BICS-035

DIPLOMA – VIEP – COMPUTER SCIENCE AND ENGINEERING (DCSVI)

00633   Term-End Examination

December, 2016

BICS-035 : JAVA BASIC AND OBJECT MODELING DESIGN

Time : 2 hours   *Maximum Marks : 70*

Note :   *Question no. 1 is* **compulsory**. *Attempt any* **four** *questions from the rest. All questions carry equal marks.*

1.   Explain any **seven** of the following :   *7×2=14*

   (a)   Variables and data types in Java

   (b)   Class

   (c)   Primary key

   (d)   Links

   (e)   Package

   (f)   Object diagram

   (g)   Association

   (h)   Constructor

2. (a) Write a Java program to add two numbers. **6**

(b) What is inheritance ? How is it implemented in Java ? Explain with the help of an example. **8**

3. (a) What is object modeling technique (OMT) ? Explain briefly. **7**

(b) What is exception ? How is it different from error ? Explain briefly. **7**

4. (a) What are the key features of Java ? Explain the concept of byte code in Java. **7**

(b) What is multiplicity in association ? Explain with the help of an example. **7**

5. (a) What is a sequence diagram ? Explain how it is drawn with the help of an example. **7**

(b) What is a class diagram ? Explain how inheritance is represented in a class diagram. **7**

6. (a) Draw the collaboration diagram for money withdrawal from an ATM. **7**

(b) Define polymorphism. Explain its advantages with the help of an example. **7**

7. (a) Draw the use case diagram for online shopping. **7**

(b) What is JDK ? Explain the various tools of JDK. **7**

8. Write short notes on any *four* of the following : $4 \times 3\frac{1}{2} = 14$

   (a)   Java Virtual Machine

   (b)   OOSE

   (c)   CRC

   (d)   Functional Modeling

   (e)   Activity Diagram

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