17930114

MANIPAL UNIVERSITY JAIPUR
SCHOOL OF COMPUTING AND INFORMATION TECHNOLOGY
B.Tech III Semester, First Sessional Examination- 2018-19
Branch: CSE/CC/IT
CS1304-Object-Oriented Programming Using Java
(CLOSE BOOK)

Duration: 1 Hour
Max. Marks: 15

Instructions:

- All Questions are Compulsary
- Missing Data if any may be assumed suitably

Que 1.

(A) You are given two incomplete class named 'Book' and 'Library' as follows and you have to complete it as per the commented specification

```
public class Book
{
    String author_name, ISBN, Title;
    int price;
    //Build a parameterized constructor to initialize author_name and ISBN (A1)
    // Build a parameterized constructor to initialize author_name, ISBN and Title (A2)
    // Build a parameterized constructor to initialize author_name, ISBN,Title and price (A3)
    // Demonstrate constructor chaining using above three constructor (A4)
    public  boolean equals(Book obj)
    {
      /*this method will compare the current book object with obj. If ISBN is same it will return true
otherwise false*/
//Complete this method (A5)

   }//End of method euqals
}//End of class Book

public class Library
{
  //library class has books. Define a variable suitable for storing books information (A6)
  //create constructor for class Library
  //This constructor will initialize the variable in A6 (A7)
 public boolean searchBook(Book obj)
 {
  // this method will search for the book obj in the library if found return true else return false
  // Complete the method  (A8)
 } // End of method searchBook
 public Book expensiveBook(Book obj, Book obj1)
{
   // this method will compare the book obj and obj1 and return the book with more cost
   // Complete the method (A9)
} // End of method expensiveBook

}// End of class Library
```

0.5+ 0.5+ 0.5+ 1+1 +0.5 +1+ 1.5+ 1 = 2.5

book bk[]

Que 2. You are given an incomplete class named 'Fibonacci_series' as follows and you have to complete it as per the commented specification

(A)

```
import java.util.*;
class Fibonacci_series
{
   //Declare required identifiers
   boolean check(//pass argument if needed)
   {
   // Check the number if negative or zero it is invalid otherwise valid
   // Display the message whether the number entered is valid or not. (A1)
   // if no. is invalid return false otherwise true (A2)
   }// End of method check

   int getdata()
   {
   //take an integer number as an input from user using either BufferedReader class, Scanner class or
   // Console class (A3)
   }// End of method getdta

   void fibo(//pass argument if needed)
   {
   //create a recursive method to display Fibonacci series (A4)
   }// End of method fibo
}//End of class Fibonacci_series

class fibonacci
{
   public static void main(String a[])
   {
   Fibonacci_series f = new Fibonacci_series ();
   int number=f.getdata();
   //declare proper variable to store the return value of the method called below (A5)
   f.check(argument if passed);
   //if the no. is valid call fibo() method otherwise take a new number as input using getdata() (A6)
   }//End of main method
}//End of class Fibonacci
```

0.5+
0.5+
1+1
+0.5
+1

Que 3. Write a short note on:

(A) Garbage Collector and it's working — 1.5+

(B) Variable length arguments. Explain with the help of an example — 1.5