

AMIETE – IT (Current & New Scheme)

Time: 3 Hours

December 2016

Max. Marks: 100

PLEASE WRITE YOUR ROLL NO. AT THE SPACE PROVIDED ON EACH PAGE IMMEDIATELY AFTER RECEIVING THE QUESTION PAPER.

NOTE: There are 9 Questions in all.

- Question 1 is compulsory and carries 20 marks. Answer to Q.1 must be written in the space provided for it in the answer book supplied and nowhere else.
- The answer sheet for the Q.1 will be collected by the invigilator after 45 minutes of the commencement of the examination.
- Out of the remaining EIGHT Questions, answer any FIVE Questions, selecting THREE questions from Part A and TWO questions from Part B. Each question carries 16 marks.
- Any required data not explicitly given, may be suitably assumed and stated

Q.1 Choose the correct or the best alternative in the following: (2×10)

- Which class cannot be extended in java?
(A) abstract class (B) parent class
(C) Final class (D) None of these
- Suspend thread can be revived by using
(A) Start() (B) Suspend()
(C) Resume() (D) Yield()
- Which collection class associates values with keys and orders the keys according to their natural order
(A) java.util.HashSet (B) java.util.LinkedList
(C) java.util.TreeMap (D) java.util.SortedSet
- AppletViewer tool is available in which of the folder of JDK :
(A) bin (B) lib
(C) source (D) class
- When a method can throw an exception then it is specified by _____ keyword
(A) finally (B) throw
(C) throws (D) catch
- Which is the container that contains title bar and can have MenuBars. It can have other components like button, textfield etc.?
(A) Panel (B) Frame
(C) Window (D) container
- In order to fetch stream of data from network or file, following data type is used
(A) double (B) char
(C) int (D) byte

- h. What is the output of this program?

```
classisfinite_output{ public static void main(String args[]){
Double d = new Double(1 / 0.); boolean x = d.isInfinite();
System.out.print(x); } }
```

(A) 0 **(B)** 1
(C) true **(D)** false
- i. Which of these methods of Object class is used to obtain class of an object at run time?
(A) get() **(B)** voidgetClass()
(C) Class getClass() **(D)** None of these
- j. What is the default priority of a thread in Java?
(A) 0 **(B)** 1
(C) 10 **(D)** 5

PART A

Answer any THREE Questions. Each question carries 16 marks.

- Q.2** a. What are the three pillars of object? Explain any two of them in Detail. **(8)**
- b. What do you mean Type-casting? What automatic type conversion has been done? Explain with suitable example. **(8)**
- Q.3** a. Write a program that reads one line of input text and breaks it up into words. The words should be output one per line. A word is defined to be a sequence of letters. Any characters in the input that are not letters should be discarded. For example, if the user inputs the line as: He said, "That is not a good idea.", then the output of the program should be: **(10)**
He
said
That
is
not
a
good
idea
- b. There is no operator overloading in Java? Why not? **(3)**
- c. static and final are not exactly the descriptive words for creating class variables, class methods, and constants. Why not use class and const? **(3)**
- Q.4** a. What is the difference between Byte streams and Character Streams? Write a program to take the input from the keyboard and find out whether the given number is even or odd. **(8)**
- b. Explain the following methods: **(8)**
(i) equals() versus ==
(ii) charAt() and setCharAt()

- Q.5** With the help of a suitable figure, describe the life cycle of a thread. Write a small program illustrating the various states of the thread. (16)
- Q.6** a. What is the advantage of the event-delegation model over the earlier event-inheritance model? (4)
- b. Compare SWING components to standard AWT. (9)
- c. What is the difference between a Vector and an Array? Discuss the advantages and disadvantages of both. (3)

PART B

Answer any TWO Questions. Each question carries 16 marks.

- Q.7** a. Describe the main differences between HTML and XHTML. (10)
- b. How do you make an image clickable in HTML? Give an example. (6)
- Q.8** a. Explain different data types used in JavaScript. (4)
- b. What are the disadvantages of using frames in HTML? (4)
- c. Write a note on CGI programming. (8)
- Q.9** a. Define design. What are the elements of a good design? (8)
- b. What are the name servers? Explain. (3)
- c. What are the Tasks performed with client-side scripts? (5)