

T.Y.B.SC.(I.T.) (SEM-V)**Network Security.****(Revised) (JAN - 2019)****(3 Hours)****[Total Marks: 100]**

- N. B.: (1) **All** questions are **compulsory**.
 (2) Make **suitable assumptions** wherever necessary and **state the assumptions** made.
 (3) Answers to the **same question** must be **written together**.
 (4) Numbers to the **right** indicate **marks**.
 (5) Draw **neat labeled diagrams** wherever **necessary**.
 (6) Use of **Non-programmable** calculators is **allowed**.

1. Attempt any two of the following:**10**

- Explain Diffie Hellman key exchange algorithm in detail.
- Explain different types of firewall.
- Write a short note on Asymmetric Key Cryptography.
- What are the different requirements of Kerberos?

2. Attempt any three of the following:

- Explain the concept of cryptography with a block diagram.
- Explain Substitution Cipher with an example.
- Explain the principle of Data Encryption Standards.
- What is Symmetric Key Cryptography? Explain in detail.
- Explain the concept of Cryptanalysis.
- Explain the RSA algorithm in detail.

3. Attempt any three of the following:**15**

- Explain the concept of Digital Signature.
- Write a short note on Fail-Stop Signature.
- Describe Station-to Station Protocol.
- Explain Birthday Attack in detail.
- Explain the concept of message digest.
- Write a short note on ElGamal key cryptography

4. Attempt any three of the following:**15**

- Explain the need of computer security.
- Describe the overview of OSI Security Architecture.
- Explain the terms. a) Integrity b) Confidentiality
- What are the different security services of X.800?
- Compare Passive attacks and Active Attacks.
- Describe a model for Network Security

5. Attempt any three of the following:**15**

- Write a short note on Kerberos Authentication Service.
- Explain the contents of X.509 certificate.
- What are the different services of PGP?
- Explain S/MIME protocol in detail.
- Explain PKIX model.
- Write a short note on Password Authentication

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6. Attempt any three of the following:
- Write a short note on applications of IPSec.
 - Explain Authentication Header format.
 - Who are the different participants of SET protocol?
 - What is SSL Record Protocol?
 - Write a short note on key management.
 - Write a short note on Transport Layer Security.

15

7. Attempt any three of the following:
- What is Honeypot? Explain in detail.
 - Explain Password Selection Strategy.
 - Explain the terms a) Trojan Horse b) Logic Bomb c) worm
 - Explain DDoS Attack in detail
 - Write a short note on Antivirus Software
 - Explain the concept of Trusted System.

15

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1. Attempt any two of the following:

10

- What is difference between Write() and WriteLine()? Explain with an example.
- Explain internal and external style sheet in ASP.NET.
- Explain ADO.NET object model with help of suitable diagram.
- Differentiate between while and do-while.

2. Attempt any three of the following:

- What is garbage collector? How does it work?
- Explain different types of assembly in .Net.
- Explain method overloading with example.
- What are different types of constructor in C#?
- List and Explain the various data types used in c#
- Write a console program to find a factorial of entered number?

3. Attempt any three of the following:

15

- Write a short note on conversion.
- Write a short note on MDI Form.
- Explain the Textbox control with any five properties.
- Explain the different types of collection in .NET.
- Explain List Box control with properties and methods.
- Explain the steps of creating Delegates in C#.

4. Attempt any three of the following:

15

- Explain ASP.NET Life cycle events.
- What is Global.asax file? Explain its structure.
- What is state management? Explain role of cookies in ASP.NET.
- What is CSS selector? Explain any four selectors present in C#.
- What is the place of page directive? Explain its attribute.
- Explain any five common properties of the server control

5. Attempt any three of the following:

15

- What is the use of master pages in asp.net? Explain relationship between content page and master page.
- What is Range validator control? Explain with example.
- Explain any two site navigation controls in ASP.NET.
- What is difference between inline code and code behind in ASP.NET?
- Explain Response, Redirect () and Server. Transfer () Methods in asp.net.
- What is caching in ASP.NET? Explain different types of caching.

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6. Attempt any three of the following:

15

- Differentiate between Dataset and Data Reader.
- Explain different data source provided IN ASP.NET.
- What is LINQ? Write the basic syntax of a LINQ query.
- What are different LINQ operators?
- What do you mean by authentication? Explain its types.
- Explain the properties and methods of connection object.

7. Attempt any three of the following:

15

- What is the use of Document Ready function? Explain.
- Explain the need of Timer Control in AJAX.
- What are the selectors present in JQuery?
- Explain DOM manipulation methods in JQuery.
- What is AJAX? List the advantages of AJAX.
- Write a code to hide and show the text on click of command button using JQuery?

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1. Attempt any two of the following:**10**

- List and explain the advantages of Top Down Approach.
- Differentiate between Black Box testing and White Box testing.
- Write a short note on Program Graph.
- Enumerate and explain the benefits of Test Metrics.

2. Attempt any three of the following:

- Explain how quality is viewed by different stakeholders of software development.
- State the skills required for a good tester.
- Write a short note on Verification testing.
- Explain the characteristics of Big Bang Approach.
- List and explain the quality objectives of software development.
- Discuss the reasons for software defects.

3. Attempt any three of the following:**15**

- State the benefits of Boundary Value Analysis.
- Justify how well decision table testing deals with the multiple fault assumption.
- Differentiate between Weak and Strong Equivalence class.
- List the limitations of Equivalence class testing. Explain.
- Explain Retrospection with reference to Functional Testing.
- Write a short note on DD-Path.

4. Attempt any three of the following:**15**

- Explain Loop testing with an example.
- What are the advantages of data flow testing?
- Discuss the functionality of Du Path Test Coverage Metrics.
- List and elaborate the features of Path based testing.
- Explain the different types of Structural Testing.
- Write a short note on Structural testing.

5. Attempt any three of the following:**15**

- What are the advantages of Sandwich Integration testing?
- Discuss the entry criteria for System Testing.
- Explain the benefits of Client Server testing.
- Differentiate between Unit and Integration testing.
- Explain the different types of Acceptance testing.
- Write a short note on Regression testing.

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6. Attempt any three of the following:

- State the advantages and disadvantages of Object Oriented Testing.
- Explain the concept of Class testing.
- State the important guidelines for Object Oriented System Testing.
- Explain how UML supports Integration testing.
- Write a short note on Integration testing in Object Oriented context.
- Discuss GUI Testing.

15

7. Attempt any three of the following:

- What are the benefits of Test Plan?
- Explain the concept of Pareto Chart.
- Differentiate between Qualitative and Quantitative data.
- Justify how test process improvement helps in software quality.
- State the characteristics of Good Test Case.
- Write a short note on Defect Density.

15

T.Y.B.SC.(I.T.) (SEM-V)**Advanced Java.****(Revised) (JAN - 2019)****(3 Hours)****[Total Marks: 100]**

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 (5) Draw neat labeled diagrams wherever necessary.
 (6) Use of Non-programmable calculator is allowed.

1. Attempt any two of the following:**10**

- Write a note on delegation event model.
- Explain the life cycle of Servlet.
- Name the four JDBC Drivers. Explain any two of them.
- Write a note of Packaging of Enterprise Java Bean.

2. Attempt any three of the following:

- Explain using suitable example, the use of adapter classes and inner class in event handling.
- Write a note on JFrame Class with its constructor and any three methods.
- Write a swing program using a text field and a button "Now" to display current date and time when the user press the button.
- What is an anonymous inner class? How it is used in event handling?
- Which component is used to show progress of a background process? Explain.
- Write a note on JTable class.

3. Attempt any three of the following:**15**

- Write a note on Java Servlet API.
- List and explain the need of dynamic contents on internet. Why Servlet is used for it?
- Write a program using servlet to display Square, Square Root, Cube and Cube Root of a number entered through HTML form.
- Explain Cookie class with its constructor and any four methods.
- Write a note on javax.servlet.Servlet interface.
- Create a servlet application to demonstrate the creation and use of HttpSession.

4. Attempt any three of the following:**15**

- Write a short note on JDBC.
- What is a PreparedStatement. Explain using suitable example.
- Write a JDBC program to fetch all the records from a database table "Product_List". (Make suitable assumptions)
- What are the advantages of JSP over Servlet? Explain any five.
- List the various implicit objects available in JSP. Explain any four.
- Write a JSP program using scriptlet to display Simple Interest from 1 to 10 years on Principle amount ₹ 5, 75,000 at the rate of 8.52 pa.

5. Attempt any three of the following:**15**

- Explain the <navigation-rule> element used in facesconfig.xml.
- Create a Stateless EJB to represent Book Information. (Make suitable assumptions)
- Explain the benefits of using EJB.
- Write a note on Bean Server and Container.
- List the life cycle phases of JSF. Explain any two in details.
- Create a Login page using JSF.

6. Attempt any three of the following:**15**

- Explain the different components of Hibernate Configuration file.
- What is Mapping in Hibernate? Explain the use Hibernate Mapping file.
- Explain Hibernate architecture using suitable diagram.
- Write a note on Struts framework.
- Explain Struts framework core components.
- List the steps involved in installing and setting up Struts.

7. Attempt any three of the following:**15**

- Write a note on SOAP.
- Create a simple “Hello World” web service.
- Explain the components of Java MAIL API.
- Write a note on javax.mail.Session class and javax.mail.Message class from the Java Mail API.
- What is Naming Service? Explain.
- Write a short note on JNDI.

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1. Attempt any two of the following:**10**

- What is the syntax for installing RPM? Explain its various options.
- What is GNU? Explain.
- List and explain various NFS export options.
- What are the various components of an email delivery process? Explain.

2. Attempt any three of the following:

- List and explain any five duties of a linux system administrator.
- Write a short note on init process.
- Explain the purpose of various directories of /.
- Explain process of enabling and disabling services.
- Explain Global File System.
- Explain in brief history of linux.

3. Attempt any three of the following:**15**

- What is NFS? Explain its advantages and disadvantages.
- Explain the GRUB configuration file.
- What is CIDR? Explain with example.
- List and explain various options of showmount command.
- Explain the use of fstab file.
- Explain the process to set up an Network Interface Card.

4. Attempt any three of the following:**15**

- Explain various sections in smb.conf file.
- Explain the use of telnet, ftp, rsync, finger and rlogin services.
- How to configure a Time server? Explain.
- Explain smbclient and smbmount commands.
- Explain various services started using xinetd.
- How to optimize samba service? Explain.

5. Attempt any three of the following:**15**

- Write a short note on m4 Macro Processor.
- What is a zone file? Explain.
- Explain the process for configuring Postfix server.
- Explain the steps to enable guest user account in FTP.
- Differentiate between POP3 and IMAP4.
- Explain the various statements of /etc/named.conf file.

6. Attempt any three of the following:**15**

- Write the steps to generate a self-signed certificate.
- List and explain the purpose of any five Mailman configuration categories.
- How is feed file created? Explain.
- How does an Apache web server work? Explain.
- What is virtual server? How to configure it? Explain its directives.
- What is CGI? How is it enabled in an Apache web server?

7. Attempt any three of the following:**15**

- Explain how to optimize mail services?
- Explain chage command with various options.
- What are the options of upgrading existing RPMs? Explain with example.
- What is the use of up2date agent? How are different states of update represented by Alert icon?
- State and explain various commands for viewing login and process information.
- Explain various options of passwd command.

T.Y.B.SC.(I.T.) (SEM-V)
Internet Security
(Old) (JAN - 2019)

Q. P. Code: 38252

(3 Hours)

[Total Marks: 100]

- N. B.: (1) Question **No. 1** is **compulsory**.
 (2) Attempt **any four** from **Question Nos. 2 to 7**.
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 (7) Use of **Non-programmable** calculators is **allowed**.

- 1 A What is Cryptography? Explain Cryptanalysis and role of Cryptanalyst with example 5
 B What do you understand by a "Security Policy"? Explain the characteristics of a good security policy. 5
 C Write short note on Botnets. 5
 D Write a note on Social Engineering. 5
- 2 A Discuss any five Principles of Security in brief with an appropriate example of each. 8
 B Explain Ceaser cipher and mono-alphabetic cipher substitution technique used to convert a plain text message to cipher text. 6
 C Explain bugs and backdoors 6
- 3 A What are worms? Show the structure diagram of worms? Show its working and eradication. Explain the types of worms 8
 B Explain Denial of service attack in detail, 6
 C Distinguish between the Active and Passive attack. 6
- 4 A What is meant by message digests? How the message digests are related to the digital signatures and explain the concept of key wrapping? 8
 B What do you mean by packet sniffing and packet spoofing? 6
 C Explain Diffie Hellman key exchange algorithm with an example. 6
- 5 A Write any one Asymmetric Cryptographic algorithm and explain its performance with suitable example. 8
 B Explain any two transposition cipher with example. 6
 C What are the different kinds of firewalls configurations? Explain anyone in detail. 6
- 6 A What are application gateways? Why are they known as proxy servers? Explain their working in detail. How are they different from circuit gateways? 8
 B Explain the working of digital signature. 6
 C What are Trojan Horses? How do they enter into a system? Give their working mechanism in brief. 6
- 7 A What is a computer virus? What are its types? What is the structure of virus? How can we prevent a computer from being affected by virus? 8
 B Describe the life cycle of virus. 6
 C What is firewall? What are the limitations of firewall? 6

T.Y.B.SC.(I.T.) (SEM-V)**Visual Basic - 6.****(Old) (JAN - 2019)****Q. P. Code: 37252****(3 Hours)****[Total Marks: 100]**

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- | | | | |
|---|---|---|---|
| 1 | A | What are the naming rules and conventions for objects? | 5 |
| | B | Explain the case structure with an example. | 5 |
| | C | What is err object? How is it implemented? | 5 |
| | D | Explain multi-dimensional arrays with an example. | 5 |
| 2 | A | Create a project to accept a number from the user. Provide a button "FIND PRIME" which will check if the number is a prime number and display a message box "Number entered is a prime number" else "Number entered is not a prime number" | 8 |
| | B | Explain in detail message box function. | 6 |
| | C | Write a short note on
i. Visual Basic events ii. Visual Basic event procedures iii. End statement | 6 |
| 3 | A | Create a project to declare a class that will store CODE, NAME, DESCRIPTION, PRICE and QUANTITY of product. Provide "CALCULATE" button for calculation of STOCK VALUE i.e. PRICE * QUANTITY. Display all the details along with stock value in the message box. | 8 |
| | B | Describe the purpose of each of the following methods or properties for a list box control with example
i. List ii. ListIndex iii. Clear | 6 |
| | C | Explain the following controls in detail
i. Frames ii. Check boxes | 6 |
| 4 | A | Create a project to accept two integers from the user as any two sides of a right angled triangle. Calculate the value of the third side by implementing Pythagoras Theorem. (Assuming the three sides of the right angled triangle to be AB, BC, AC respectively where BC is hypotenuse, then AB, AC and BC are connected by the formula: $AB^2 + AC^2 = BC^2$) | 8 |
| | B | Explain control array with suitable examples. | 6 |
| | C | Explain with example creating tool tips and setting default and cancel property. | 6 |

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- 5 A Create a project to maintain employee_id, name, designation, salary, commission, join_date, and birth_date of employees in a random file. Create a user defined type for maintaining the details. Allow the user to ADD, MODIFY and DELETE details. Use a list box to display the name of the employees to the user. Provide a SHOW button to display all the details in a text box after selecting the name from the list. 8
- B Give the comparison between List box and Combo box. 6
- C What is the use of font dialog box in Visual Basic? 6
- 6 A Create a project to display the information of the product table from the stock.mdb database. Include command buttons for record navigation. Hide the data control. Allow the user to add and delete the records. (Product {product_id, name, manufacturer, rate, quantity, description}) 8
- B What is validation? Explain the different validation functions. 6
- C Write a short note on object oriented language. 6
- 7 A Create a project for a food stall owner who provides pizza Rs. 70/-, burger Rs. 30/-, club sandwich Rs. 50/-, grilled sandwich Rs. 60/- and has also distributed discount coupons of 5% and 10%. Allow the user to select a discount rate of 5%, 10% or none (OPTION buttons) and select the items of order (check boxes) along with the quantity (text boxes). Provide CALCULATE button to display the total for each item, total due before and after the discount and also discount amount, if any. 8
- B What are the various properties of data control and data-bound control? 6
- C How are the Visual Basic projects debugged? 6

N. B.: (1) Question **No. 1** is **compulsory**.

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(4) Answers to the **same question** must be **written together**.

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(7) Use of **Non-programmable** calculators is **allowed**.

- 1
 - A State and explain Codd's rules. **5**
 - B What is referential integrity? Discuss referential integrity problems. **5**
 - C What are the different problems that occur due to concurrent transactions? **5**
 - D What are views? State the benefits of views. **5**
- 2
 - A Write SQL statement to create EMPLOYEE and DEPT tables with all the constraints as given after Q. No. 7 **8**
 - B Explain WHERE clause of SELECT statement with example. **6**
 - C What are privileges? Explain GRANT and REVOKE with example. **6**
- 3
 - A Write the SQL queries for the following (refer to the tables given after Q. No. 7) **8**
 - i. List all the employees names with their managers.
 - ii. List all the employees who belong to deptno 10.
 - iii. List employee name, department name and location of all employees.
 - iv. List employee no, employee name concatenated with salary from the employee table. For e.g. empno: ename's salary Rs. XXXXX
 - B Explain network database model. **6**
 - C What are wild cards? What is escape option? Explain with suitable example. **6**
- 4
 - A Write the SQL queries for the following (refer to the tables given after Q. No. 7) **8**
 - i. List the employees whose salary is between 10000 and 15000.
 - ii. Give the name of the employees whose name start with 'RO' or ends with 'SH'.
 - iii. List the employees in the descending order of the department and within that in the ascending order of the salary.
 - iv. List the employee name and department name whose department no is not 10 and salary is greater than 15000
 - B What are triggers? State advantages and disadvantages of triggers. **6**
 - C Explain outer join in detail. **6**
- 5
 - A Write the SQL queries for the following (refer to the tables given after Q. No. 7) **8**
 - i. List the employee no, employee name and salary of employees who are manager.
 - ii. List the employee no, employee name and salary of employees who have been hired after March 15, 2012.

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- iii. List the employee no, employee name and salary of employees who have completed more than 3 years in the organization.
- iv. List the employee name and their hire date who work in the department where 'Satish' works.
- B** What are the various locking techniques? **6**
- C** What is an index? How it is used? How it differs from sorting? **6**
- 6 A** Write the SQL queries for the following (refer to the tables given after Q. No. 7) **8**
- i. List the ename, job and salary of the employees. If the job is 'CLERK' the salary displayed must be 1.2 times the original value. For 'SALESMAN' 1.3 times the original value, for 'ANALYST' 1.4 times the original value and for the remaining 1.1 times the original value. Write the query using CASE.
- ii. List the ename, manager, commission from employee. If the manager is NULL, then display commission, if the commission is also NULL, then display salary.
- B** Write a short note on data types of SQL2. **6**
- C** What is subquery? Explain single row and multi-row subqueries with examples. **6**
- 7 A** Write the SQL queries for the following (refer to the tables given after Q. No. 7) **8**
- i. List the dept no and lowest salary of the department with the highest average salary.
- ii. List the ename, deptno and job of all employees whose department is located in 'PUNE' or 'MUMBAI'.
- iii. List the empno, ename and department name of employees whose salary is greater than average salary.
- iv. List the deptno, department name and number of employees working in each department in the ascending order of number of employees.
- B** State and explain aggregate functions. **6**
- C** Explain IN, ANY and ALL in SQL2. **6**

Table: EMPLOYEE

COLUMN NAME	DATA TYPE	CONSTRAINT
EMPNO	NUMBER(4)	PRIMARY KEY
ENAME	VARCHAR(10)	NOT NULL
JOB	VARCHAR(9)	
MGR	NUMBER(4)	FOREIGN KEY REFERRING EMPLOYEE(EMPNO)
HIREDATE	DATE	
SALARY	NUMBER(7,2)	
COMM	NUMBER(7,2)	
DEPTNO	NUMBER(4)	FOREIGN KEY REFERRING DEPT(DEPTNO)

Table: DEPT

COLUMN NAME	DATA TYPE	CONSTRAINT
DEPTNO	NUMBER(4)	PRIMARY KEY
DNAME	VARCHAR(15)	NOT NULL
LOCATION	VARCHAR(15)	
MANAGER	NUMBER(4)	FOREIGN KEY REFERRING EMPLOYEE(EMPNO)

T.Y.B.SC.(I.T.) (SEM-V)**(Elective – I)****Web Design and Internet based Applications****(Old) (JAN - 2019)**

(Hours)

Q. P. Code: 37249**[Total Marks: 100]**N. B.: (1) Question **No. 1** is **compulsory**.(2) Attempt **any four** from **Question Nos. 2 to 7**.(3) Make **suitable assumptions** wherever necessary and **state the assumptions** made.(4) Answers to the **same question** must be **written together**.(5) Numbers to the **right** indicate **marks**.(6) Draw **neat labeled diagrams** wherever **necessary**.(7) Use of **Non-programmable** calculators is **allowed**.

- | | | | |
|---|---|---|---|
| 1 | A | Explain the <META> tag of HTML giving its purpose and attributes with the help of an Example. | 5 |
| | B | Explain <BODY> tag with example. | 5 |
| | C | What are core HTML attributes? Explain ID and Class attributes. | 5 |
| | D | Write a VB script program to print the factorial of given numbers. | 5 |
| 2 | A | With the help of appropriate examples, explain how different types of hyperlinks are created in HTML. | 8 |
| | B | How to create tables in a web page? Explain with an example. | 6 |
| | C | Explain the role of global.asa file in ASP. | 6 |
| 3 | A | What are IMAGEMAP? illustrate an example of the client side image maps | 8 |
| | B | Explain the data types in VBSCRIPT. | 6 |
| | C | Explain the 'MSGBOX' and 'SPLIT' functions with example | 6 |
| 4 | A | Explain in detail the ADRotator component of ASP. Also give an example of rotating four advertisements on a webpage. | 8 |
| | B | Describe the and tags of HTML. | 6 |
| | C | Differentiate between Client side and Server side Scripting. | 6 |
| 5 | A | What are Cookies? How are Cookies created and destroyed? Enumerate the advantages and disadvantages of cookies. | 8 |
| | B | Explain various Looping constructs of VBScript with its syntax and example. | 6 |
| | C | State and explain the properties and methods of Server object of ASP. | 6 |
| 6 | A | Explain the session object of ASP with its collections, properties and methods. | 8 |
| | B | Write a VBSCRIPT code to determine the age of a person by providing the date of birth as the input through a form. | 6 |
| | C | What are the different ways to connect to database in ASP? Explain. | 6 |
| 7 | A | Explain the <FRAMESET> and <FRAME> tags with their purpose and attributes. Also explain the importance of using Floating Frames | 8 |
| | B | Describe the Response object of ASP, explaining its properties and methods. | 6 |
| | C | State and explain the various Locks Types of RECORDSET object. | 6 |

T.Y.B.SC.(I.T.) (SEM-V)**(Elective – I)****Advanced Java****(Old) (JAN - 2019)****Q. P. Code: 38249****(3 Hours)****[Total Marks: 100]**

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- | | | | |
|---|---|---|---|
| 1 | A | What are the advantages and disadvantages of using JDBC over ODBC? | 5 |
| | B | How HTTP Request and Response are handled by the Servlets? | 5 |
| | C | What is Swing? List the advantages of using Swings | 5 |
| | D | Explain the concept of Character Quoting Conventions in JSP | 5 |
| 2 | A | Explain event delegation model | 8 |
| | B | Explain the following controls:
i) JButton ii) JCheckBox iii) JList | 6 |
| | C | Write a Java Swing program to create a GUI tree | 6 |
| 3 | A | Explain implicit objects in JSP | 8 |
| | B | Explain the steps to connect database using JDBC | 6 |
| | C | What is cookie? How to create a Cookie and use it in Servlet? | 6 |
| 4 | A | Explain the lifecycle of Servlet | 8 |
| | B | Explain the structure of web.xml file with respect to servlet | 6 |
| | C | Write a servlet program to display the factorial of a given number | 6 |
| 5 | A | What is JDBC driver? Explain different types of JDBC drivers | 8 |
| | B | Write a session bean that contains the business logic for Dollar-Rupee Converter. Assume the value, from and to are entered by the user. The business logic should convert the user-entered Dollar value into Rupee and vice versa. | 6 |
| | C | How are menus created? What are the classes used for creating menus? Explain with example | 6 |
| 6 | A | Explain JSP document and various component related to it. | 8 |
| | B | Explain lifecycle of JSP Page | 6 |
| | C | Write a JSP application that computes the cubes of numbers 1 to 10 | 6 |
| 7 | A | Explain JDBC architecture | 8 |
| | B | Write a JDBC program that inserts values in database (Table Name: Student, Fields: Roll no, Name, Course, Grade) | 6 |
| | C | What is JavaBean? Explain its advantages | 6 |

T.Y.B.SC.(I.T.) (SEM-V)**(Elective – II)****ERP Systems.****(Old) (JAN - 2019)****Q. P. Code: 37237****(3 Hours)****[Total Marks: 100]**

- N. B.: (1) Question **No. 1** is **compulsory**.
 (2) Attempt **any four** from **Question Nos. 2 to 7**.
 (3) Make **suitable assumptions** wherever necessary and **state the assumptions** made.
 (4) Answers to the **same question** must be **written together**.
 (5) Numbers to the **right** indicate **marks**.
 (6) Draw **neat labeled diagrams** wherever **necessary**.
 (7) Use of **Non-programmable** calculators is **allowed**.

- | | | | |
|---|---|--|---|
| 1 | A | What is ERP? State the reason for the growth of ERP. | 5 |
| | B | Explain the concept of SCM. | 5 |
| | C | Discuss the reasons for failure of ERP. | 5 |
| | D | Write a short note on fast forward ERP. | 5 |
| 2 | A | What is re-engineering? How is it important in ERP implementation process? | 8 |
| | B | Discuss sales order management process. | 6 |
| | C | “General Ledger is the heart of finance module”. Discuss. | 6 |
| 3 | A | Explain personnel management system of IIR. | 8 |
| | B | Give the difference between MIS and DSS. | 6 |
| | C | Describe any three modules of Oracle application. | 6 |
| 4 | A | Give the comparison between operational data and archive data. | 8 |
| | B | What is integrated data model? | 6 |
| | C | Explain plant maintenance module and its importance. | 6 |
| 5 | A | Describe vendor evaluation and inventory management activity of material management. | 8 |
| | B | How data mining differs from data warehousing. | 6 |
| | C | What are the drawbacks of in-house development of ERP? | 6 |
| 6 | A | What is the purpose of GAP analysis? How the gaps are fixed. | 8 |
| | B | How is ERP package evaluated? | 6 |
| | C | What is business modeling? | 6 |
| 7 | A | How does data warehousing improves the efficiency of ERP? | 8 |
| | B | What is cycle time reduction? How is it implemented? | 6 |
| | C | What is data mining? State the need of computerized and automated mining tools. | 6 |

T.Y.B.SC.(I.T.) (SEM-V)
(Elective – II)
Management Information System
(Old) (JAN - 2019)

Q. P. Code: 37234

(3 Hours)

[Total Marks: 100]

- N. B.: (1) Question **No. 1** is **compulsory**.
 (2) Attempt **any four** from **Question Nos. 2 to 7**.
 (3) Make **suitable assumptions** wherever necessary and **state the assumptions** made.
 (4) Answers to the **same question** must be **written together**.
 (5) Numbers to the **right** indicate **marks**.
 (6) Draw **neat labeled diagrams** wherever **necessary**.
 (7) Use of **Non-programmable** calculators is **allowed**.

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|---|---|---|---|
| 1 | A | What is MIS? What are the uses of computer in MIS? | 5 |
| | B | What are the types of information? | 5 |
| | C | List the decision involved in each phase of management process starting from planning to control. | 5 |
| | D | What are the steps of data processing? | 5 |
| 2 | A | Write a short note on TQM. | 8 |
| | B | What are the different types of CASE tools in MIS? | 6 |
| | C | What are the different sources of information collection? | 6 |
| 3 | A | What are the elements of configuration design? | 8 |
| | B | Write a short note on prototype model. | 6 |
| | C | What are the contents of MIS plan? What is the purpose of each of them? | 6 |
| 4 | A | Why is it necessary to resort strategic business planning? | 8 |
| | B | What are the functions of manager? Explain. | 6 |
| | C | Explain the scope of Economic environment. | 6 |
| 5 | A | What is rational decision? Why is it difficult to take? | 8 |
| | B | How will you avoid misusing information? | 6 |
| | C | "The choice of IT is a strategic decision but not a financial decision". Explain. | 6 |
| 6 | A | What are the principles of operational management? | 8 |
| | B | Explain bias in information. | 6 |
| | C | Explain Payoff Analysis. | 6 |
| 7 | A | What is management by exception? | 8 |
| | B | Write a short note on spiral model. | 6 |
| | C | Explain the principle of organizational structure. | 6 |