**Constructor & Destructor  
[SET – 1]**

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| **1** | Answer the questions (i) and (iii) after going through the following class:  class Seminar  {  int time;  public:  Seminar() //Function 1  {  time = 30;  cout << "Seminar starts now" << endl;  }  void lecture() //Function 2  {  cout << "Lectures in the seminar on" << endl;  }  Seminar(int duration) //Function 3  {  time = duration;  cout << "Seminar starts now" << endl;  }  ~Seminar() //Function 4  {  cout << "Thanks" << endl;  }  };  i. Write statements in C++ that would execute Function 1 and Function 3 of class Seminar.  ii. In Object Oriented Programming, what is Function 4 referred as and when does it get invoked/called?  iii. In Object Oriented Programming, which concept is illustrated by Function 1 and Function 3 together? |

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| **2** | Answer the questions (i) and (ii) after going through the following class:  class Test  {  char paper[20];  int marks;  public:  Test () // Function 1  {  strcpy (paper, "Computer");  marks = 0;  }    Test (char p[]) // Function 2  {  strcpy(paper, p);  marks = 0;  }    Test (int m) // Function 3  {  strcpy(paper,"Computer");  marks = m;  }    Test (char p[], int m) // Function 4  {  strcpy (paper, p);  marks = m;  }  };  i. Write statements in C++ that would execute Function 1, Function 2, Function 3 and Function 4 of class Test.  ii. Which feature of Object Oriented Programming is demonstrated using Function 1, Function 2, Function 3 and Function 4 together in the above class Test? |

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| **3** | Consider the definition of the following class:  class Sample  {  private:  int x;  double y;  public :  Sample(); //Constructor 1  Sample(int); //Constructor 2  Sample(int, int); //Constructor 3  Sample(int, double); //Constructor 4  };  i. Write the definition of the constructor 1 so that the private member variables are initialized to 0.  ii. Write the definition of the constructor 2 so that the private member variable x is initialized according to the value of the parameter, and the private member variable y is initialized to 0.  iii. Write the definition of the constructors 3 and 4 so that the private member variables are initialized according to the values of the parameters. |