

P P SAVANI UNIVERSITY

Second Semester of B.Sc. IT. Examination

May 2019

SSIT1071 Introduction to Computer Science - II

18.05.2019, Saturday

Time: 12:30 p.m. To 3:00 p.m.

Maximum Marks: 60

Instructions:

1. The question paper comprises of two sections.
2. Section I and II must be attempted in separate answer sheets.
3. Make suitable assumptions and draw neat figures wherever required.
4. Use of scientific calculator is allowed.

SECTION - I

Q - 1 Answer the following (Any Five) [05]

- (i) What is full form of JVM?
- (ii) Java performs Automatic Garbage Collection - State true or false.
- (iii) The double variable occupies _____ bytes.
- (iv) _____ are used to initialize the objects.
- (v) Java allows you to group classes in a collection called a _____.
- (vi) Abstract classes can be instantiated - State True or False.
- (vii) Does Java support multiple inheritance? (Yes or No)

Q - 2 (a) Explain why Java is called Platform Independent Language. [05]

Q - 2 (b) Explain various Object-Oriented Programming features. [05]

OR

Q - 2 (a) Explain Static Imports in Packages in Java. [05]

Q - 2 (b) Explain Dynamic Binding in Java with example. [05]

Q - 3 (a) Explain various types of operators in Java. [05]

Q - 3 (b) Explain the use of static variables and methods with suitable Java code. [05]

OR

Q - 3 (a) Explain the use of Final Keyword in Java with classes and methods with suitable Java code snippet. [05]

Q - 3 (b) Explain Interfaces in Java with an example. [05]

Q - 4 Attempt any one. [05]

(i) Write a Java code to demonstrate the use of "Super" keyword in Inheritance. [05]

(ii) What is "this" keyword in Java? Write a Java code to demonstrate this keyword.

SECTION - II

Q - 1 Answer the following (Any Five) [05]

- (i) Write an example of a mutable class.
- (ii) What is the use of charAt()?
- (iii) Which function is used to find length of a string?
- (iv) What is drawRectangle()?
- (v) Write the syntax of try and catch.
- (vi) Which of these methods of FileReader class is used to read characters from a file?
 - a) read()
 - b) scanf()
 - c) get()
 - d) getInteger()

- (vii) Which of these method of Thread class is used to find out the priority given to a thread?
a) priority()
b) setPriority()
c) getPriority()
d) threadPriority()
- Q - 2 (a) Explain serialization in Java with an example. [05]
Q - 2 (b) Explain different I/O classes in Java. [05]
- OR
- Q - 2 (a) Explain the life cycle of an Applet along with its methods. [05]
Q - 2 (b) Write a program to show Thread Synchronization in Java. [05]
Q - 3 (a) Write a program to explain creation of Threads in Java. [05]
Q - 3 (b) Explain with example, Input Streams and Output Streams. [05]
- OR
- Q - 3 (a) Write a Java code to read integers from the file and write the even and odd integers to two different files. [05]
Q - 3 (b) Explain try, catch, finally and throws mechanism with proper java code. [05]
Q - 4 **Attempt any one.** [05]
(i) Explain File Handling in Java.
(ii) Write a Java code to demonstrate the use of different methods of Thread.
