

P P. SAVANI UNIVERSITY

Second Semester of B.Sc. (IT) Examination

May 2022

SSIT1071 Object Oriented Programming with Java

03.06.2022, Friday

Time: 10:00 a.m. To 12:30 p.m.

Maximum Marks: 60

Instructions:

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

SECTION - I

Q - 1 Answer the Following [05]

- (i) What is JVM?
- (ii) The method main is a static method. Why?
- (iii) Explain keyword "this".
- (iv) Explain method parseInt.
- (v) Interfaces can extend any number of other interfaces.(True/False Justify)
- (vi) What is Bytecode?
- (vii) Write use of keyword import.

Q - 2 (a) What is Constructor? Explain the Constructor Overloading with example. [05]

Q - 2 (b) Explain the Features of Java. [05]

OR

Q - 2 (a) Explain any five operators of Java. [05]

Q - 2 (b) What is type casting? Discuss types of conversions. [05]

Q - 3 (a) Explain Basic Datatypes of Java. [05]

Q - 3 (b) Write a simple java application that define a class Product with p_id(int), name(String), vendor name(String), brand(String) as data fields. The class should have parameterize constructor to create of Product class. Also include show method to display product details. [05]

OR

Q - 3 (a) Differential abstract class and interface. [05]

Q - 3 (b) Write a simple java application that defines a class Employee with empid(int), name(String),address(String) & branch(String) as data fields. The class should have getData() & showData() methods. The program should create an Employee object, get the details and display it. [05]

Q - 4 Attempt any one/two. [05]

- (i) Differentiate between constructor and method
- (ii) Explain Access Modifiers with Example

SECTION - II

Q - 1 Answer the Following: (MCQ/Short Question/Fill in the Blanks) [05]

- (i) 1) An abstract class in Java can be created using the keyword ____.
A) final
B) interface
C) abstract
D) static
- (ii) What is the maximum number of Java Class files that can be kept inside a single Java Package?
A) 8

- B) 64
- C) 128
- D) Unlimited

- (iii) The keyword used to import a package into Java class or Interface is __.
- A) import
 - B) download
 - C) use
 - D) None of the above
- (iv) What is an Exception in Java?
- A) An exception is like a generic error occurring during the time of execution of program
 - B) An exception may occur due to memory or hardware issues
 - C) An exception leads to bad experience for an End user of the software
 - D) All the above
- (v) All Java exceptions can be handled gracefully. State TRUE or FALSE.
- A) TRUE
 - B) FALSE
- (vi) To successfully overload a method in Java, the return types must be __.
- A) Same
 - B) Different
 - C) Same but using superclass or subclass types also work
 - D) None
- (vii) To successfully overload a method in Java, the method names must be __.
- A) Same
 - B) Different
 - C) Same or different
 - D) None

Q - 2 (a) What is an Exception? Explain try, catch and finally with example. [05]

Q - 2 (b) What do you understand by thread? Describe the complete life cycle of thread. [05]

OR

Q - 2 (a) What is an Exception? Explain throw and throws with example. [05]

Q - 2 (b) Explain abstract class with example. [05]

Q - 3 (a) Explain Thread Synchronization with example. [05]

Q - 3 (b) Explain Method Overloading and Overriding [05]

OR

Q - 3 (a) Write a Java program for matrix addition and multiplication [05]

Q - 3 (b) What is Java packages? list out step of create packages [05]

Q - 4 Attempt any one/two. [05]

(i) What do you understand by Applet? Describe the complete life cycle of Applet.
