

B.Sc. (Part—III) Semester—VI Examination
COMPUTER SCIENCE (New)
(6S : Advanced Java and VB.Net)

Time : Three Hours]

[Maximum Marks : 80

Note :—(1) All questions are compulsory.

(2) Question No. 1 carries 8 marks and all other questions carry 12 marks each.

(3) Assume suitable data wherever necessary.

(4) Draw neat sketches and diagrams wherever required.

1. (A) Fill in the blanks :

(i) _____ are components that allow to interact with application in various ways.

(ii) A _____ is a component that contains a label and that generates an event when it is pressed.

(iii) _____ are used to display graphics from bitmap, icon, JPEG etc. file type.

(iv) The _____ control lets you display a list of radio buttons. 2

(B) Select correct alternatives :

(i) _____ are used to select continuous values between a specified minimum and maximum.

(a) Scroll bars

(b) List

(c) Text field

(d) None

(ii) The ability of a language to support multithreads is referred to as :

(a) Multithreaded program

(b) Concurrency

(c) Exception

(d) None

(iii) A GUI stands for :

(a) Uses buttons, menus and icons

(b) Should be easy for a user to manipulate

(c) Both (a) and (b)

(d) Graphical User Interface

(iv) _____ is a bridge between a dataset and data source for retrieving and saving data.

(a) Data controller

(b) Data command

(c) Data adapter

(d) None 2

(C) Answer in one sentence each :

(i) What is thread ?

(ii) What is exceptions ?

(iii) What is breakpoint ?

(iv) What is applet ? 42. (A) Explain the life cycle of a thread. 6(B) Explain Nested try statements with suitable example. 6**OR**

3. (A) How to create multiple threads ? Explain with example. 6
 (B) Explain various types of exception. 6
4. (A) Explain following methods :
 (i) get DocumentBase()
 (ii) get CodeBase() 6
 (B) How to display using applet viewer ? Explain the process. 6
- OR**
5. (A) Write an applet program to draw multiple lines. 6
 (B) Explain the applet life cycle in detail. 6
6. (A) List the different AWT controls and explain how to add and remove controls. 6
 (B) Explain event delegation model in detail. 6
- OR**
7. (A) List the Event Listener Interfaces with description. 6
 (B) Explain checkboxes and label AWT control with example. 6
8. (A) Explain the following functions with suitable example :
 (i) MsgBox
 (ii) InputBox. 6
 (B) How to Access Text in TextBox ? Explain the steps of adding scroll bars and aligning text in TextBoxes. 6
- OR**
9. (A) Explain :
 (i) Labels
 (ii) Link Labels. 6
 (B) What is event ? Explain in detail all mouse events. 6
10. (A) Write the steps of creating objects of the class. Explain with suitable example. 6
 (B) Explain unstructured exception handling with suitable example. 6
- OR**
11. (A) Explain the steps of creating methods of a class with suitable example. 6
 (B) What do you mean by Structured Exception Handling ? Explain with suitable example. 6
12. (A) Explain the steps of binding data to control. 6
 (B) Explain the role of the following :
 (i) Data adaptors
 (ii) Datasets. 6
- OR**
13. (A) Explain the working with ADO.NET. 6
 (B) Explain the steps of accessing data with server explorer. 6

B.Sc. Part—III Semester—VI Examination
6S : COMPUTER SCIENCE (New)
(Advanced Java and VB.Net)

Time : Three Hours]

[Maximum Marks : 80

N.B. :— (1) **All** questions are compulsory.(2) Question No. **1** carries **8** marks and all other questions carry **12** marks each.

(3) Assume suitable data wherever necessary.

(4) Draw neat sketches and diagrams wherever required.

1. (A) Fill in the blanks :

(i) _____ automatically positions components within a container in Java.

(ii) A _____ is a control that is used to turn an option on or off.

(iii) To specify the default button for a form by setting the form's _____ property to the name of the button.

(iv) To create a Random object by declaring it in a _____ statement. 2

(B) Select the correct alternatives from the given options :

(i) The _____ class implements a single line text-entry area usually called an edit control.

(a) Scroll bars

(b) List

(c) Text field

(d) Check box

(ii) To obtain the string currently contained in the Text field, method is called :

(a) SetText()

(b) getText()

(c) getselectedText()

(d) getEchoChar()

(iii) The _____ enable us to pass data between a program and a class.

(a) Functions

(b) Properties

(c) Procedures

(d) Variables

(iv) The default property for a text box control is :

(a) Text

(b) Enable

(c) MultiLine

(d) Password 2

(C) Answer in one sentence each :

(i) What is edit control ?

(ii) What is light weight threads ?

(iii) What is VB.Net ?

(iv) What is Data Set ? 4

2. (A) How do we set priorities for threads ? Explain. 6
 (B) What is multithreading program ? Explain how to create the thread. 6
- OR**
3. (A) Explain stopping and blocking a thread with suitable example. 6
 (B) Explain throw and throws with suitable example. 6
4. (A) Explain the HTML APPLET tag with its attributes. 6
 (B) Write a program to draw Polygon. 6
- OR**
5. (A) Explain :
 (i) drawRect()
 (ii) drawLine()
 (iii) fillOval() 6
 (B) How to pass parameters to applets ? Explain in detail. 6
6. (A) List the different types of controls supported by AWT. Explain. 6
 (B) Explain Adapter Classes with suitable example. 6
- OR**
7. (A) What is event ? Explain sources of events with example. 6
 (B) Explain List and Labels AWT controls with example. 6
8. (A) Explain the following controls :
 (i) Buttons
 (ii) CheckBoxes 6
 (B) Explain the Multiple Document Interface (MDI) Applications with example. 6
- OR**
9. (A) What is event ? Explain all mouse events in detail. 6
 (B) How to work with multiple forms ? Explain with suitable example. 6
10. (A) What is Class ? Explain class statement with its parameters and suitable example. 6
 (B) How to create breakpoint ? Explain with suitable example. 6
- OR**
11. (A) Explain the steps of creating methods of a class with suitable example. 6
 (B) Explain the following :
 (i) Watch
 (ii) Quick Watch. 6
12. (A) Write and explain the steps of accessing data with server explorer. 6
 (B) Explain the process of simple binding to controls. 6
- OR**
13. (A) What is Data Grid Control ? Explain in detail. 6
 (B) Explain the following :
 (i) Populating a data set
 (ii) Selecting data provider. 6

B.Sc. Part—III Semester—VI Examination
COMPUTER SCIENCE
(Advance Java & VB.Net)

Time : Three Hours]

[Maximum Marks : 80

Note :—(1) All questions are compulsory.

(2) Question No. 1 carries 8 marks and all other questions carry 12 marks each.

(3) Assume suitable data wherever necessary.

(4) Draw neat sketches and diagrams wherever necessary.

1. (A) Fill in the blanks :

(i) A user defined exception class need to be extended from _____.

(ii) Applets does not have _____ method.

(iii) The _____ keyword is used to instantiate an object.

(iv) _____ is a bridge between a Data Set and Data Source for retrieving and saving data. 2

(B) Choose correct option and rewrite answer :

(i) The default event of TextBox control is :

(a) Click event

(b) Load event

(c) TextChanged event

(d) MouseDown event

(ii) _____ is used to retrieve the data residing in a data store or database.

(a) Data Adapter

(b) Data Provider

(c) Data Source

(d) Data Set

(iii) _____ Block is executed only when exception occurs in the program.

(a) Throw

(b) Finally

(c) Try

(d) Catch

(iv) Which package provides many event classes and Listener interfaces for event handling ?

(a) java.awt.Graphics

(b) java.awt

(c) java.awt.applet

(d) java.awt.event 2

- (C) Answer in **one** sentence each :
- (i) What is thread ?
 - (ii) What is the tool used to execute an applet ?
 - (iii) What is constructor ?
 - (iv) What is delegate ? 4
2. (A) What is exception ? State and explain the need to handle exception. 6
- (B) Write procedure to create your own exception. 6
- OR**
3. (A) Explain predefined exception with suitable example. 6
- (B) What is thread ? Explain thread class with suitable example. 6
4. (A) Explain life cycle of an applet. 6
- (B) What is applet context ? Give the difference between Java Application and Applet. 6
- OR**
5. (A) What is Graphics Class ? Explain. 6
- (B) How parameters can be passed to an applet ? Explain. 6
6. (A) Explain Java AWT Checkboxes with example. 6
- (B) Explain Event Listener interface. 6
- OR**
7. (A) Explain Delegation model. 6
- (B) Explain Java AWT Hierarchy. 6
8. (A) Explain following functions with syntax and example :
- (i) MsgBox()
 - (ii) InputBox() 6
- (B) Explain ListBox with any three properties and any three methods with example. 6
- OR**
9. (A) Explain Rich Text Box control with any three properties and any three methods. 6
- (B) Explain the following controls with any two properties and any two methods :
- (a) Combo Box
 - (b) Check Box 6

10. (A) Define class and object. Explain with syntax class definition and creating objects. 6
- (B) What are delegates ? Explain delegate with syntax and example. 6
- OR**
11. (A) List down the steps to attach a class with a form. 6
- (B) Explain structured exception handling with suitable example. 6
12. (A) What is ADO.Net ? Explain ADO.Net object model. 6
- (B) Explain Data Adapter with its method. 6
- OR**
13. (A) Explain Data Provider and its types use in ADO.Net. 6
- (B) Write a program to connect to database and execute query to display data from table. 6

B.Sc. Part-III (Semester—VI) Examination
COMPUTER SCIENCE
(Advanced Java and VB.NET)

Time : Three Hours]

[Maximum Marks : 80

Note :— (1) All questions are compulsory.

(2) Question No. 1 carries 8 marks and all other questions carry 12 marks each.

(3) Assume suitable data wherever necessary.

(4) Draw neat sketches and diagrams wherever required.

1. (A) Fill in the blanks :

(i) _____ method can be used to output a string in an applet.

(ii) A suspended thread can be received by using the _____ method.

(iii) _____ class is used to group controls together.

(iv) MDI stands for _____.

2

(B) Select correct alternative :

(i) Which of these methods is a part of AWT ?

(a) display()

(b) print()

(c) drawstring()

(d) transient()

(ii) Which object can be constructed to show any number of choices in the visible window ?

(a) Labels

(b) Choice

(c) List

(d) Checkbox

(iii) The default property for a text box control is _____.

(a) Text

(b) Enable

(c) Multiline

(d) Password char

(iv) The _____ enables us to pass data between a program and a class in VB.NET.

(a) Functions

(b) Properties

(c) Procedures

(d) Variables

2

(C) Answer in **one** sentence each :

(i) What is event listener ?

(ii) What is multithreaded program ?

(iii) What is exception handling ?

(iv) What is the use of Timer control ? 4

2. (A) Explain State transition diagram of thread. 6

(B) Explain Finally statement with suitable example. 6

OR

3. (A) Explain throw and throws with suitable example. 6

(B) What is multithreading program ? Explain how to create thread with suitable example. 6

4. (A) What is Applet ? Explain Applet life cycle in detail. 6

(B) Write a program to draw Rectangles using Java Applet and explain its graphics methods. 6

OR

5. (A) Explain the steps of Applet initialization and termination. 6

(B) Explain the following with its arguments :

(i) FillArc()

(ii) FillOval()

(iii) RoundRect()

(iv) drawLine()

(v) drawOval()

(vi) drawCircle(). 6

6. (A) Explain event delegation model in detail. 6

(B) Explain the following AWT controls :

(i) Button

(ii) List. 6

OR

7. (A) Explain adapter classes with example. 6

(B) List the different AWT controls and explain the steps of adding and removing controls. 6

8. (A) Explain the following functions with arguments and suitable example :
- (i) MsgBox
 - (ii) InputBox. 6
- (B) Explain the following with respect to VB.NET :
- (i) Radio Buttons
 - (ii) Check Boxes. 6

OR

9. (A) Explain the process/steps of creating Multiple Document Interface (MDI) applications with example. 6
- (B) What is event ? Explain all mouse event in detail. 6
10. (A) What is object ? Explain the steps of creating objects of the class with suitable example. 6
- (B) How to create breakpoint ? Explain with suitable example. 6

OR

11. (A) Explain the following :
- (i) Watch
 - (ii) Quick watch. 6
- (B) Differentiate between structure and unstructured exception handling in VB.NET. 6
12. (A) Explain the steps of complex binding to controls. 6
- (B) What is Data Grid control ? Explain in detail. 6

OR

13. (A) Write and explain the steps of accessing data with server explorer. 6
- (B) Explain the following :
- (i) Data access using data adapter
 - (ii) Selecting data provider. 6