



Mahila Vikas Sanstha's

**INDRAPRASTHA NEW ARTS
COMMERCE & SCIENCE
COLLEGE,** AT POST MALWADI, DIST. WARDHA (M.S.)

Accredited 'B' by NAAC

Approved by government
of Maharashtra

Affiliated to Rashtrasant Tukadoji
Maharaj Nagpur University, Nagpur

Recognised by U.G.C New Delhi
under section 2 (f) & 12 (b) of
UGC act 1956

Department of Computer Science

Class : B.Sc II Sem

Subject : OOPS

Question Bank

Unit I

1. What is inline member function ? How will you make a member function defined outside the class as inline ?
2. Write a syntax for accessing class members and write a program in C++ which shows member function defined inside the body of the student class.
3. Explain access specifiers in C++ with example.
4. What is static data members ? Write access rules for static data members and static member functions.
5. Explain class and object with example.
6. What are classes and objects ? Describe syntax for declaring a class with suitable example.
7. Explain features of OOP's.
8. Write a program to implement class :
 - (I) Data member
 - (i) Name of cricket player
 - (ii) Score in last two matches.
 - (II) Member function
 - (i) To assign initial values
 - (ii) To compute total and average score
 - (iii) To display data. 5
9. What is the purpose of static data member ? Explain with example.
10. Explain private and public specifier.
11. What are the different characteristics of object oriented programming ? Explain.
12. Write a program to create a class student. Data members are roll no., name m1, m2 and m3.
13. Write member function to compute total and percentage.
14. What are inline functions ? Explain with example outside member functions as inline.



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UNIT 2

1. What is constructor ? Explain the parameterized constructor with a suitable example.
2. What is copy constructor ? Explain with example.
3. Write a program in C++ which shows the use of destructor.
4. What is operator overloading ? Write a program in C++ to overload the unary operator '___'.
5. Differentiate between constructor and destructor.
6. Explain the need of copy constructor with example.
7. How is constructor invoked ? Explain usage of constructor giving suitable example.
8. Explain default constructor with example.
9. Explain unary operator overloading with example.
10. What are Constructors and Destructors ? Explain it with suitable example.
11. Explain with example parameterised constructors.
12. What is Overloading ? State different rules for operator overloading.
13. Write short note on copy constructor. Explain it with suitable example.

UNIT 3

1. What are dynamic objects ? What is the difference between dynamic memory allocation and dynamic objects ?
2. What is 'this' pointer ? Write a program demonstrating the use of 'this' pointer.
3. What is inheritance ? Explain single inheritance with a suitable example.
4. Write a program in C++ for multilevel inheritance.
5. Draw a labelled diagram for hybrid inheritance and hierarchical inheritance.
6. What is inheritance ? List its types. Explain single inheritance with example.
7. Write a program to illustrate the use of this pointer and explain.
8. What is an abstract class ? How will you define it ? Give an example.
9. What is derived class ? Explain giving suitable example.
10. Explain multilevel inheritance.
11. What is Dynamic Object ? Explain new and delete operators.
12. Explain abstract class with suitable example.
13. What is Inheritance ? Explain multiple inheritance with suitable example.
14. What is array of object ? Write a program to demonstrate array of object.



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UNIT 4

1. What are virtual functions ? Give its advantages and write rules for it.
2. What is Exception ? List all exceptions with its purpose.
3. Explain Abstract class with example.
4. Write a program in C++ to handle division by zero exception.
5. Explain handling uncaught exceptions.
6. What meaning does it convey :
 - (i) Hit the exception
 - (ii) Throw the exception ?
7. Draw and explain exception handling model.
8. Write a short note on fault tolerant design techniques.
9. What are virtual functions ? State rules for virtual functions.
10. How will you handle an uncaught exception ?
11. Write difference between Virtual and pure virtual function.
12. Explain in detail fault tolerant design techniques.
13. What is Exception ? Write a program to handle uncaught exception.
14. Write a program in C++ to create a class emp and member functions addemp() and
15. displayemp(). Further extend your program to display only those employees whose salary is greater than 25000.