Answer all the question:

1. a. What are the different types of operators in java?

   (Or)

   b. How do you declare a constant variable in java?

2. a. What is a two-way branching statement?

   (Or)

   b. What is a vector in java with an example?

3. a. How many types of inheritance are there in java? Explain with programs.

   (Or)

   b. What are java API packages?

4. a. Can we throw exceptions manually? explain briefly

   (Or)

   b. What is applet programming in java?

5. a. Briefly explain about files in java.

   (Or)

   b. What is GUI programming in java?
Answer all the Question:  

Marks: 5X5=25

1) a. Difference between Book Keeping and Accounting

(Or)

b. Briefly explain about accounting concepts with suitable examples.

2) a. Explain the objectives and Limitations of Trial Balance

(Or)

b. Define cash Book. Explain the types of Cash Book with suitable examples.

3) a. The following balances are extracted from the books of Nikhil & Co. on 31st March, 2002. You are required to make the necessary closing entries and to prepare the Trading and Profit and Loss Account and a Balance Sheet on that date:

<table>
<thead>
<tr>
<th>Description</th>
<th>Rs.</th>
<th>Description</th>
<th>Rs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opening Stock</td>
<td>500</td>
<td>Commission (Cr.)</td>
<td>200</td>
</tr>
<tr>
<td>B/R</td>
<td>2,250</td>
<td>Returns Outwards</td>
<td>250</td>
</tr>
<tr>
<td>Purchases</td>
<td>19,500</td>
<td>Trade Expenses</td>
<td>100</td>
</tr>
<tr>
<td>Wages</td>
<td>1,400</td>
<td>Office Fixtures</td>
<td>500</td>
</tr>
<tr>
<td>Insurance</td>
<td>550</td>
<td>Cash in Hand</td>
<td>250</td>
</tr>
<tr>
<td>Sundry Debtors</td>
<td>15,000</td>
<td>Cash at Bank</td>
<td>2,375</td>
</tr>
<tr>
<td>Carriage Inwards</td>
<td>400</td>
<td>Rent &amp; Taxes</td>
<td>550</td>
</tr>
<tr>
<td>Commission (Dr.)</td>
<td>400</td>
<td>Carriage Outwards</td>
<td>725</td>
</tr>
<tr>
<td>Interest on Capital</td>
<td>350</td>
<td>Sales</td>
<td>25,000</td>
</tr>
<tr>
<td>Stationary</td>
<td>225</td>
<td>Bills Payable</td>
<td>1,500</td>
</tr>
<tr>
<td>Returns Inwards</td>
<td>650</td>
<td>Creditors</td>
<td>9,825</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Capital</td>
<td>8,950</td>
</tr>
</tbody>
</table>

The Closing Stock was valued at Rs. 12,500.
b. Difference between Trading Account and Manufacturing Accounts.

4) a. List down the features in Tally 9
   
   (Or)

   b. Explain the elements of the Gateway of Tally screen.

5) a. Define Voucher. Explain the types of Voucher
   
   (Or)

   b. Draw the voucher creation screen and explain it.
Data communication and Computer networks

Answer all the question:

1)  a. What is data communication & network?

   (Or)

   b. What is the component of data communication?

2)  a. What are the advantages of wireless transmission?

   (Or)

   b. What is data definition language (DDL)?

3)  a. Write briefly Routing algorithms?

   (Or)

   b. Explain about IP protocol?

4)  a. Discuss about Hypertext Transfer Protocol?

   (Or)

   b. List out application layer?

5)  a. Discuss about symmetric key cryptography?

   (Or)

   b. What is meant by digital signature key management?
Madurai Kamaraj University
Directorate of Distance Education
Department of Computer Science
ASSIGNMENT
Internet of things

Marks: 5X5=25

Answer all the question:

1) a. What is IOT with example?
   (Or)
   b. What is the physical design of IoT?

2) a. How many layers are there in IoT architecture?
   (Or)
   b. What is the purpose of information model in IOT?

3) a. Explain about the IEEE 802.15.4 protocols?
   (Or)
   b. Which component comes under the application layer in IoT?

4) a. Give short note on a logical design using python.
   (Or)
   b. How raspberry Pi is used in IoT?

5) a. What is cloud computing in simple terms with example?
   (Or)
   b. What are the constraints of IOT network?
Answer all the question:

1) a. What is data mining? What kinds of data can be mined?

(Or)

b. Explain about the measuring data similarity and dissimilarity.

2) a. What is data processing explain with a diagram?

(Or)

b. What are the design prosperities of online analytical processing?

3) a. What is meant by patterns in data mining?

(Or)

b. How do you write a road map? With examples.

4) a. What are the rules that govern decision trees?

(Or)

b. List out the model evaluation and selections.

5) a. Write short notes on cluster analysis?

(Or)

b. Discuss an evaluation of clustering.