102_{(10)}$  to binary. (S)
4. Convert  $287.27_{(10)}$  to binary. (S)
5. Convert  $1100011.011_{(2)}$  to decimal (S)
6. Convert  $2546_{(16)}$  to decimal. (S)
7. Convert  $897.526_{(10)}$  to octal. (S)
8. Convert 4352 in octal to binary. (S)
9. Convert  $CEBA_{(16)}$  to binary. (S)
10. Convert  $1100.1100$  in binary to octal. (S)
11. Convert  $DF43.AB$  in hexadecimal to decimal. (S)
12. Convert  $734.67_{(10)}$  to hexadecimal. (S)
13. Convert  $1100101011_{(2)}$  to hexadecimal. (S)
14. Convert  $36B.DEF_{(16)}$  to binary. (S)
15. Add  $1101101$  and  $1011101$  (S)

**Five marks questions:**

1. Give the Radix of: (A)
 

(a) Decimal system	(b) Binary system
(c) Octal system	(d) Hexadecimal system
2. Subtract 36 from 83 using 2's complement. (S)
3. Using 1's complement method, solve  $54_{(10)} - 87_{(10)}$  (S)
4. Using 2's complement method, solve  $73_{(10)} - 25_{(10)}$  (S)
5. Add:  $64_{(10)} + 35_{(10)}$  using binary addition. (S)
6. Find  $(11001001.1011)_2 = (?)_8 = (?)_{16}$  (S)
7. Find  $(FADE)_{16} = (?)_8 = (?)_{10}$  (S)
8. Explain different types of computer codes. (K)
9. Evaluate:  $BEAD_{(16)} = ()_{10} = ()_2 = ()_8$  (S)
10. Find  $(572)_8 = (?)_{16} = (?)_{10}$  (S)
11. Find  $(986)_{10} = (?)_8 = (?)_{16}$  (S)
12. Add:  $89_{(10)} + 66_{(10)}$  using binary addition. (S)
13. Find  $1101110_{(2)} + 1010111_{(2)} - 11110_{(2)}$  (S)
14. Find  $1101110_{(2)} + 1010111_{(2)} - 11110_{(2)} + 110011_{(2)}$  (S)

**CHAPTER 4**  
**SOFTWARE CONCEPTS**

**One mark questions:**

1. What is a program? (U)
2. What is hardware? (U)
3. What is software? (U)
4. What is machine language? (U)
5. What is assembly language? (U)
6. Give an example for high-level language. (A)
7. What is meant by machine dependent language? (K)
8. What is meant by machine independent language? (K)
9. Define opcode. (K)
10. What is an assembler? (U)
11. What is a compiler? (U)
12. What is an interpreter? (U)
13. What is system software? (U)
14. What is application software? (U)
15. What is linker? (U)
16. What is loader? (U)
17. Define operating system. (U)
18. Write any one function of operating system. (A)
19. Name any single-user operating system. (A)
20. Name any multi-user operating system. (A)
21. What is multitasking? (U)
22. What is multithreading? (U)
23. Name any mobile operating system. (A)

**Two marks questions:**

1. What are the types of software? (U/K)
2. Compare hardware and software. (U)
3. What is application software? Give example. (U /K)
4. What is system software? Give example. (U/K)
5. State the difference between object code and source code. (U)
6. Differentiate between high-level and low-level language. (U)
7. What is a translator? (U)
8. What is an Assembler? (U)
9. Differentiate between interpreter and compiler. (U)
10. What is the function of linker and loader. (U)
11. What is an operating system? Give example. (U)
12. Explain operating system as user interface? (U)
13. Explain need of operating system. (U)
14. Explain real time operating system. (U)
15. Explain batch processing. (U)
16. Explain time sharing system. (U)

17. Write any two functional features of windows. (K)
18. Write any two functional features of network operating system. (K)
19. Write any two functional features of LINUX. (K)
20. Mention any two mobile operating systems. (K)
21. Give the difference between CUI and GUI (K)

**Three marks questions:**

1. Write a note on Computer languages. (K)
2. Explain different types of operating systems. (U)
3. List any three functions of operating system. (K)
4. Explain multi-user operating system. (U)
5. Mention the features of DOS OS. (K)
6. Mention the features of UNIX OS. (K)
7. Explain the purpose of utilities. (U)
8. Explain the terms multiprogramming and multitasking. (U)
9. Compare CUI and GUI. (U)

**Five marks questions:**

1. Define the terms:
  - a. Interpreter
  - b. Compiler
  - c. Assembler
  - d. Linker
  - e. Loader
2. Define the following:
  - a. Object code
  - b. Source code.
  - c. Application software
  - d. System software.
  - e. Utilities.
3. What is an operating system? Explain any four operating systems.
4. What are language translators? Explain briefly.
5. What are the different functions of an operating system?
6. What are the features of Disk Operating System (DOS)?
7. What are the features of UNIX operating system?
8. What are the features of Windows operating system?

**CHAPTER 5**  
**PROBLEM SOLVING METHODOLOGY**

**One mark questions:**

1. Define problem solving. (K)
2. What is problem definition? (U)
3. What is sequential construct? (U)
4. What is an algorithm? (U)
5. Define flowchart. (K)
6. How are flowcharts classified? (U)
7. Define coding. (K)
8. What do you mean by debugging? (U)
9. What does syntax refer to? (U)
10. What is syntax error? (U)
11. What are semantic errors? (U)
12. What is logical error? (U)
13. What is runtime error? (U)
14. Define stepwise refinement? (K)
15. Define testing. (K)
16. Give one advantage of structured programming. (A)
17. What is the use of documentation? (A)
18. What is program maintenance? (U)
19. Why is program maintenance required? (U)
20. When is selection construct used? (U)
21. What is the use of iteration construct? (A)
22. What is top-down design? (K)

**Two marks questions**

1. Which design tools are used in designing the problems? (K)
2. State the characteristics of algorithm? (U)
3. What is the difference between program and system flowcharts? (U)
4. Explain the difference between source program and object program? (U)
5. Explain the importance of documentation. (U)
6. What are the types of selection construct? (U)
7. What are the characteristics of good program? (U)
8. Write an algorithm to find simple interest. (S)
9. What is Syntax error? Give an example. (U)
10. How is runtime error different from semantic error? (U)
11. Write an algorithm to find average of three numbers. (S)
12. Draw a flowchart to add two numbers. (S)
13. Write the flowchart symbols for (U)  
a) Decision b) Looping
14. Mention two differences between while and do-while constructs. (U)
15. Explain the various types of errors detected during testing.

**Three marks questions:**

1. Give advantages of algorithm.
2. Mention advantages of flowchart.
3. What are the different programming constructs? (U)
4. Write an algorithm to swap the values of two variables. (U)
5. Write an algorithm to convert temperature in Fahrenheit to Celsius. (U)
6. Write an algorithm to find largest among three numbers. (U)
7. Write an algorithm to find sum and average of three numbers. (U)
8. What is the importance of flowchart? (U)
9. Draw a flowchart to find the largest of three numbers. (S)
10. Draw a flowchart to calculate simple interest. (S)
11. Draw a flowchart to add all integers from 1 to 100. (S)
12. Draw a flowchart to find factorial of a number. (S)
13. What are the advantages of structured programming? (U)
14. Draw various symbols of flowchart with their purpose. (A)
15. State the different types of errors. (U)
16. Explain if-else-if structure. (K)
17. Explain while loop with example. (U)
18. Explain do-while loop with example. (U)
19. Explain for loop with example. (U)
20. How is iteration construct useful? Explain. (U)
21. Give the syntax, flowchart for the various **if** command. (S)

**Five marks questions**

1. Briefly explain the various stages of problem solving. (U)
2. What are the symbols used in flowchart? (K)
3. Mention advantages and disadvantages of algorithm. (K)
4. Write advantages and disadvantages of flowchart. (K)
5. Briefly explain documentation and maintenance. (U)
6. Explain divide and conquer method. (U)
7. Give the syntax and flowchart of if-else-if and nested-if construct. (U)
8. Explain while construct with flowchart. (U)
9. Explain do-while construct with flowchart. (U)
10. Explain for loop construct with flowchart. (U)
11. Explain while and do-while statements with flowchart and syntax. (A)
12. Explain different forms of **if** statement. (A)
13. Explain top-down analysis with example. (U)
14. Discuss types of errors with example. (U)
15. Explain selection statements. (U)
16. Explain iterative statements. (U)
17. Write algorithm and flowchart to find sum of N natural numbers. (S)
18. Write algorithm and flowchart to find sum of odd and even numbers upto N. (S)

**CHAPTER 6**  
**OOP CONCEPTS**

**One mark questions:**

1. Define Structured Programming. (U)
2. Define Top-down design. (U)
3. What is Bottom up? (U)
4. What is Top-down approach? (U)
5. Define an Object. (U)
6. Expand OOP.
7. What is Object Oriented Programming (OOP)? (U)
8. What is Class? (U)
9. Define a Module. (U)
10. What is Bottom up approach? (U)
11. What is Modularity? (U)
12. What is Abstraction? (U)
13. What is Data Encapsulation.? (U)
14. What is Inheritance? (U)
15. What is Polymorphism? (U)
16. What is Dynamic binding? (U)
17. What is Message Passing? (U)
18. Mention any one benefit of OOP. (K)
19. Mention any one advantage of OOP. (K)
20. Mention any one disadvantage of OOP. (K)
21. Mention any one application of OOP. (K)
22. What is the use of member function? (U)

**Two marks questions**

1. What is structured programming? (U)
2. Define a Module. (K)
3. What is Modularity? (U)
4. What is an object in OOP? (U)
5. What is a Class with reference to OOP? (U)
6. Differentiate class and object. (U)
7. Mention any two characteristics of OOP(K)
8. Explain Data Abstraction (U)
9. Explain about Data Encapsulation(U)
10. Explain about Inheritance. (U)
11. Explain about Polymorphism. (U)
12. Explain about Dynamic binding. (U)
13. Explain about Message Passing. (U)
14. Mention any two advantages of OOP. (K)
15. Mention any two disadvantages of OOP. (K)
16. List any two characteristics of OOP. (K)
17. Mention any two applications of OOP. (K)
18. Define the terms: a) Encapsulation b) Polymorphism. (U)
19. What is function overloading? Give example. (U)
20. Give an example for operator overloading. (U)



**CHAPTER 7**  
**INTRODUCTION TO C++**

**One mark questions:**

1. Who developed C++? (K)
2. Mention any one characteristic of C++. (K)
3. Mention any token of C++.
4. Can Keywords be used to name an identifier?
5. Define a token in C++? (K)
6. Define an identifier? (K)
7. Define variables. (K)
8. What is a keyword? (U)
9. Mention any keyword. (A)
10. Define a constant? (K)
11. What is an integer constant? (K)
12. What is an octal constant? (K)
13. What is a hexadecimal constant? (K)
14. Give an example for integer constant. (S)
15. Give an example for octal constant. (S)
16. Give an example for hexadecimal constant. (S)
17. Give an example for float constant. (S)
18. Give an example for character constant. (S)
19. Give an example for string constant. (S)
20. How do you define a string constant? (U)
21. Define Escape sequences. (K)
22. Mention any one escape sequences. (A)
23. What are punctuators? (U)
24. Mention any one punctuator. (A)
25. What is an operator? (K)
26. What are unary operator? (A)
27. Mention any one unary operator. (A)
28. What is a binary operator? (U)
29. Mention any one binary operator. (A)
30. What is a ternary operator? (U)
31. If  $\text{int } x=10$ , then find the value of  $y=++x-x++$ . (A)
32. Which operator gives the remainder? (U)
33. What is an expression? (U)
34. Convert the expression  $a^2+b^2+b^2=c^2$  into equivalent C++ expression. (S)
35. What is the purpose of `sizeof()` operator?(U)
36. Give an example for `sizeof()` operator.
37. Which is the pointer operator? (K)
38. What is a library function? (K)
39. What is operator precedence? (U)
40. Convert the expression  $l=2\sqrt{a^2+b^2}$  into equivalent C++ expression. (S)
41. Convert the expression  $A = \pi r^2$  into equivalent C++ expression. (S)
42. What is type casting? (K)

**Two marks questions.**

1. Mention any two characteristics of C++. (K)
2. Mention any two tokens of C++. (K)
3. Mention any two rules for naming an identifier. (K)
4. Mention the types of constants of C++. (K)
5. Explain integer constant with suitable example. (A)
6. Explain octal constant with suitable example. (A)
7. Explain hexadecimal constant with suitable example. (A)
8. Explain float constant with suitable example. (A)
9. Explain character constant with suitable example. (A)
10. What are escape sequences? Give example. (U)
11. Explain string constant with suitable example. (U)
12. Explain unary operators with suitable example. (K)
13. Explain arithmetic operators with suitable example. (K)
14. Explain logical operators with suitable examples. (K)
15. Give one difference between `i++` and `++i` (A)
16. State the difference between `/` and `%` (A)
17. Explain type conversion. (K)
18. Explain any two `math.h` function. (A)
19. Explain any two `ctype.h` function. (A)
20. Explain any two `string.h` function. (A)
21. Mention any two functions of `stdio.h`. (A)
22. Mention any two functions of `stdlib.h`. (A)

**Three marks questions.**

1. List the character set of C++. (A)
2. Mention any three keywords. (U)
3. Name any three punctuators. (U)
4. Explain the usage of ternary operator with an example. (K)
5. Write a note on Logical operators. (K)
6. What are short hand operators? (K)
7. Mention any three functions of `stdio.h` (U)
8. Mention any three functions of `ctype.h` (U)
9. What is type casting? Explain. (U)
10. What is the purpose of `randomize()`, `random(n)`. (U)
11. Explain the difference between `getch()` and `getche()`. (S)
12. State any three rules for naming an identifier. (K)
13. Explain unary operators with examples. (K)
14. Explain escape sequences with example. (K)
15. Explain mathematical and character library functions. (K)
16. How are comments inserted in C++? (K)

**Five marks questions.**

1. What are the characteristics of C++ program? (K)
2. Explain briefly the different types of tokens. (U)
3. Write a note on different kinds of Constants. (U)
4. Summarize the rules for naming an identifier. (U)
5. Write a note on Unary operators with examples (U)
6. Explain Arithmetic operators. (U)
7. Explain Relational operators. (U)
8. What is an expression? Explain precedence of operators with suitable examples. (U)
9. Write the structure of a C++ program. (K)
10. Explain implicit and explicit type conversions with examples. (K)
11. Write the purpose of any five character functions. (K)
12. Write the purpose of any five String functions. (K)

## CHAPTER 8

### DATA TYPES

#### One mark questions:

1. Define a variable. (K)
2. Give the syntax of declaring and initializing a variable. (K)
3. Differentiate between lvalue and rvalue. (U)
4. Name the simple data types in C++. (K)
5. Write any two types of modifiers. (K)
6. What are derived data types? Give example. (K)
7. What are user-defined data types? (U)
8. What is an enumerated data type? (K)
9. Write the syntax for defining and declaring enumerated data type. (S)

#### Two mark questions:

1. Explain data types and its classification. (U)
2. Explain modifiers in detail. (U)
3. Explain enumerated data types with suitable examples (U)
4. What is a variable? Give its declaration. (K)
5. Explain lvalue and rvalue with an example. (U)
6. What is a data type? Mention the different data types. (U)
7. Explain the various data types. (U)
8. What are modifiers? Mention the different modifiers. (U)
9. What is an enumerated data type? Give an example. (U)

**CHAPTER 9**  
**INPUT AND OUTPUT OPERATORS**

**One mark questions:**

1. What is a stream insertion operator? (K)
2. What is a stream extraction operator? (K)
3. Give the other name for cin. (A)
4. Give the other name for cout. (A)
5. What is the purpose of manipulators? (K)
6. Give the header file that holds setw( ) and endl. (U)
7. What is the purpose of setw( )? (U)
8. What is the purpose of endl? (U)

**Two marks questions:**

1. Explain the input operator in C++. (U)
2. Explain the output operator in C++. (U)
3. Explain the cascading of input operators with example. (K)
4. Explain the cascading of output operators with example. (K)
5. What is input output stream? (U)
6. Write the input output statements to read and display the marks scored by a student. (A)
7. Write a C++ statement to input the heights of three students using cascading. (A)
8. Write a formatted output statement to display two numbers. (A)

**Three marks questions:**

1. Explain the cascading of input and output operators with suitable example. (A)
2. Write a C++ program to demonstrate the cout . (A)
3. Write a C++ program to find the sum of two numbers. ( A)
4. Write a C++ program to convert Fahrenheit to Celsius. (A)
5. Write a C++ program to find whether a given number is even or odd. (A)
6. Write a C++ program to find whether a given number is positive or negative. (A)
7. Write a C++ program to print multiplication table of any number (A)  
(e.g. 2\*1=2).
8. Explain (a)setw (b) setprecision (c) endl (A)
9. What is the need of formatting output? Explain with example (U)

**CHAPTER 10**  
**CONTROL STATEMENTS**

**One mark questions:**

1. What is compound statement? (K)
2. Name the fixed execution loop. (U)
3. What is iterative statement? (U)
4. What is the numerical equivalent of TRUE and FALSE? (U)
5. Name the multiple branch selection statement (U)
6. What is the purpose of else clause? (U)
7. What are the case labels? What type of labels must be used in case labels? (U)
8. Correct the following code fragment: (S/A)

```
if( x = 1 )  
    k = 100;  
else  
    k = 10;
```

**Ans: if(x==1)**

```
    k=100;  
else  
    k=10;
```

9. What is while loop also called as? (A)
10. What is do-while also called as? (A)
11. What is nested loop? (U)
12. What is the use of jump statement? (A)
13. Name the jump statement which terminates the loop. (A)
14. Name the jump statement which terminates the program. (A)
15. Why continue statement is used? (A)

**Two marks questions:**

1. What will be the output of the following code fragment? (A)

```
;  
int year  
cin>>year;  
if(year%400==0)  
cout<<"LEAP YEAR";  
else  
cout<<"Not LEAP YEAR";
```

If the input is (a)2000 (b)1900 (c) 1971?

**Ans: (a) LEAP YEAR**  
**(b) Not a LEAP YEAR**  
**(c) No Output**

2. Rewrite the following program segment using if else statement (A)  
comm=(sale>10000)? sale\*0.05 : 0;
3. Write the output of this program segment (A)

```
int ans=1,i=2;  
while(++i<6)  
ans*=i;  
cout<<ans;
```

**Ans: output will be 60**

4. What is the purpose of switch statement? (K)
5. How does the switch statement differ from if statement? (K)
6. What type of value can be taken by case labels? (K)
7. What is the significance of default clause in a switch statement? (K)
8. Define the term looping. (U)
9. Name the iteration statements provided by C++. (K)
10. What is pre-tested looping statement? (K)
11. What is post-tested looping statement? (K)
12. Rewrite the following using ternary operator (A)

```

if (income<=10000)
    tax=0;
else
    tax=12;

```

13. Name any two jump statements in C++. (K)
14. What is the function of exit( )? (K)
15. What are the nested statements? (U)
16. Write syntax of if- else statement. (K)
17. How many times will the following loop execute? what will be the output? (A)

```

int x=2, y=50;
do
{
    ++x;
    y-=x++;
}while(x<=10);
cout<<y;

```

**Ans: loop will execute 5 times and y will be 15.**

18. What will be the output of the following code? (A)

```

int p = 200;
while(true)
{
    if(p<100)
        break;
    p=p-20;
}
cout<<p;

```

**Ans: Loop will execute 7 times and the output will be 80**

19. Write a program to find the sum of odd 'N' numbers using while loop (A)
20. Compare break and continue statements. (U)

**Three marks questions:**

1. What are control statements? How are they classified? (U)
2. Explain the working of if statement with syntax and suitable example. (U)
3. Explain if else if statement with general format and suitable example. (U)
4. Explain the working of switch statement with an example. (U)
5. Write general format of while loop with a suitable example. (U)
6. Explain working of do while statement with an example. (U)

7. Differentiate between while looping and do-while looping structure. (K)  
 8. Write a program to find largest of three numbers using **IF** ladder. (A)  
 9. What is the final value of ctr when the iteration process given below: (S)

```
int ctr=0;
for(int i =1;i<=5);i++)
for(j=1;j<=5;j+=2)
++ctr;
```

**Ans: The final value of ctr is 15.**

10. Rewrite the program segment using while loop (S)

```
int i,f=1;
for(i=1;i<5;i++)
{
f*=i;
cout<<f;
}
```

11. Write a program fragment to display numbers 2, 4, 6, 8, 10, .....18, 20

Using while loop. (A)

12. Write a program segment to find the sum of 1+2+3+.....10 using do while loop. (A)

13. Explain the working of if statement with syntax and example program. (U)

#### Five marks questions:

1. What are control statements? How are they classified? (U)
2. What is the purpose of if- else statement? (U)
3. What are the nested statements? (U)
4. Write syntax of if- else statement. (K)
5. What is the purpose of switch statement? How does it differ from other statements? (U)
6. What are the case labels? What type of labels must be used in case labels? (U)
7. How many times will the following loop execute? what will be the output? (S)

```
int x=2,y=50;
do
{
++x;
y-=x++;
} while (x<=10);
cout<<y;
```

**Ans: loop will execute 5 times and y will be 15.**

8. What will be the output of the following code? (S)

```
int p = 200;
while(true)
{
if(p<100)
break;
p=p-20;
}
cout<<p;
```

**Ans: Loop will execute 7 times and the output will be 80**



9. Write a short program to test the given number is even or odd. (A)
10. Write a program to find the sum of odd 'N' numbers using while loop. (A)
11. Write a program segment to display the multiplication table of a particular number using do-while loop. (A)
12. Compare break and continue statements. (U)
13. Write a program to check whether a number is prime or not. (A)
14. Write a program to find the sum of the series  $1+1/3!+1/5!+.....1/n!$  using while loop. (A)
15. Write a program to find sum of  $1+ 1/2 + 1/3+ .....+1/n$ . (A)
16. Write a program to check whether the number is a special number or not. (A number is said to be a special, if the sum of the factorial of the digits of the number is same as the original number. (Eg,145 is special number because  $1!+4!+5!=145$ ) (A)
17. Write a program to find sum of digits of a given number using while loop. (A)
18. Write a program to find the sum of  $x/2 +x/5 + x/8..... x/20$  using do while. (A)
19. Write a program to find all the integer divisors of a given number using for loop. (A)
20. Write a program to check whether the number is Armstrong or not using for loop. (A)
21. Write a program to print Fibonacci series of N number. (A)
22. Write a program to check whether the number is palindrome or not.  
(A number is a palindrome which when read in reverse order is same as read in the right order) (A)
23. Explain switch statement with syntax and example. (K)
24. Explain jump statements in C++. (U)
25. Explain working of FOR loop with flow-chart. (U)
26. Write a program to calculate the net amount according to the criteria given below:

<b>Purchase amount</b>	<b>Discount</b>
0 to 5000	NIL
5001 to 10000	5%
>10001	10%. (S)

## CHAPTER 11 ARRAYS

### One mark questions:

1. What is an array? (U)
2. How are arrays different from normal variables? (K)
3. Define size of an array. (K)
4. What is the subscript of the first element of the array? (A)
5. What is the data type of the array subscript? (A)
6. Define one-dimensional array. (U)
7. Give the syntax of one-dimensional array declaration. (A)
8. How are one-dimensional arrays initialized? When are they declared? (A)
9. Mention the difference between an integer array and character array. (K)
10. Define two-dimensional array. (K)
11. What are multi-dimensional arrays? (k)
12. What is the use of array subscript? (K)
13. Write the syntax of multi-dimensional array. (A)
14. Write an example of one-dimensional array. (A)

### Two marks questions:

1. Why do we use an array? (U)
2. What are the advantages of arrays over normal variables? (S)
3. What are the operations on arrays? (U)
4. What is the significance of subscript in an array? (U)
5. How are two dimensional arrays initialized when they are declared? (K)
6. Write the program to read and write the elements of one dimensional array. (S)
7. How do you initialize two-dimensional arrays? (A)
8. Write C++ program to input the elements of two-dimensional array and display it. (S)
9. Give the syntax and example of one – dimensional array. (A)
10. Give the syntax and example of two – dimensional array. (A)
11. Give the syntax and example of multi – dimensional array. (A)
12. How do you access one – dimensional array elements? Give example. (S)
13. How do you access two – dimensional array elements? Give example. (S)

### Three marks questions:

1. What are the operations on arrays? (U)
2. Name the different types of arrays. (K)
3. Give the difference between one-dimensional array and two-dimensional array. (U)
4. How are individual elements of two-dimensional array accessed? (A)
5. Explain memory representation of one-dimensional array. (A)
6. Explain memory representation of two-dimensional array. (A)
7. How do you initialize one-dimensional array? (S)
8. How do you initialize two-dimensional array? (S)
9. Write a program to find total and average of an array containing N elements. (S)
10. Write a program to check whether the matrix is square or rectangular. (S)

**Five marks questions:**

1. What is an array? Explain different types of array? (A)
2. Write a C++ program to search an element in the array. (A)
3. Write a C++ program to find the minimum and maximum element of an array. (A)
4. Write a C++ program to find the position of an element from the array. (A)
5. Write a C++ program to sort the elements of one-dimensional array. (A)
6. Write a C++ program to find the sum of all positive and negative numbers. (A)
7. Write a C++ program to find the sum of two matrices. (A)
8. Write a C++ program to find the transpose of a matrix. (A)
9. Write a C++ program to find the product of two compatible matrices. (A)
10. Write a C++ program to find the row-sum and column-sum of a matrix. (A)
11. Write a C++ program to determine whether the matrix is a scalar matrix. (A)
12. Write a C++ program to find sum all the elements of a one-dimensional array. (A)

## CHAPTER 12 FUNCTIONS

### One mark questions:

1. What is standard library function?(U)
2. What is a function? (U)
3. Why is C++ standard library required? (K)
4. What are the different types of functions? (U)
5. Give an example of header file? (U)
6. Write any one library function of iomanip.h (A)
7. Define character array. (U)
8. Write the syntax to declare a string. (U)
9. Write any one library function of file string.h (A)
10. Write the syntax of getline() function. (U)
11. Write any one function of the header file ctype.h (K)
12. Write one function of the header file math.h (K)
13. Give the syntax of get() function. (U)
14. Give the syntax of put() function. (U)
15. Why do we use pow() function? (S)
16. Define user-defined function. (K)
17. Name any one function to generate pseudo-random number. (S)
18. Name the header file to be included, to use the functions for generation of random numbers. (S)

### Two marks questions:

1. What is standard library? (U)
2. What is a function? (U)
3. What are the different types of functions? (U)
4. Define character array (U)
5. Write the syntax to declare a string (U)
6. Write any two library functions of header file String.h (A)
7. Write the syntax of getline() function (A)
8. Write any two functions of header file ctype.h (K)
9. Write two functions of the header file math.h (S)
10. Give the syntax of get() function. (A)
11. Give the syntax of put() function. (A)
12. Why do we use pow() function? (A)
13. Define user defined function. (K)
14. How do we display a string using write() function? (A)
15. What is string concatenation? What function is used to achieve this operation? (A)
16. Distinguish between islower() and tolower() functions. (A)
17. Distinguish between strcmp() and strcmpi() functions. (A)
18. Write the difference between toupper() and isupper(). (A)
19. What are the different types of values strcmp() function return? (A)

## CHAPTER 13

### USER DEFINED FUNCTIONS

#### One mark questions:

1. What is a user-defined function? (U)
2. How is a function invoked? (K)
3. What does the keyword void represent? (U)
4. What are actual arguments? (K)
5. What are formal arguments? (K)
6. What are global variables? (U)
7. What are local variables? (U)
8. Give the syntax and use of return() statement. (A)
9. How many expressions can be included in a return statement? (A)
10. What is a function prototype? Give syntax (K)
11. What is scope of a variable? (U)
12. What is the use of scope resolution operator? (A)
13. Define recursion. (U)

#### Two marks questions:

1. Differentiate between library function and user-defined function. (K)
2. How do we call a function? Give the syntax of function call statement. (U)
3. Distinguish between actual parameter and formal parameter. (K)
4. Distinguish between local variable and global variable. (K)
5. What is a function prototype? When is a function prototype necessary? (S)
6. Name the different categories of functions. (U)
7. What are the uses of default arguments? (U)
8. Name the methods of calling a function. (S)

#### Three marks questions:

1. What are the advantages of functions? (U)
2. Explain the structure of function with an example. (K)
3. Write a C++ program to find the greatest of three numbers using function. (A)
4. Write a C++ program to find the cube of a number using function. (A)
5. Illustrate the use of scope of variables with an example. (S)
6. Explain the method of passing default arguments to a function. (U)
7. Explain recursive function. (U)
8. Explain the method of passing constant arguments to a function. (K)
9. Explain pass by value method of calling a function. (K)
10. Explain pass by reference method of calling a function. (K)
11. Explain the method of passing an array to a function. (U)
12. Explain the method of passing structure to a function. (U)

**Five marks questions:**

1. Explain the structure of the function with an example program. (U)
2. Write a C++ program to find the cube of a number using function. (A)
3. Explain pass by value method of calling a function. (K)
4. Explain pass by reference method of calling a function (K)
5. Explain the method of passing an array to a function. (A)
6. Explain the method of passing structure to a function. (A)
7. Explain the scope of a variable with an example. (K)
8. Explain the working of function with no arguments and no return values with an example. (A)
9. Explain the working of function with arguments and no return values with an example. (A)
10. Explain the working of function with no arguments and with return values with an example. (A)
11. Explain the working of function with arguments and with return values with an example. (A)
12. Explain the following terms: (K)
  - (a) Function prototype
  - (b) Actual argument
  - (c) Function call
  - (d) Formal argument
  - (e) return statement
13. Compare call by value and call by reference. (K)

## CHAPTER 14 STRUCTURES

### One mark questions:

1. Define a structure. (U)
2. Give a difference between an array and a structure. (U)
3. Does the definition of a structure create memory space? (K)
4. Create the structure definition that contains the information of a student. (A)
5. Why is the keyword struct used? (K)
6. How are the members of a structure accessed? (S)
7. What is the use of dot operator? (A)
8. How do we initialize a structure? (A)
9. What distinguishes an array from a structure? (K)
10. Define an array of structures. (U)
11. Why is an array of structures used? (K)
12. Can a structure have the elements of same data type? (S)

### Two marks questions:

1. When do we use structures? (U)
2. How do define a structure? (U)
3. How do we declare a structure? Give an example. (A)
4. Differentiate between structure definition and structure declaration. (K)
5. Declare a structure that contains the data of a student. (S)
6. Declare a structure that contains the data of all the employees. (S)
7. How are the elements of a structure accessed? Give an example. (A)
8. How do we initialize a structure? Give an example. (A)
9. What are nested structures? Give an example. (U)

### Three marks questions:

1. Define structure. Write its syntax. (U)
2. Create a structure definition to store data of a student. (U)
3. Why is the keyword struct used? How do we initialize structure? (U)
4. Differentiate between structure definition and structure declaration with example. (U)
5. What do you mean by nesting of structures? Give an example. (U)
6. What is the use of dot operator? Give an example. (A)
7. How do you access members of a structure? (A)

**CHAPTER 15**  
**WORD PROCESSING**

**One mark questions:**

1. What is word processor? (U)
3. Give one important activity that is performed by a word processor. (U)
4. What does the tile bar contain? (U)
5. What information is present on the ruler bar? (U)
6. What is a menu? (U)
7. What is the extension of the word processor file? (U)
8. What happens when the left button of the mouse is clicked twice on a word? (U)
9. How do we convert data to bold using formatting toolbar? (U)
10. Which are the standard alignments used in word processor? (U)
11. What is the use of the font dialog box? (U)
12. What are bullets? (U)
13. What is a header? (U)
14. What is a footer? (U)

**Two marks questions :**

1. Give any two advantages of word processors? (A)
2. Name any two popularly used word processors. (U)
3. Explain the usage of scroll bar and status bar? (U)
4. Give the steps for opening a new file in word processor. (S)
6. Write the difference between save as and save. (U)
7. Give the steps for opening an existing document. (A)
8. Explain the different methods of selecting text with the mouse. (A)
9. Explain any two options of the formatting toolbar in detail? (A)
10. Explain the option of copy in detail. (A)
11. Explain the option of copy and paste. (A)
12. How do we perform the undo operation? (A)
13. How to select the complete text? (A)
14. What are tables in word processor? (U)
15. How to insert page numbers? (A)
16. What is indentation? (K)
17. What is the use of header and footer? (K)

**Three marks questions:**

1. Explain GUI windows screen in detail. (A)
2. Write the advantages of GUI. (K)
3. What are the advantages of word processor over a manual system? (K)
4. Explain the screen layout in detail that a word processor can perform. (A)
5. Explain the screen layout in detail with suitable illustrations. (S)
6. Give the steps involved in creating a new word processor document. (S)
7. Explain the contents of the formatting toolbar. (K)
8. Explain the process of setting the paragraph attributes. (S)



9. How do we include bullets and numbers of different types in a document? (S)
10. Explain the process of setting the page margins in details. (S)
11. Explain the spelling and grammatical mistakes in a document. (S)
12. Give the steps involved and the options in finding and replacing text. (S)
13. Explain the steps involved in inserting the images. (S)
14. How to implement page border's in a word processor? (S)
15. Explain the Mail merge operation. (K)
16. Write the shortcut for the following: (K)
  - (a) Bold (b) Italics (c) Underline
17. How to insert a table in word-processor? (S)

**CHAPTER 16**  
**SPREADSHEET**

**One mark questions:**

1. Expand ESS? (U)
2. What is a spread sheet? (U)
3. What is workbook? (U)
4. What is an absolute reference? (K)
5. What is a relative reference? (K)
6. Give an example for spreadsheet. (K)
7. What is a work sheet? (U)
8. How many rows and columns are present in a worksheet? (A)
9. What is cell? (U)
10. What is cell address? (U)
11. What is cell pointer? (U)
12. What is the use of formula? (A)
13. Give the format of entering date in a worksheet by default? (A)
14. Why is the auto format option used? (U)
15. How do we include a formula in a worksheet? (S)
16. What is a chart? (U)
17. What is the advantage of using a chart wizard? (U)

**Two marks questions:**

1. What is the purpose of using ESS? (K)
2. Give any two features of spread sheet. (K)
3. Explain the terms cell, cell address with suitable example. (U)
4. What are the steps to activate ESS? (S)
5. What are the types of data used in ESS? (U)
6. Explain the steps used to add rows and columns to a worksheet. (S)
7. What is the range of numbers possible in a worksheet with version? (A)
8. Explain the steps used to change the size of rows and columns in a worksheet. (S)
9. Explain the steps of using the auto format option. (S)
10. Explain the use of any two mathematical functions with suitable examples. (A)
11. Explain the use of any two statistical functions with suitable examples. (A)
12. Explain the use of any two financial functions with suitable examples. (A)
13. Explain the use of any two text functions with suitable examples. (A)
14. Classify the types of graph? (K)
15. What is data form? (U)

**Three marks questions:**

1. Give the area ESS is used in detail. (A)
2. Give the features of a spreadsheet. (U)
3. Explain the screen layout of a worksheet in detail. (A)
4. Explain the options of the standard toolbar in detail. (A)
5. Explain in detail the types of data and the range of values that can be used in a worksheet. (K)

6. Explain the various options of the formatting toolbar. (K)
7. Explain the use of the various statistical functions with suitable example. (A)
8. Explain the use of financial functions with suitable examples (A)
9. Explain the steps involved in drawing a chart. (S)
10. How can data from the other packages be imported in ESS? (S)

**Five marks questions:**

1. Give the features of a spreadsheet. (U)
2. Explain the screen layout of a worksheet in detail. (U)
3. Explain the steps involved in drawing a chart. (U)
4. How can data from the other packages be imported in ESS? (U)
5. Explain the default alignments text and numerical with examples. (U)
6. Explain any five built-in functions in detail. (U)
7. State the use of the following functions. (U)  
(a) max (b) min (c) sum (d) average (e) if
8. State the purpose of the following functions. (U)  
(a) Date (b) Day (c) Now (d) Today (e) Year

## CHAPTER 17

### WEB DESIGNING

#### **One mark questions:**

1. Define internet. (U)
2. Define browser. (U)
3. Mention any one of the services of the internet. (A)
4. What is world wide web? (U)
5. What is e-mail? (U)
6. Mention any one advantage of e-mail. (A)
7. Mention any one disadvantage of e-mail. (A)
8. What is virus? (U)
9. What is spam? (U)
10. What is hacking? (U)
11. What are newsgroup? (U)
12. What is e-commerce? (U)
13. What is chatting? (U)
14. What is a gopher? (U)
15. What is telnet? (U)
16. Expand FTP. (K)
17. What is FTP? (U)
18. What is a webpage? (U)
19. What is a website? (U)
20. What is http? (K)
21. Expand http. (K)
22. What is DNS? (K)
23. Expand DNS. (K)
24. What is URL? (U)
25. Expand URL. (K)
26. What is a search engine? (U)
27. What is surfing of net? (U)
28. Expand HTML. (K)
29. Mention any one tag in HTML. (A)
30. Which tag is used to display a list? (A)

#### **Two marks questions:**

1. Briefly explain internet. (U)
2. Mention any two services of internet. (K)
3. Explain www and email. (U)
4. Mention any two advantages of e-mail. (A)
5. Mention any two disadvantages of e-mail. (A)
6. Briefly explain FTP and Telnet. (K)
7. Briefly explain chatting and gopher. (K)
8. Briefly explain www. (K)
9. Briefly explain webpage. (K)
10. Briefly explain web browser. (K)

11. Briefly explain http. (K)
12. Briefly explain DNS. (K)
13. Briefly explain URL. (K)
14. Briefly explain search engine. (K)
15. Briefly explain surfing. (K)
16. Briefly explain HTML. (K)
17. Explain any two tags in HTML. (A)
18. Explain any two formatting tags in HTML. (A)
19. Explain lists in HTML. (A)
20. Which tag is used for hyperlink? (A)

**Three marks questions:**

1. Explain any three services of internet. (A)
2. Explain any three benefits of email. (A)
3. Explain the disadvantages of email. (A)
4. Explain www and webpage in detail. (K)
5. Explain website and web browser. (K)
6. Explain http and DNS. (K)
7. Explain URL and search engines. (K)
8. Explain the structure of a HTML tag page. (A)
9. Explain the basic tags in HTML. (A)
10. Explain the formatting tags in HTML. (A)

**Five marks questions:**

1. Explain in detail the services of internet. (K)
2. Explain the various benefits of email. (K)
3. Explain the following terms in web technology. (K)  
(a) gopher (b) telnet (c) web browser (d) URL (e) search engine
4. Define the following terms: (K)  
(a) domain (b) http (c) webpage (d) website (e) www
4. Explain the structure of a HTML tag page with an example. (A)
5. Explain the basic tags in HTML. (K)
6. Explain the formatting tags in HTML. (K)
7. Design a web page to demonstrate the ordered lists. (A)
8. Design a web page to display your details on a web page. (A)
9. Name the tag to perform the following functions. (K)  
(a) use to scroll the text  
(b) use to hyperlink  
(c) use to insert an image  
(d) use to change background color  
(e) use to change text style
10. Write the function of the following tags: (K)  
(a) <OL> (b) <B> (c) <BR> (d) <P> (e) <H2>

## QUESTION BANK PREPARATION COMMITTEE

The Committee comprises of:

**Smt. Sharon Mednora**

**Chairperson**

Govt. PU College for Boys,  
18<sup>th</sup> Cross, Malleshwaram, Bengaluru

**Smt. Farhathunissa Ansari**

**Reviewer**

St. Germain PU College,  
Frazer Town, Bengaluru

**Smt. Neelima Ganesh**

**Member**

Vidyamandir PU College,  
11th Cross, Malleshwaram, Bengaluru

**Smt. Janet Mary**

**Member**

St. Ann's PU College,  
2, Millers Road, Bengaluru

**Smt. Bhuvaneshwari Ankalagi**

**Member**

Govt PU college,  
Yelahanka, Bengaluru