XI- COMPUTER SCIENCE
BOOK BACK ONE MARK QUESTIONS
(Choose the correct answer)

CHAPTER 1- INTRODUCTION TO COMPUTER

1. First generation computers used
(a) Vacuum tubes (b) Transistors (c) Integrated circuits (d) Microprocessors

2. Name the volatile memory
(a) ROM (b) PROM (c) RAM (d) EPROM

3. Identify the output device
(a) Keyboard (b) Memory (c) Monitor (d) Mouse

4. Identify the input device
(a) Printer (b) Mouse (c) Plotter (d) Projector

5. _____ Output device is used for printing building plan.
(a) Thermal printer (b) Plotter (c) Dot matrix (d) inkjet printer

6. Which one of the following is used to in ATM machines
(a) Touch Screen (b) speaker (c) Monitor (d) Printer

7. When a system restarts which type of booting is used.
(a) Warm booting (b) Cold booting (c) Touch boot (d) Real boot.

8. Expand POST
(a) Post on self Test (b) Power on Software Test (c) Power on Self Test (d) Power on Self Text

9. Which one of the following is the main memory?
(a) ROM (b) RAM (c) Flash drive (d) Hard disk

10. Which generation of computer used IC's?
(a) First (b) Second (c) Third (d) Fourth

CHAPTER 2 - NUMBER SYSTEMS

1. Which refers to the number of bits processed by a computer's CPU?
A) Byte B) Nibble C) Word length D) Bit

2. How many bytes does 1 Kilo Byte contain?
A) 1000 B) 8 C) 4 D) 1024

3. 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

4. 2^50 is referred as
A) Kilo B) Tera C) Peta D) Zetta

5. How many characters can be handled in Binary Coded Decimal System?
A) 64 B) 255 C) 256 D) 128

6. For 11012 the equalent Hexadecimal equivalent is?
A) F B) E C) D D) B

7. What is the 1's complement of 00100110?
A) 00100110 B) 11011001 C) 11010001 D) 00101001

8. Which amongst this is not an Octal number?
A) 645 B) 234 C) 876 D) 123

PART - II - BOOLEAN ALGEBRA

1. Which is a basic electronic circuit which operates on one or more signals?
(A) Boolean algebra (B) Gate (C) Fundamental gates (D) Derived gates

2. Which gate is called as the logical inverter?
(A) AND (B) OR (C) NOT (D) XNOR

3. A + A = ?
(A) A (B) O (C) 1 (D) A

4. NOR is a combination of ?
(A) NOT(OR) (B)NOT(AND) (C) NOT(NOT) (D) NOT(NOR)

5. NAND is called as …… Gate
(A) Fundamental Gate (B) Derived Gate (C) Logical Gate (D) Universal gate

CHAPTER 3 - COMPUTER ORGANISATION

1. Which of the following is said to be the brain of a computer?
(a) Input devices (b) Output devices (c) Memory device (d) Microprocessor

2. Which of the following is not the part of a microprocessor unit?
(a) ALU (b) Control unit (c) Cache memory (d) register

3. How many bits constitute a word?
(a) 8 (b) 16 (c) 32 (d) determined by the processor used.

4. Which of the following device identifies the location when address is placed in the memory address register?
(a) Locator (b) encoder (c) decoder (d) multiplexer

5. Which of the following is a CISC processor?
(a) Intel P6 (b) AMD K6 (c) Pentium III (d) Pentium IV

6. Which is the fastest memory?
(a) Hard disk (b) Main memory (c) Cache memory (d) Blue-Ray disc

7. How many memory locations are identified by a processor with 8 bits address bus at a time?
(a) 28 (b) 1024 (c) 256 (d) 8000

8. 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

9. What is the smallest size of data represented in a CD?
(a) blocks (b) sectors (c) pits (d) tracks

10. Display devices are connected to the computer through.
(a) USB port (b) Ps/2 port (c) SCSI port (d) VGA connector

CHAPTER 4 - THEORETICAL CONCEPTS OF OPERATING SYSTEM

1) Operating system is a _____
A) Application Software B) Hardware C)System Software D)Component

2) 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

3) Which of the following is not a function of an Operating System?
A) Process Management B)Memory Management C)Security management D)Complier Environment

4) Which of the following OS is a Commercially licensed Operating system?
A)Windows B)UBUNTU C)FEDORA D)REDHAT

5) Which of the following Operating systems support Mobile Devices?
A)Windows 7 B)Linux C)BOSS D)iOS

6) File Management manages
A) Files B) Folders C) Directory systems D) All the Above

7) Interactive Operating System provides
A)Graphics User Interface (GUI) B)Data Distribution C)Security Management D)Real Time Processing

8) An example for single task operating system is
A)Linux B) Windows C)MS-DOS D) Unix

9) The File management system used by Linux is
A) ext2 B) NTFS C) FAT D) NFTS

CHAPTER 5 - WORKING WITH WINDOWS OPERATING SYSTEM

1. From the options given below, choose the operations managed by the operating system.
a)Memory b) Processes c) Disks and I/O devices d) all of the above

2. Which is the default folder for many Windows Applications to save your file?
a)My Document b) My Pictures c) Documents and Settings d) My Computer

3. Under which of the following OS, the option Shift + Delete – permanently deletes a file or folder?
(a) Windows 7 (b) MS-DOS (c)Linux (d) Android OS

4. What is the meaning of "Hibernate" in Windows XP/Windows 7?
(a) Restart the Computer in safe mode
(b) Restart the Computer in hibernate mode
(c) Shutdown the Computer terminating all the running applications
(d) Shutdown the Computer without closing the running applications

5. The shortcut key used to rename a file in windows
(a)F2 (b)F4 (c)F5 (d) F6

CHAPTER 6 – SPECIFICATION AND ABSTRACTION

1. 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.

2. Which of the following activities is not algorithmic in nature?

(a) Multiply two numbers. (b) Draw a kolam. (c) Walk in the park. (d) Swaping of two numbers.

3. 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

4. Stating the input property and the input-output relation a problem is known

(a) specification (b) statement (c) algorithm (d) definition

5. Ensuring the input-output relation is

(a) the responsibility of the algorithm and the right of the user.
(b) the responsibility of the user and the right of the algorithm.
(c) the responsibility of the algorithm but not the right of the user.
(d) the responsibility of both the user and the algorithm.

6. 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

7. If 0 < i before the assignment i := i-1 after the assignment, we can conclude that

(a) 0 < i (b) 0 ≤ i (c) i = 0 (d) 0 ≥i

CHAPTER 7- COMPOSITION AND DECOMPOSITION

1. 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 (c) u, v = 10 ,5 (b) u, v = 5 ,10 (d) u, v = 10 ,10

2. Which of the following properties is true after the assignment (at line 3?

1 --i, j = 0, 0
2 i, j := i+1, j-1
3 -- ?

(a) i+j >0 (b) i+j < 0 (c) i+j =0 (d) i = j

3. 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

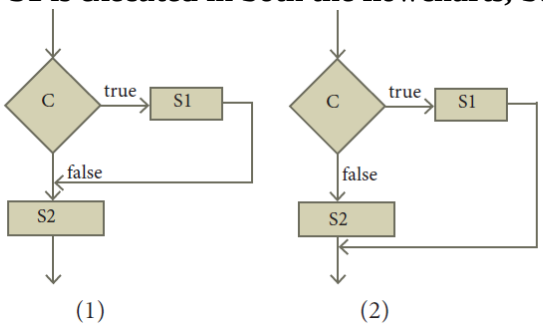
(a) S1 (b) S2 (c) S3 (d) none

4. 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

5. If C is true, S1 is executed in both the flowcharts, but S2 is executed in



(a) (1) only (b) (2) only (c) both (1) and (2) (d) neither (1) nor (2)

6. How many times the loop is iterated?
i := 0
while i ≠ 5
i := i + 1
(a) 4 (b) 5 (c) 6 (d) 0

CHAPTER 8 - ITERATION AND RECURSION

1. A loop invariant need not be true

(a) at the start of the loop. (b) at the start of each iteration
(c) at the end of each iteration (d) at the start of the algorithm

2. 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

3. If m x a + n x 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

4. Which of the following is not an invariant of the assignment?
m, n := m+2, n+3

(a) m mod 2 (b) n mod 3 (c) 3 X m - 2 X n (d) 2 X m - 3 X n

5. If Fibonacci number is defined recursively as

$$F(n) = \begin{cases} 0 & n = 0 \\ 1 & n = 1 \\ F(n-1) + F(n-2) & \text{otherwise} \end{cases}$$

to evaluate F(4), how many times F() is applied?

(a) 3 (b) 4 (c) 8 (d) 9

6. Using this recursive definition

$$a^n = \begin{cases} 1 & \text{if } n = 0 \\ a \times a^{n-1} & \text{otherwise} \end{cases}$$

how many multiplications are needed to calculate a10?

(a) 11 (b) 10 (c) 9 d) 8

CHAPTER – 9 INTRODUCTION TO C++

1. Who developed C++?

(a) Charles Babbage ` (b) Bjarne Stroustrup (c) Bill Gates (d) Sundar Pichai

2. What was the original name given to C++?

(a) CPP (b) Advanced C (c) C with Classes (d) Class with C

3. Who coined C++?

(a) Rick Mascitti (b) Rick Bjarne (c) Bill Gates (d) Dennis Ritchie

4. The smallest individual unit in a program is:

(a) Program (b) Algorithm (c) Flowchart (d) Tokens

5. Which of the following operator is extraction operator in C++?

(a) >> (b) << (c) <> (d) ^^

6. Which of the following statements is not true?

(a) Keywords are the reserved words which convey specific meaning to the C++ compiler.
(b) Reserved words or keywords can be used as an identifier name.
(c) An integer constant must have at least one digit without a decimal point.
(d) Exponent form of real constants consist of two parts

7. Which of the following is a valid string literal?

(a) 'A' (b) 'Welcome' (c) 1232 (d) "1232"

8. A program written in high level language is called as

(a) Object code (b) Source code (c) Executable code (d) All the above

9. Assume a=5, b=6; what will be result of a&b?

(a) 4 (b) 5 (c) 1 (d) 0

10. Which of the following is called as compile time operators?

(a) sizeof (b) pointer (c) virtual (d) this

PART –II DATA TYPES, VARIABLES AND EXPRESSIONS

1. How many categories of data types are available in C++?

(a) 5 (b) 4 (c) 3 (d) 2

2. Which of the following data types is not a fundamental type?

(a) signed (b) int (c) float (d) char

3. What will be the result of following statement?

```
char ch= 'B';
cout << (int) ch;
```

(a) B (b) b (c) 65 (d) 66

4. Which of the character is used as suffix to indicate a floating point value?

(a) F (b) C (c) L (d) D

5. How many bytes of memory is allocated for the following variable declaration if you are using Dev C++? short int x;

(a) 2 (b) 4 (c) 6 (d) 8

6. What is the output of the following snippet?

```
char ch = 'A';
ch = ch + 1;
```

(a) B (b) A1 (c) F (d) 1A

7. Which of the following is not a data type modifier?

(a) signed (b) int (c) long (d) short

8. Which of the following operator returns the size of the data type?

(a) sizeof( ) (b) int ( ) (c) long ( ) (d) double ( )

9. Which operator is used to access reference of a variable?
(a) $ (b) # (c) & (d) !

10. This can be used as alternate to endl command:
(a) \t (b) \b (c) \0 (c) \n

CHAPTER 10 - FLOW OF CONTROL

1. What is the alternate name of null statement?
(A) No statement (B) Empty statement (C) Void statement (D) Zero statement

2. In C++, the group of statements should be enclosed within:
(A) { } (B) [ ] (C) ( ) (D) < >

3. 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

4. The branch statement: multi way
(A) if (B) if … else (C) switch (D) for

5. How many types of iteration statements?
(A) 2 (B) 3 (C) 4 (D) 5

6. How many times the following loop will execute? for (int i=0; i<10; i++)
(A) 0 (B) 10 (C) 9 (D) 11

7. Which of the following is the exit control loop?
(A) for (B) while (C) do…while (D) if…else

8. Identify the odd one from the keywords of jump statements:
(A) break (B) switch (C) goto (D) continue

9. Which of the following is called entry control loop?
(A) do-while (B) for (C) while (D) if-else

10. A loop that contains another loop inside its body:
(A) Nested loop (B) Inner loop (C) Inline loop (D) Nesting of loop

CHAPTER 11- FUNCTIONS

1. Which of the following header file defines the standard I/O predefined functions ?
A) stdio.h B) math.h C) string.h D) ctype.h

2. Which function is used to check whether a character is alphanumeric or not.
A) isalpha() B) isdigit() C) isalnum() D) islower()

3. Which function begins the program execution ?
A) isalpha() B) isdigit() C) main() D) islower()

4. 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)

5. Which is return data type of the function prototype of add(int, int); ?
A) int B) float C) char D) double

6. Which of the following is the scope operator ?
A) > B) & C) % D) ::

Chapter 12 - Arrays and Structures

1. **Which of the following is the collection of variables of the same type that an referenced by a common name?**
a) int b) float c) Array d) class

2. int age[]={6,90,20,18,2}; How many elements are there in this array?
a) 2 b) 5 c) 6 d) 4

3. cin>>n[3]; To which element does this statement accept the value?
a) 2 b) 3 c) 4 d) 5

4. By default, a string ends with which character?
a)\o b) \t c) \n d) \b

5. Structure definition is terminated by
(a) : (b) } (c) ; (d) ::

6. What will happen when the structure is declared?
(a) it will not allocate any memory (b) it will allocate the memory
(c) it will be declared and initialized (d) it will be only declared

7. A structure declaration is given below.
struct Time
{
int hours;
int minutes;
int seconds;
}t;
Using above declaration which of the following refers to seconds.
(a) Time.seconds (b) Time::seconds (c)seconds (d) t. seconds

8. Which of the following is a properly defined structure?
(a) struct {int num;} (b) struct sum {int num;} (c) struct sum int sum; (d)struct sum {int num;};

9. A structure declaration is given below.
struct employee
{
int empno;
char ename[10];
}e[5];
Using above declaration which of the following statement is correct.
(a) cout<<e[0].empno<<e[0].ename; (b) cout<<e[0].empno<<ename;
(c)cout<<e[0]->empno<<e[0]->ename; (d) cout<<e.empno<<e.ename;

10. 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

CHAPTER 13 - INTRODUCTION TO OBJECT ORIENTED PROGRAMMING TECHNIQUES

1. The term is used to describe a programming approach based on classes and objects is
(A) OOP (B) POP (C) ADT (D) SOP

2. The paradigm which aims more at procedures.
(A) Object Oriented Programming (B)Procedural programming
(C) Modular programming (D)Structural programming

3. Which of the following is a user defined data type?
(A) class (B) float (C) int (D) object

4. The identifiable entity with some characteristics and behaviour is.
(A) class (B) object (C) structure (D) member

5. The mechanism by which the data and functions are bound together into a single unit is known as
(A) Inheritance (B) Encapsulation (C) Polymorphism (D) Abstraction

6. Insulation of the data from direct access by the program is called as
(A) Data hiding (B) Encapsulation (C) Polymorphism (D) Abstraction

7. Which of the following concept encapsulate all the essential properties of the object that are to be created?
(A) class (B) Encapsulation (C) Polymorphism (D) Abstraction

8. Which of the following is the most important advantage of inheritance?
(A) data hiding (B) code reusability (C) code modification (D) accessibility

9. "Write once and use it multiple time" can be achieved by
(A) redundancy (B) reusability (C) modification (D) composition

10. Which of the following supports the transitive nature of data?
(A) Inheritance (B) Encapsulation (C) Polymorphism (D) Abstraction

CHAPTER 14 - CLASSES AND OBJECTS

1. The variables declared inside the class are known as
(A) data (B) inline (C) method (D) attributes

2. Which of the following statements about member functions are True or False?
i) A member function can call another member function directly with using the dot operator.
ii) Member function can access the private data of the class.
(A) i)True, ii)True (B) i)False, ii)True (C) i)True, ii)False (D) i)False,ii)False

3. 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

4. The member function defined within the class behave like ..... functions
(A) inline (B) Non inline (C) Outline (D) Data

5. Which of the following access specifier protects data from inadvertent modifications?
(A) Private (B) Protected (C) Public (D) Global

6. class x
{
int y;
public:

x(int z){y=z;}
} x1[4];
int main()
{ x x2(10);
return 0;}
How many objects are created for the above program
(A) 10 (B) 14 (C) 5 (D) 2

7. State whether the following statements about the constructor are True or False.
i) constructors should be declared in the private section.
ii) constructors are invoked automatically when the objects are created.
(A) True, True (B) True, False (C) False, True (D) False, False

8. Which of the following constructor is executed for the following prototype ?
add display(add &); // add is a class name
(A) Default constructor (B) Parameterized constructor
(C) Copy constructor (D) Non Parameterized constructor

CHAPTER 15 - POLYMORPHISM

1. Which of the following refers to a function having more than one distinct meaning?
(A) Function Overloading (B) Member overloading (C) Operator overloading (D) Operations overloading

2. Which of the following reduces the number of comparisons in a program ?
(A) Operator overloading (B) Operations overloading (C) Function Overloading (D) Member overloading

3. void dispchar(char ch='$',int size=10)
{
for(int i=1;i<=size;i++)
cout<<ch;
}
How will you invoke the function dispchar() for the following input?
To print $ for 10 times
(A) dispchar(); (B) dispchar(ch,size); (C) dispchar($,10); (D)dispchar('$',10 times);

4. Which of the following is not true with respect to function overloading?
(A) The overloaded functions must differ in their signature.
(B) The return type is also considered for overloading a function.
(C) The default arguments of overloaded functions are not considered for Overloading.
(D) Destructor function cannot be overloaded.

5. Which of the following is invalid prototype for function overloading
(A) void fun (intx);
void fun (char ch) ;
(B) void fun (intx);
void fun (inty);
(C) void fun (double d);
void fun (char ch);
(D) void fun (double d);
void fun (inty);

CHAPTER 16 - INHERITANCE

1. Which of the following is the process of creating new classes from an existing class
(a) Polymorphism (b) Inheritance (c) Encapsulation (d) super class

2. 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

3. The type of inheritance that reflects the transitive nature is
(A) Single Inheritance (B) Multiple Inheritance (C) Multilevel Inheritance (D) Hybrid Inheritance

4. 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

5. Inheritance is a process of creating new class from

(A) Base class (B) abstract (C) derived class (D) Function

6. A class is derived from a class which is a derived class itself, then this is referred to as

(A) multiple inheritance (B) multilevel inheritance (C) single inheritance (D) double inheritance

7. Which amongst the following is executed in the order of inheritance?

(A) Destructor (B) Member function (C) Constructor (D) Object

8. Which of the following is true with respect to inheritance?

(A) Private members of base class are inherited to the derived class with private
(B) Private members of base class are not inherited to the derived class with private accessibility
(C) Public members of base class are inherited but not visible to the derived class
(D) Protected members of base class are inherited but not visible to the outside class

9. Based on the following class declaration answer the questions (from9.1 to 9.4)

```
class vehicle
{ int wheels;
public:
void input_data(float,float);
void output_data();
protected:
int passenger;
 };
class heavy_vehicle : protected vehicle {
int diesel_petrol;
protected:
        int load;
public:
void read_data(float,float)
void write_data(); };
class bus: private heavy_vehicle {
char Ticket[20];
public:
void fetch_data(char);
void display_data(); };
```

9.1. Which is the base class of the class heavy_vehicle?

(a) Bus (b) heavy_vehicle (c) vehicle (d) both (a) and (c)

9.2. The data member that can be accessed from the function displaydata()

(a) passenger (b) load (c) Ticket (d) All of these

9.3. The member function that can be accessed by an objects of bus Class is

(a) input_data(), output_data() (b) read_data() ,write_data()
(c) fetch_data(), display_data() (d) All of these

9.4. The member function that is inherited as public by Class Bus

(a) input_data(), output_data() (b) read_data(), write_data()
(c) fetch_data(), display_data() (d) none of these

CHAPTER 17 - COMPUTER ETHICS AND CYBER SECURITY

1.Which of the following is a set of moral principles that regulate the use of computers ?
a. piracy b. programs c. virus d. computer ethics

2.Commercial programs made available to the public illegally are known as
a. freeware b. warez c. free software d. software

3. 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

4. Which one of the following tracks a user visits a website?
a. spyware b. cookies c. worms d. Trojans

5. Which of the following is not a malicious program on computer systems?
a. worms d. Trojans c. spyware d. cookies

6. A computer network security that monitors and controls incoming and outgoing traffic is
a. Cookies b.Virus c. Firewall d. worms

7. The process of converting cipher text to plain text is called
a. Encryption b. Decryption c. key d. proxy server

8. e-commerce means
a. electronic commerce b. electronic data exchange c. electric data exchange d. electronic commercialization.

9. Distributing unwanted e-mail to others is called.
a. scam b. spam c. fraud d. spoofing

10. Legal recognition for transactions are carried out by
a. Electronic Data Interchange b. Electronic Data Exchange
c. Electronic Data Transfer d. Electrical Data Interchange