Code: DC60/DE123/DC113   **Subject: JAVA AND WEB PROGRAMMING**

DipIETE – ET/CS (Current & New Scheme)

Time: 3 Hours   **JUNE 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)**

a. All classes in Java are directly or indirectly subclasses of the _____ class.
  (A) Wrapper   **(B)** Object
  (C) This   **(D)** String

b. Abstract methods are used when defining _____.
  (A) interface classes   **(B)** arrays
  (C) derived classes   **(D)** classes that have no constructor

c. Which of this is a super class of all exceptional type classes?
  (A) String   **(B)** Catchble
  (C) RuntimeException   **(D)** Throwable

d. A finally clause will execute
  (A) only if the try statement that precedes it throws an exception that is caught
  (B) only if the try statement that precedes it does not throw an exception
  (C) only if the try statement that precedes it throws an exception that is not caught
  (D) in any circumstance

e. Which of these keywords is used to refer to member of base class from a sub class?
  (A) upper   **(B)** super
  (C) this   **(D)** None of these

f. Which one of the following is a valid statement?
  (A) char c[ ] = new char( );   **(B)** char c[ ] = new char[ ];
  (C) char c[ ] = new char[5];   **(D)** char c[ ] = new char(5);

g. CSS stands for
  (A) cascading style sheet   **(B)** cascading system style
  (C) costume style sheet   **(D)** None of these

h. You can redirect to the new webpage in JavaScript by using _____ method.
  (A) page.location   **(B)** window. Location
  (C) url.location   **(D)** page.reload

i. Which elements are mandatory in an XHTML document?
   (**A**) doctype, html, head, body, and title
   (**B**) doctype, html, head, and body
   (**C**) css, html, head, body, and title
   (**D**) doctype, html and body

j. The .... specifies whether a border should be solid, dashed line, dotted line, double line, groove etc.?
   (**A**) border-decoration   (**B**) border-style
   (**C**) border-weight   (**D**) border-layout

PART A
Attempt any THREE questions. Each question carries 16 marks.

Q.2	a.	List any five features of Java.	**(5)**
	b.	What are the main differences between Java and C++?	**(3)**
	c.	What is the importance of JVM in Java?	**(4)**
	d.	Describe the typical structure of Java Program.	**(4)**
Q.3	a.	Write a program for command line argument to print month name (e.g. February) based on month number (e.g. 2) entered by user using switch-case statements**.**	**(8)**
	b.	Explain Arithmetic and Relational operator of Java with Example.	**(4+4)**
Q.4	a.	Describe types of inheritance supported by Java with example.	**(8)**
	b.	Write a Java program for addition of two metrics.	**(8)**
Q.5	a.	State differences between interface and Abstract class.	**(6)**
	b.	How do we design, create, and access a package? Discuss with suitable example.	**(6)**
	c.	What is the importance of static import in Java? Give the Example.	**(4)**
Q.6	a.	What are exceptions and how are they handled in Java? Give an example.	**(8)**
	b.	Draw the hierarchy of stream classes of Java. Explain FileInputStream and FileOutputStream Classes.	**(3+5)**

PART B
Attempt any TWO questions. Each question carries 16 marks.

Q.7	a.	Explain dynamic web page generation.	**(4)**
	b.	Explain HTTP transaction in details. Give the difference between GET and POST method of HTTP.	**(2+2)**
	c.	Describe any Eight XHTML inline elements.	**(8)**
Q.8	a.	Explain Table tag in XHTML with the help of code. Give the difference between cell spacing and cell padding.	**(3+2)**
	b.	Describe Row and Column spans with the help of code.	**(5)**
	c.	What is client identity? How to maintain client identity?	**(3+3)**
Q.9	a**.**	What is Form in HTML? What are the essential attributes of Form element in HTML?	**(5)**
	b.	What is CSS? Explain with the help of code.	**(5)**
	c.	What is the importance of JavaScript in building web page? Explain with the help of code.	**(3+3)**