Enrollment No.....................................

Faculty of Engineering
End Sem (Even) Examination May-2019
CA5CO18 Advanced Programming
Programme: MCA   Branch/Specialisation: Computer Application

Duration: 3 Hrs.   **Maximum Marks: 60**

Note: All questions are compulsory. Internal choices, if any, are indicated. Answers of Q.1 (MCQs) should be written in full instead of only a, b, c or d.

Q.1 i. Which of the following is logical operator   **1**
     (a) &   (b) &&   (c) | (d) All of these

ii. toLowerCase() method returns   **1**
     (a) int   (b) boolean   (c) float   (d) None of these

iii. Superclass of Exception is   **1**
     (a) RunTimeException   (b) Throwable
     (c) ArithmeticException   (d) Error

iv. Value of Thread.MAX_PRIORITY is   **1**
     (a) 1   (b) 5   (c) 10   (d) 0

v. AWT controls are available in the package   **1**
     (a) java.awt.*   (b) javax.awtx.*
     (c) javax.awt.*   (d) javax.swing.*

vi. X and Y axis exists in   **1**
     (a) BorderLayout   (b) BoxLayout
     (c) CardLayout   (d) FlowLayout

vii. HttpServlet is   **1**
     (a) Abstract Class   (b) Interface
     (c) Method   (d) Variable

viii. executeQuery() method returns   **1**
     (a) int   (b) boolean
     (c) reference of ResultSet   (d) None of these

ix. JSP expression tag is   **1**
     (a) <%-- -->   (b) <%= %>   (c) <% %>   (d) <%@ %>

x. Implicit object request is of type   **1**
     (a) JspWriter   (b) HttpServletRequest
     (c) HttpServlet   (d) HttpServletResponse

Q.2 i. Write a suitable java program on constructor overloading.   **4**
ii. Explain String class and explain toLowerCase(), concat(), equals(), compareTo() and length() methods of String class.   **6**
OR iii. Write a program using interface to calculate area of circle and its perimeter.   **6**

Q.3   Attempt any two:
i. Write a java program using thread methods.   **5**
ii. Explain try, catch, throw, throws and finally with example.   **5**
iii. Write a java program implements Runnable interface.   **5**

Q.4 i. Explain Delegation event model with advantages.   **4**
ii. Write a java program for GridLayout.   **6**
OR iii. Write a java program for event handling using anonymous class.   **6**

Q.5   Attempt any two:
i. Write java program to delete and update a database row of a table.   **5**
ii. Write java program for servlet interaction techniques.   **5**
iii. Explain ResultSet interface with its methods.   **5**

Q.6   Attempt any two:
i. Explain any 5 implicit objects with example.   **5**
ii. Explain JSP Scripting elements.   **5**
iii. Create a JSP page info.jsp where shopkeeper enters products amount and quantity, shopkeeper can enter multiple product details in info.jsp. Create another JSP page bill.jsp which shows bill from the information taken from info.jsp.   **5**

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Marking Scheme
CA5CO18 Advanced Programming

Q.1 i. Which of the following is logical operator **1**
(d) All of these

ii. toLowerCase() method returns **1**
(d) None of these

iii. Superclass of Exception is **1**
(b) Throwable

iv. Value of Thread.MAX_PRIORITY is **1**
(c) 10

v. AWT controls are available in the package **1**
(a) java.awt.*

vi. X and Y axis exists in **1**
(b) BoxLayout

vii. HttpServlet is **1**
(a) Abstract Class

viii. executeQuery() method returns **1**
 (c) reference of ResultSet

ix. JSP expression tag is **1**
(b) <%= %>

x. Implicit object request is of type **1**
(b) HttpServletRequest

Q.2 i. Java program on constructor overloading. **4**
Main method   1 Mark
Class having constructor   3 Marks

ii. Define String class   1 Mark   **6**
String class Methods   5 Marks

OR iii. Calculate area of circle and its perimeter **6**
Main Method   1 Mark
Interface   2 Marks
Class Implementing Interface   3 Marks

Q.3 Attempt any two:
i. Java program using thread methods. **5**

Main Method   1 Mark
Classes extending thread   4 Marks

ii. Explain try, catch, throw, throws and finally with example. **5**
One Keyword   (1 Mark *5)

iii. Java program implements Runnable interface. **5**
Main Method   1 Mark
Classes implementing interface   4 Marks

Q.4 i. Delegation event model   2 Marks   **4**
Advantages.   2 Marks

ii. Java program.   **6**

OR iii. Java program   **6**

Q.5 Attempt any two:
i. Java program to delete   2.5 Marks   **5**
Update a database row of a table.   2.5 Marks

ii. Technique   (2.5 Marks*2) **5**

iii. ResultSet interface   **5**
One Method   (1 Mark* 5)

Q.6 Attempt any two:
i. Implicit objects.   (1 Mark*5)   **5**
ii. JSP Scripting elements   (1 Mark *5) **5**
iii. Info.jsp   2 Marks   **5**
bill.jsp   3 Marks

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