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Code No: 133BM

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B.Tech II Year I Semester Examinations, May/June - 2019

OBJECT ORIENTED PROGRAMMING THROUGH JAVA

(Common to CSE, IT)

Time: 3 Hours

Max. Marks: 75

Note: This question paper contains two parts A and B.

Part A is compulsory which carries 25 marks. Answer all questions in Part A.

Part B consists of 5 Units. Answer any one full question from each unit.

Each question carries 10 marks and may have a, b as sub questions.

PART- A

(25 Marks)

- 1.a) Differentiate between class and object. [2]
- b) What is meant by ad-hoc polymorphism? [3]
- c) How to define a package in Java? [2]
- d) Contrast between abstract class and interface. [3]
- e) Define exception. [2]
- f) Differentiate between a thread and a process. [3]
- g) Which methods of deque enable it to be used as a stack? [2]
- h) Make a comparison of List, array and ArrayList. [3]
- i) Give the AWT hierarchy. [2]
- j) What are the various classes used in creating a swing menu? [3]

PART-B

(50 Marks)

- 2.a) What are the responsibilities of an agent?
 - b) What is the purpose of constructor in Java programming? [5+5]
- OR**
3. Define inheritance. What are the benefits of inheritance? What costs are associated with inheritance? How to prevent a class from inheritance? [10]
 4. Write a program to demonstrate hierarchical and multiple inheritance using interfaces. [10]
- OR**
- 5.a) Demonstrate ordinal() method of enum.
 - b) What is type wrapper? What is the role of auto boxing? [5+5]
 6. Write a program to create three threads in your program and context switch among the threads using sleep functions. [10]
- OR**
- 7.a) Write a program with nested try statements for handling exception.
 - b) How to create a user defined exception? [5+5]

8. Write a program to read a file content and extract words using String Tokenizer class. Display the file if it contains the user query term/search key. [10]

OR

9.a) Contrast sorted map and navigable map interfaces.

b) What is the purpose of BitSet class? What is the functionality of the following functions of BitSet class: cardinality(), flip() and intersects() [5+5]

10.a) Illustrate the use of Grid Bag layout.

b) What are the subclasses of JButton class of swing package? [5+5]

OR

11.a) Create a simple applet to display a smiley picture using Graphics class methods.

b) Write a short note on delegation event model. [5+5]

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