

**CHRIST THE KING BOYS MATRIC HR. SEC. SCHOOL,  
KUMBAKONAM – 612 001.**

**STD: XI****MARKS: 70****SUB: COMPUTER SCIENCE****TIME: 2.30 MINS****HALF – YEARLY MODEL QUESTION PAPER – 1****PART – I****I. CHOOSE THE CORRECT ANSWER:****15\*1=15**

1. \_\_\_\_\_ Output device is used for printing building plan, flex board, etc.  
a) Thermal printer      b) Plotter      c) Dot matrix      d) Inkjet printer
2. How many characters can be handled in Binary Coded Decimal System?  
a) 64      b) 255      c) 256      d) 128
3. Which is the fastest memory?  
a) Hard disk      b) Main memory      c) Cache memory      d) Blue-Ray
4. The process of converting cipher text to plain text is called  
a) Encryption      b) Decryption      c) Key      d) Proxy server
5. The type of inheritance that reflects the transitive nature is  
a) Single Inheritance      b) Multiple Inheritance      c) Multilevel Inheritance      d) Hybrid Inheritance
6. The member function defined within the class behave like  
a) Inline functions      b) Non inline function      c) Outline function      d) Data function
7. “Write once and use it multiple time” can be achieved by  
a) Redundancy      b) Reusability      c) Modification      d) Composition
8. Array subscript always starts with which number?  
a)-1      b) 0      c) 2      d) 3
9. Which of the following is the scope operator?  
a) >      b) &      c) %      d) ::
10. The set of statements that are executed again and again in iteration is called as:  
a) Condition      b) Loop      c) Statement      d) Body of loop
11. The smallest individual unit in a program is:  
a) Program      b) Algorithm      c) Flowchart      d) Tokens
12. Which of the following activities is algorithmic in nature?  
a) Assemble a bicycle.      b) Describe a bicycle.  
c) Label the parts of a bicycle.      d) Explain how a bicycle works.
13. How many times the loop is iterated?  
 $i := 0$  while  $i \neq 5$   $i := i + 1$   
a) 4      b) 5      c) 6      d) 0

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14. If  $m \times a + n \times b$  is an invariant for the assignment  $a, b := a + 8, b + 7$ , the values of  $m$  and  $n$  are  
 a)  $m = 8, n = 7$                       b)  $m = 7, n = -8$                       c)  $m = 7, n = 8$                       d)  $m = 8, n = -7$
15. Suppose  $u, v = 10, 5$  before the assignment. What are the values of  $u$  and  $v$  after the sequence of assignments?  
 1  $u := v$   
 2  $v := u$   
 a)  $u, v = 5, 5$                       b)  $u, v = 5, 10$                       c)  $u, v = 10, 5$                       d)  $u, v = 10, 10$

**PART – II**

**II. ANSWER ANY 6 QUESTIONS: (Q.No.19 Compulsory)**

**6\*2=12**

16. Define Boolean algebra
17. What is Microprocessor?
18. What is GUI?
19. What is meant by Parameter? What are the types of Parameters?
20. What are the Symbols in Flowchart?
21. What is Anonymous Structure? Give Example?
22. What is Paradigm? Mention the different types of Paradigm?
23. Define Operator Overloading
24. List the Search Engines supporting Tamil?

**PART – III**

**III. ANSWER ANY 6 QUESTIONS: (Q.No.30 Compulsory)**

**6\*3=18**

25. What are the types of Memory?
26. Differentiate the Cut and Copy in files and folders?
27. Write the parts of the Specification format?
28. What are the benefits of learning C++?
29. What are the kinds of statements are there in C++?
30. Define the following Character Functions in C++: a) `isdigit()`    b) `islower()`    c) `isupper()`
31. How many access specifiers are there in Class?
32. What are the following points should be observed for defining the derived class?
33. What is Proxy Servers?

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**PART – IV**

**IV. ANSWER THE FOLLOWING QUESTIONS:**

**5\*5=25**

34. a) Explain the basic components of a computer with a neat diagram?

**[OR]**

b) Explain the Characteristics of Microprocessor?

35. a) What are the Elements of a Window? Explain it briefly?

**[OR]**

b) Write the specification of an algorithm hypotenuse whose inputs are the lengths of the two shorter sides of a right angled triangle, and the output is the length of the third side.

36. a) What are the different types of Errors in Dev C++?

**[OR]**

b) Explain Switch Statement with an example?

37. a) Define Scope? Explain the various types of scopes in C++ language?

**[OR]**

b) Mention the differences between constructor and destructor

38. a) What is Function overloading? Explain with an example?

**[OR]**

b) Define Inheritance. Explain the different types of inheritance?

**// ALL THE BEST**

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**STD: XI****MARKS: 70****SUB: COMPUTER SCIENCE****TIME: 2.30 MINS****HALF – YEARLY MODEL QUESTION PAPER – 2****PART – I****I. CHOOSE THE CORRECT ANSWER:****15\*1=15**

1. When a system restarts \_\_\_\_\_ which type of booting is used.  
a) Warm booting                      b) Cold booting                      c) Touch boot                      d) Real boot.
2. Which is a basic electronic circuit which operates on one or more signals?  
a) Boolean algebra                      b) Gate                      c) Fundamental gates                      d) Derived gates
3. Which of the following is said to be the brain of a computer?  
a) Input devices                      b) Output devices                      c) Memory device                      d) Microprocessor
4. Identify the usage of Operating Systems  
a) Easy interaction between the human and computer                      b) Controlling input & output Devices  
c) Managing use of main memory                      d) All the above
5. A computer network security that monitors and controls incoming and outgoing traffic is  
a) Cookies                      b) Virus                      c) Firewall                      d) Worms
6. Which visibility mode should be used when you want the features of the base class to be available to the derived class but not to the classes that are derived from the derived class?  
a) Private                      b) Public                      c) Protected                      d) All of these
7. Which of the following Access Specifier protects data from inadvertent modifications?  
a) Private                      b) Protected                      c) Public                      d) Global
8. Insulation of the data from direct access by the program is called as  
a) Data hiding                      b) Encapsulation                      c) Polymorphism                      d) Abstraction
9. By default, the string ends with which character?  
a) \0                      b) \t                      c) \n                      d) \b
10. How many times the following loop will execute? for (int i=0; i<10; i++)  
a) 0                      b) 10                      c) 9                      d) 11
11. Who developed C++?  
a) Charles Babbage                      b) Bjarne Stroustrup                      c) Bill Gates                      d) Sundar Pichai
12. Stating the input property and the as:-output relation a problem is known  
a) Specification                      b) Statement                      c) Algorithm                      d) Definition
13. A loop invariant need not be true  
a) At the start of the loop.                      b) At the start of each iteration

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- c) At the end of each iteration d) At the start of the algorithm
14. Which of the following properties is true after the assignment (at line3)?
- 1 --  $i+j = 0$   
 2  $i, j := i+1, j-1$   
 3 -- ?
- a)  $i+j > 0$  b)  $i+j < 0$  c)  $i+j = 0$  d)  $i = j$
15. If C1 is false and C2 is true, the compound statement
- 1 if C1  
 2 S1  
 3 else  
 4 if C2  
 5 S2  
 6 else  
 7 S3 executes
- a) S1 b) S2 c) S3 d) none

**PART – II**

**II. ANSWER ANY 6 QUESTIONS: (Q.No.22 Compulsory)**

**6\*2=12**

16. What is Base or Radix in the Number System?
17. What is Program Counter?
18. Define Double Dash
19. Write down the Syntax for declaring one – dimensional Array?
20. Define the following Mathematical Functions in C++: a) pow() b) sqrt()
21. What are the Functions of Constructor?
22. What are the Advantages of Inheritance?
23. Define Warez
24. What is E-Governance?

**PART – III**

**III. ANSWER ANY 6 QUESTIONS: (Q.No.25 Compulsory)**

**6\*3=18**

25. Define the following Output Devices: a) Plotter b) Multimedia Projector c) Speaker
26. What are the types of Operating System?
27. Define Recycle bin. How to restore the file and folders from the Recycle Bin?

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28. What is the difference between Continue and Break Statement?
29. Define Identifier. What are the Rules for Naming Identifier?
30. What are the different types of Function?
31. List some important features of Procedural Programming?
32. How many methods are there to create the Objects in C++?
33. What are the Rules for Function Overloading?

**PART – IV**

**IV. ANSWER THE FOLLOWING QUESTIONS:**

**5\*5=25**

34. a) What are the different types of ROM?

**[OR]**

- b) Explain the Algorithms that are used to allocate the Job?

35. a) What are the methods to Rename the Files or Folders?

**[OR]**

- b) Exchange the contents: Given two glasses marked A and B. Glass A is full of apple drink and glass B is full of grape drink. Write the specification for exchanging the contents of glasses A and B, and write a sequence of assignments to satisfy the specification.

36. a) Write about the Binary Operators used in C++?

**[OR]**

- b) Explain the While Loop with Syntax and Example?

37. a) Describe the Inline Function with Syntax, Advantages and program?

**[OR]**

- b) Write a C++ program to find the difference between two matrices?

38. a) What are the Rules of Operator Overloading?

**[OR]**

- b) Explain the different visibility mode through pictorial representation

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**STD: XI****MARKS: 70****SUB: COMPUTER SCIENCE****TIME: 2.30 MINS****HALF – YEARLY MODEL QUESTION PAPER – 3****PART – I****I. CHOOSE THE CORRECT ANSWER:****15\*1=15**

1. In ATM machines, which one of the following is used to
  - a) Touch Screen
  - b) Speaker
  - c) Monitor
  - d) Printer
2. Which refers to the number of bits processed by a computer's CPU?
  - a) Byte
  - b) Nibble
  - c) Word length
  - d) Bit
3. Display devices are connected to the computer through.
  - a) USB port
  - b) PS/2 port
  - c) SCSI port
  - d) VGA connector
4. Which of the following is not a function of an Operating System?
  - a) Process Management
  - b) Memory Management
  - c) Security management
  - d) Compiler Environment
5. Distributing unwanted e-mail to others is called.
  - a) Scam
  - b) Spam
  - c) Fraud
  - d) Spoofing
6. Which of the following is the process of creating new classes from an existing class?
  - a) Polymorphism
  - b) Inheritance
  - c) Encapsulation
  - d) super class
7. What happens when a class with parameterized constructors and having no default constructor is used in a program and we create an object that needs a zero-argument constructor?
  - a) Compile-time error
  - b) Domain error
  - c) Runtime error
  - d) Runtime exception
8. Which of the following supports the transitive nature of data?
  - a) Inheritance
  - b) Encapsulation
  - c) Polymorphism
  - d) Abstraction
9. When accessing a structure member, the identifier to the left of the dot operator is the name of
  - a) Structure Variable
  - b) Structure Tag
  - c) Structure Member
  - d) Structure Function
10. Which of the following function is with a return value and without any argument?
  - a) x=display(int, int)
  - b) x=display()
  - c) y=display(float)
  - d) display(int)
11. In C++, the group of statements should enclose within:
  - a) { }
  - b) [ ]
  - c) ( )
  - d) <>
12. Which of the following operator is extraction operator of C++?
  - a) >>
  - b) <<
  - c) <>
  - d) ^^

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13. If  $i = 5$  before the assignment  $i := i-1$  after the assignment, the value of  $i$  is  
 a) 5                                      b) 4                                      c) 3                                      d) 2
14. Which of the following is not an invariant of the assignment?  $m, n := m+2, n+3$   
 a)  $m \bmod 2$                               b)  $n \bmod 3$                               c)  $3 \times m - 2 \times n$                               d)  $2 \times m - 3 \times n$
15. If  $C$  is false just before the loop, the control flows through  
 1 S1  
 2 while  $C$   
 3 S2  
 4 S3  
 a) S1 ; S3                              b) S1 ; S2 ; S3                              c) S1 ; S2 ; S2 ; S3                              d) S1 ; S2 ; S2 ; S2 ; S3

**PART – II**

**II. ANSWER ANY 6 QUESTIONS: (Q.No.21 Compulsory)**

**6\*2=12**

16. Define IPO Cycle
17. What is meant by Access Time or Response Time?
18. Define sizeof () operator
19. What is If – else Statement?
20. What is the prototyping information provided to the compiler?
21. Define Two – Dimensional Array with Example
22. Differentiate Classes and its Objects?
23. What is the Need for Function Overloading?
24. What is the Tamil Office Automation Applications?

**PART – III**

**III. ANSWER ANY 6 QUESTIONS: (Q.No.28 Compulsory)**

**6\*3=18**

25. Define the following Terms: a) Bit                                      b) Nibble                                      c) Word Length
26. What is meant by Multitasking and Desktop?
27. Difference between Algorithm and a Process?
28. Describe the Type Conversion and its types?
29. Define Continue Statement
30. Write a note on Default Arguments?
31. How many methods are there to define the Methods of a Class?
32. Define Base Class and Derived Class



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33. Define Cracking and Hacking

**PART – IV**

**IV. ANSWER THE FOLLOWING QUESTIONS:**

**5\*5=25**

34. a) Discuss the various generations of computers.

**[OR]**

b) Find 1's Complement and 2's Complement for the following Decimal number

i) -98

ii) -135

35. a) Explain how to Copying Files and Folders to removable disk?

**[OR]**

b) Decanting problem. You are given three bottles of capacities 5 ,8, and 3 litres. The 8L bottle is filled with oil, while the other two are empty. Divide the oil in 8L bottle into two equal quantities. Represent the state of the process by appropriate variables. What are the initial and final states of the process? Model the decanting of oil from one bottle to another by assignment. Write a sequence of assignments to achieve the final state.

36. a) What are the main steps to create and execute the C++ program?

**[OR]**

b) What are the parts of the Loop in the Iteration Statement?

37. a) Explain the For Loop with Syntax and Example?

**[OR]**

b) Explain the Call by Reference method with Program?

38. a) Write the differences between Object Oriented Programming and procedural programming?

**[OR]**

b) What are the various crimes happening using computer?

**// ALL THE BEST**

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**STD: XI****MARKS: 70****SUB: COMPUTER SCIENCE****TIME: 2.30 MINS****HALF – YEARLY MODEL QUESTION PAPER – 4****PART – I****I. CHOOSE THE CORRECT ANSWER:****15\*1=15**

1. Which one of the following is the main memory?  
a) ROM                                      b) RAM                                      c) Flash drive                                      d) Hard disk
2. Expansion for ASCII  
a) American School Code for Information Interchange  
b) American Standard Code for Information Interchange  
c) All Standard Code for Information Interchange  
d) American Society Code for Information Interchange
3. Which of the following is a CISC processor?  
a) Intel P6                                      b) AMD K6                                      c) Pentium III                                      d) Pentium IV
4. \_\_\_\_\_ is a typical rectangular area in an application or a document.  
a) Window                                      b) Application Window                                      c) Document Window                                      d) None of these
5. Interactive Operating System provides  
a) Graphics User Interface (GUI)                                      b) Data Distribution  
c) Security Management                                      d) Real Time Processing
6. Which of the following is not a malicious program on computer systems?  
a) Worms                                      b) Trojans                                      c) Spyware                                      d) Cookies
7. Which of the following derives a class student from the base class school?  
a) school: student                                      b) class student : public school  
c) student : public school                                      d) class school : public student
8. Which of the following operator is by default overloaded by the compiler?  
a) \*                                      b) +                                      c) +=                                      d) ==
9. Which of the following is a user defined data type?  
a) Class                                      b) Float                                      c) Int                                      d) Object
10. int age[]={6,90,20,18,2}; How many elements are there in this array?  
a) 2                                      b) 5                                      c) 6                                      d) 4
11. Which is return data type of the function prototype of add(int, int);?  
a) int                                      b) float                                      c) char                                      d) double

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12. The multi way branching statement:  
a) if    b) if ... else    c) switch    d) for
13. What was the original name given to C++?  
a) CPP    b) Advanced C    c) C with Classes    d) Class with C
14. Omitting details inessential to the task and representing only the essential features of the task is known as  
a) Specification    b) Abstraction    c) Composition    d) Decomposition
15. We wish to cover a chessboard with dominoes, the number of black squares and the number of white squares covered by dominoes, respectively, placing a domino can be modeled by  
a)  $b := b + 2$     b)  $w := w + 2$     c)  $b, w := b+1, w+1$     d)  $b := w$

**PART – II**

**II. ANSWER ANY 6 QUESTIONS: (Q.No.22 Compulsory)**

**6\*2=12**

16. Write the steps to be followed to find 2's complement of a number?
17. Define Word pad
18. What is Input – Output relation?
19. What are the Advantages of float type?
20. What is Scope Resolution Operator?
21. Define Destructor
22. List the Operators that cannot be overloaded in C++?
23. What is Computer Ethics?
24. Define Unicode

**PART – III**

**III. ANSWER ANY 6 QUESTIONS: (Q.No.28 Compulsory)**

**6\*3=18**

25. What are the types of Booting?
26. What is Cache Memory?
27. What are the main uses of Operating System?
28. What are the types of Window?
29. What is Infinite Loop and Empty Loop?
30. Define the following String Functions in C++: a) strcpy()    b) strlen()    c) strcat()
31. What are Row Major Order and Column Major Order?
32. List some important features of Modular Programming?

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33. What are called Accessibility or Visibility Modes in C++ program?

**PART – IV**

**IV. ANSWER THE FOLLOWING QUESTIONS:**

**5\*5=25**

34. a) Explain the Various Input Devices?

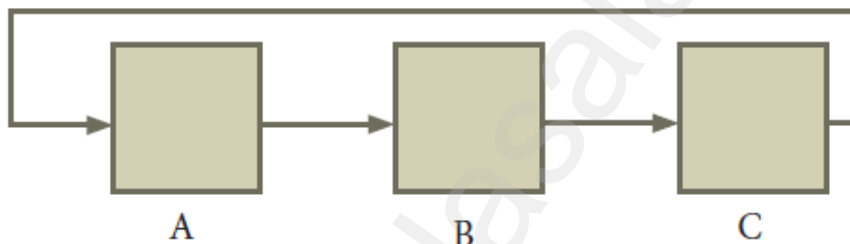
**[OR]**

b) Explain the Secondary Storage Devices?

35. a) Describe the Various Versions of Windows?

**[OR]**

b) Circulate the contents: Write the specification and construct an algorithm to circulate the contents of the variables A, B and C as shown below: The arrows indicate that B gets the value of A, C gets the value of B and A gets the value of C.



36. a) What are the basic elements of the C++ program?

**[OR]**

b) Describe the Key Differences between if – else and switch?

37. a) Explain the Call by Value method with Program?

**[OR]**

b) Describe the main features of Object Oriented Programming?

38. a) Define Constructor. Explain the Characteristics of Constructors?

**[OR]**

b) What is piracy? Mention the types of piracy? How can it be prevented?

**// ALL THE BEST**

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**STD: XI****MARKS: 70****SUB: COMPUTER SCIENCE****TIME: 2.30 MINS****HALF – YEARLY MODEL QUESTION PAPER – 5****PART – I****I. CHOOSE THE CORRECT ANSWER:****15\*1=15**

1. Expand POST
  - a) Post on self Test      b) Power on Software Test      c) Power on Self Test      d) Power on Self Text
2. How many bytes does 1 Kilo Byte contain?
  - a) 1000      b) 8      c) 4      d) 1024
3. What is the capacity of 12cm diameter DVD with single sided and single layer?
  - a) 4.7 GB      b) 5.5 GB      c) 7.8GB      d) 2.2 GB
4. Commercial programs made available to the public illegally are known as
  - a) Freeware      b) Warez      c) Free software      d) Software
5. Which amongst the following is executed in the order of inheritance?
  - a) Destructor      b) Member function      c) Constructor      d) Object
6. The variables declared inside the class are known as data members and the functions are known as
  - a) Data functions      b) Inline functions      c) Member Functions      d) attributes
7. Which of the following is the most important advantage of inheritance?
  - a) Data hiding      b) Code reusability      c) Code modification      d) Accessibility
8. Structure definition is terminated by
  - a) :      b) }      c) ;      d) ::
9. Which function begins the program execution?
  - a) isalpha()      b) isdigit()      c) main()      d) islower()
10. A loop that contains another loop inside its body:
  - a) Nested loop      b) Inner loop      c) Inline loop      d) Nesting of loop
11. Which of the following is a valid string literal?
  - a) 'A'      b) 'Welcome'      c) 1232      d) "1232"
13. If  $0 < i$  before the assignment  $i := i-1$  after the assignment, we can conclude that
  - a)  $0 < i$       b)  $0 \leq i$       c)  $i = 0$       d)  $0 \geq i$
14. At the bottom of the screen is a horizontal bar called the \_\_\_\_\_
  - a) Title Bar      b) Menu Bar      c) Scroll Bar      d) Taskbar
15. \_\_\_\_\_ is a set of programs to perform specific task.
  - a) Software      b) System Software      c) Application Software      d) OS

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## PART – II

### II. ANSWER ANY 6 QUESTIONS: (Q.No.19 Compulsory)

6\*2=12

16. Write a note on ASCII?
17. What is parallel processing?
18. List some of the Operating Systems?
19. Define Goto Statement
20. What is the difference between endl and '\n'?
21. Define gets() and puts() function
22. Define Encapsulation or Data Binding
23. What is meant by Function Overloading?
24. List the Tamil Keyboard Interface?

## PART – III

### III. ANSWER ANY 6 QUESTIONS: (Q.No.27 Compulsory)

6\*3=18

25. Define the following Input Devices: a) Digital Camera b) Bar Code Reader c) QR Code Reader
26. How many types of accessing methods to access the memory?
27. Write the specification of the algorithm to find the square root of the number?
28. What is difference between algorithm and a program?
29. What is Dynamic Initialization? Give an Example?
30. What are the types of Array?
31. Write the Syntax for defining the Outline Member Function?
32. What is meant by Overriding?
33. What is meant by Software Piracy?

## PART – IV

### IV. ANSWER THE FOLLOWING QUESTIONS:

5\*5=25

34. a) i) Write the procedure to convert fractional Decimal to Binary  
ii) Convert (98.46)<sub>10</sub> to Binary

[OR]

- b) Explain the Fundamental Gates with Truth Table and Symbol?

35. a) Explain the Ports and Interfaces?

[OR]

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b) Define User Interface and write the points to be considered when user interface is designed?

36. a) What are the Algorithm Design Techniques? Explain it?

**[OR]**

b) Explain the Do – While Loop with Syntax and Example?

37. a) What are the different forms of User – Defined function declaration?

**[OR]**

b) Write the differences between Object Oriented Programming and procedural programming?

38. a) Define Destructor. Explain the Characteristics of Destructors?

**[OR]**

b) Write a C++ Program to calculate the factorial of an integer.

**// ALL THE BEST**

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**STD: XI****MARKS: 70****SUB: COMPUTER SCIENCE****TIME: 2.30 MINS****HALF – YEARLY MODEL QUESTION PAPER – 6****PART – I****I. CHOOSE THE CORRECT ANSWER:****15\*1=15**

1. Which generation of computer used IC's?
  - a) First
  - b) Second
  - c) Third
  - d) Fourth
2.  $A + \overline{A} = ?$ 
  - a) A
  - b) 0
  - c) 1
  - d) A
3. What is the smallest size of data represented in a CD?
  - a) Blocks
  - b) Sectors
  - c) Pits
  - d) Tracks
4. \_\_\_\_\_ is set of instructions that perform specific task.
  - a) Software
  - b) System Software
  - c) Application Software
  - d) OS
5. To permanently delete a file or folder, hold down the \_\_\_\_\_ on the keyboard.
  - a) Backspace
  - b) Delete
  - c) Shift+Delete
  - d) Insert
6. Which one of the following are self-repeating and do not require a computer program to attach themselves?
  - a) Viruses
  - b) Worms
  - c) Spyware
  - d) Trojans
7. Inheritance is process of creating new class from
  - a) Base class
  - b) Abstract
  - c) Derived class
  - d) Function
8. A member function can call another member function directly, without using the dot operator called as
  - a) Sub function
  - b) Sub member
  - c) Nesting of member function
  - d) Sibling of member function
9. The identifiable entity with some characteristics and behavior is.
  - a) Class
  - b) Object
  - c) Structure
  - d) Member
10. `cin>>n[3];` To which element does this statement accepts the value?
  - a) 2
  - b) 3
  - c) 4
  - d) 5
11. Which function is used to check whether a character is alphanumeric or not.
  - a) `isalpha()`
  - b) `isdigit()`
  - c) `isalnum()`
  - d) `islower()`
12. Which of the following is the exit control loop?
  - a) For
  - b) while
  - c) do...while
  - d) if...else
13. Who coined C++?
  - a) Rick Mascitti
  - b) Rick Bjarne
  - c) Bill Gates
  - d) Dennis Ritchie



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14. \_\_\_\_\_ at crucial points of flow are useful, and even necessary, to understand the algorithm.  
 a) Keywords                      b) Identifiers                      c) Comments                      d) Variables
15. \_\_\_\_\_ data type is often said to be an integer type  
 a) Integer                      b) Character                      c) Float                      d) Double

**PART – II**

**II. ANSWER ANY 6 QUESTIONS: (Q.No.18 Compulsory)**

**6\*2=12**

16. List the Merits and Demerits of Transistors?  
 17. What are the Components of Microprocessor?  
 18. How state is represented in algorithms?  
 19. What is meant by Loop Invariant?  
 20. Write the syntax for setw() and give an example?  
 21. Differentiate between Array and Structure?  
 22. Write the Syntax for declaring the Class?  
 23. Why derived class is called power packed?  
 24. What is Tamil Virtual Academy?

**PART – III**

**III. ANSWER ANY 6 QUESTIONS: (Q.No.33 Compulsory)**

**6\*3=18**

25. Define XOR Gate with Truth Table and Symbol  
 26. What are the types of Software?  
 27. What are the Functions of Windows Operating System?  
 28. Define the following Terms: a) Programming Language                      b) Flowchart                      c) Pseudocode  
 29. What are Character Set and Boolean Literals?  
 30. Compare if and conditional operator?  
 31. Define const arguments  
 32. What is meant by Inheritance and Polymorphism?  
 33. Define Encryption and Decryption

**PART – IV**

**IV. ANSWER THE FOLLOWING QUESTIONS:**

**5\*5=25**

34. a) Explain the Various Output Devices?

**[OR]**

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b) Explain the Universal Gates with Truth Table and Symbol?

35. a) Do the following Binary Arithmetic:

i. Add  $1101010_2 + 101101_2$

ii. Subtract  $1101011_2 - 111010_2$

**[OR]**

b) Explain how to Move and Copy Files and Folders?

36. a) Exchange the contents: Given two glasses marked A and B. Glass A is full of apple drink and glass B is full of grape drink. Write the specification for exchanging the contents of glasses A and B, and write a sequence of assignments to satisfy the specification.

**[OR]**

b) Write a C++ Program to find the LCM and GCD of two numbers?

37. a) Write the Syntax and Flowchart for if-else-if ladder?

**[OR]**

b) What is Recursion? Write a program to find GCD using recursion.

38. a) Write a C++ program to find the difference between two matrixes.

**[OR]**

b) Define Operator Overloading. What is the Process of Operator Overloading with Example?

**// ALL THE BEST**