| Day & Date | Semester | Subject Name | Time | Code | Marks |
|---|---|---|---|---|---|
| Thursday 28/03/2019 | V (Repeater) | Java Programming | 02.30 PM To 05.00 PM | 5103 | 75 |

Instructions: I) Q.1 is compulsory
II) Attempt any 4 from Q.2 to Q.8
III) Draw diagrams wherever necessary

Q.1) a) What is abstraction? Explain the following principles: (8)
- Encapsulation
- Polymorphism

b) What are packages? Provide syntax for defining packages and class path with example. (7)

Q.2) a) What are Interfaces? Explain with an example. (7)

b) What is the Difference between Method overloading and Method Overriding? (8)

Q.3- a) What are Exceptions? Give its different types. Illustrate the usage of following with example in exception handling. (10)
- try
- catch
- throws
- finally

b) How do you implement multiple Inheritances in Java? (5)

Q.4- a) What are access specifiers? Comment upon their usage with respect to the following Criteria( 8)
- Same class
- Same package subclass
- Same package non subclass
- Different package subclass
- Different package non subclass

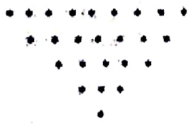
b) Explain different features of JAVA in detail. (7)

Q.5-a) WAP in Java using switch instruction which implements the following: (15)
1. Armstrong or not.
2. Reverse of the given no.
3. Prime or not prime.
4. Exit

(The program should continue until user opts for EXIT)

Q.6 a) Write a program in JAVA which takes string as input prints the input upon the screen until the input string is "exit (8)

b) W.A.P which prints the half pyramid of "*" on the screen: (7)



Q.7)a)- For the given specifications, write a program in JAVA to implement a calculator (15)

| Class name | CalciV1(superclass) | CalciV2(subclass) | CalciUser(main class) |
|---|---|---|---|
| Data Member | n1,n2,n3 | | |
| Method Member | add(),sub(),mul() ,display(),div | percentage() display() | Java main class |

Note: a)Implement method overriding using display()

- The display() of CalcIV1 should display result of the calculations.
- The display() of CalcIV2 should display "CALCULATOR VER 2.0"
- Make use of the super keyword.

b) Input for the calculation is given through main class, n1 & n2 are used as the I/p variables n3 is used as o/p variable.

Q.8 a)WAP in java which prints mark sheet in the following format: (15)

ABCD WOMEN'S COLLEGE

Student Name:- Roll No

| Subject | External | Internal | Total |
|---|---|---|---|
| WT | | | |
| ST | | | |
| JAVA | | | |
| IS | | | |
| Total: | | Percentage | |

| Class name | MrkSht | Student |
|---|---|---|
| Data Member | • Variables for storing internals<br>• Variables for storing externals<br>• Variables for storing college name, student name, roll no.<br>• Variables for storing total | (Java main class, I/ps the value of internals and externals, requests for the mark sheet printing.)<br>(the program should present a menu in front of the user prompting him to choose between following options: 1- Marksheet without student name and roll no. 2- Marksheet with student name and without roll no. 3- Marksheet with student name and roll no. 4- EXIT)<br>(the program should continue until user opts for exit.) |
| Method Member | • setMrk() (2 times)<br>• total() (2 times)<br>• percentage()<br>• display() | |
| constructors | • Mrksht()<br>• MrkSht(snam)<br>• MrkSht(snam,rno) | |

Note: 1)setMrk methods are used for setting up internal and external marks. 2)All the external marks should be in double. 3)Implement method overloading using setMarks. 4)All the internal marks should be in integer. 5)different constructors are used for implementing constructor overloading, where arguments snam & rno stand for student name and roll no respectively.

2nd Rep

| Day & Date | Semester | Subject Name | Time | Code | Marks |
|---|---|---|---|---|---|
| Saturday 30/03/2019 | V Repeater | Data Communication and Networking | 02.30 PM to 05.00 PM | 5101 | 75 |

Instruction :

I) Question No. 1 is compulsory
II) Attempt any 4 Questions from Question No. 2 to 8
III) All questions carry equal marks
IV) Draw neat and proper Diagram / Figure if necessary

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Q.1 Short Notes. (Any Three) 15
1. Data Communication Model
2. Co-axial Cable
3. Synchronous Transmission
4. MAN

Q. 2 Explain Transmission impairments - Noise, Attenuation, Delay Distortion. 15

Q. 3 a. Explain Mesh Topology is a Complete Network Topology. 08
b. Explain Ring Topology. 07

Q. 4 a. Explain Circuit Switching. 08
b. Differentiate between LAN and WAN 07

Q. 5 a. Explain Analog and Digital Signals. 08
b. Explain Modulation and Channel Bandwidth 07

Q. 6 Explain OSI Reference Model in detail. 15

Q. 7 a. Explain Framing. Explain Character Count Method with diagram. 08
b. Explain Radio Waves. 07

Q. 8 a. Explain Unguided Media. 08
b. Explain Persistent CSMA 07

| Day & Date | Semester | Subject Name | |
|---|---|---|---|
| Tuesday 02/04/2019 | V (Repeater) | Visual and Database Programming | 02.30 To 05.00 PM |

**Instruction:**

I) Question No. 1 is compulsory.
II) Attempt any 4 questions from Q. 2 to Q. 8

| | | |
|---|---|---|
| Q. 1 | Solve any 5 questions. (5 x 3 = 15)<br>a. Explain For loop in vb.net.<br>b. Explain OLE.<br>c. Explain ListBox control.<br>d. What is CLR?<br>e. Explain if-else control structure with example.<br>f. What is COM technology? | 15 |
| Q. 2 | a. What are different data types in VB.net? Explain them.<br>b. What is IDE? Explain its components. | 08<br>07 |
| Q. 3 | a. Explain different control structures in vb.net.<br>b. Explain functions with returning value. | 08<br>07 |
| Q. 4 | a. Differentiate ADO and ADO.net.<br>b. What is an Array? Explain different types of array. | 08<br>07 |
| Q. 5 | a. Explain properties, methods and events of TextBox control.<br>b. Explain private, public and protected access specifiers with example. | 08<br>07 |
| Q. 6 | a. Explain architecture of .net framework.<br>b. Explain MsgBox and InputBox. | 07<br>08 |
| Q. 7 | a. Explain Color dialog control and Print dialog control.<br>b. Explain with an example how to insert new record and delete existing record in data table using VB.net. | 08<br>07 |
| Q. 8 | Explain all the steps to generate report using Data Report or Crystal Report. | 15 |

T.Y.B.CA

5104-40

| Day & Date | Semester | Subject Name | Time | Code | Marks |
|---|---|---|---|---|---|
| Wednesday 03/04/2019 | V (Repeater) | Internet Programming | 02.30 PM To 05.00 PM | 5104 | 75 |

**Instruction:**

I) Question No. 1 is compulsory
II) Attempt any 4 questions from Question No.2 to Question No. 8
III) Give examples wherever necessary
IV) Figure to right indicates full marks

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Q1. Explain the following : [15]

i) Web
ii) Digital Signature
iii) Web Server
iv) Cookies
v) Internet

Q2. a) Explain GET method of Client request with example [8]
b) Define Encryption and explain it in detail. [7]

Q3. a) Explain Input Element of HTML [8]
b) Explain the different kinds of JS Popup Boxes with example [7]

Q4. a) What is List ? Explain its Types [8]
b) Create the following table with given background colours: [7]

| Colour (White) | | |
|---|---|---|
| Red | Green | Black |

(18)

Q5. a) Write an HTML code to develop a Web page having two frames that divide the Web page into two equal rows and then divide the second row into two equal columns. [8]

b) What is CSS ? What are the advantages & disadvantages of using Style Sheets/CSS [7]

Q6. a) What is the use of Try...Catch statements in JS [8]

b) Compare & Contrast – IF & SWITCH statements? [7]

Q7. a) Explain onFocus and onMouseover event. [8]

b) Explain String JS Object with example. [7]

Q8. a) Using JavaScript print the series of: [8]
1, 4, 9, 16, 25 .....100

b) Write Short notes on JS timing [7]

| Day & Date | Semester | Subject Name | Time | Code | Marks |
|---|---|---|---|---|---|
| Thursday 28/03/2019 | V (Repeater) | Java Programming | 02.30 PM To 05.00 PM | 5103 | 75 |

**Instructions:** I)Q.1 is compulsory
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III)Draw diagrams wherever necessary

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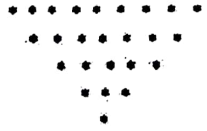

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Note: a)Implement method overriding using display()

| Day & Date | Semester | Subject Name | Time | Code | Marks |
|---|---|---|---|---|---|
| Monday 01/04/2019 | V Repeater | Java Programming | 02.30 PM To 05.00 PM | 5102 | 75 |

Instruction:

I) Question 1 is compulsory
II) Solve any 4 from 2 to 8

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Q.1 Explain any 5 from the following with reference to Java. (15)

I) Java virtual machine
II) finalize method
III) Abstract Class
IV) Multithreading
V) Predefined streams
VI) Collection interfaces

Q.2a) Explain the java Buzzwords (7)
b) Explain the java's concept of overloading methods (8)

Q.3a) Explain dynamic method dispatch. (7)
b) Explain different visibility Controls used in Java? (8)

Q.4a) Explain the Life Cycle of Applet. (7)
b) How interface can be used to support multiple inheritance. (8)

Q.5a) What is Inheritance? Benefits of Inheritance. (7)
b) Explain any three layout (8)

Q.6a) Explain the three uses of final keyword (7)
b) Write a Java program to calculate & print Area & Perimeter of Reactangle? Assume suitable Length & Breadth. (8)
Your program should contain a class 'Rectangle' and the methods –
voidRectCalc(float,float)
voidRectShow()

Q.7a) What is Method Overriding? Explain with example? (7)

b) Write a java program to convert Decimal no into Hexadecimal format with the help of class'conversion' and method 'void d2h(int) USE MULTIPLE CATCH (8)

Q.8 a) Define the terms: 1)Socket 2) port 3)TCP/4)IP 5)Inet Address 6)UDP (7)

b) Write a java program to read a string from user and print the output in following format – (8)

Eg I/p = SHUBHAM

O/p = SHUBHAM
SHUBHA
SHUBH
SHUB
SHU
SH
S