UNIT – V

9. (a) Illustrate HTTP Request and Response with suitable example.

(b) What is scripting element in JSP? What are the advantages jsp over servlets?

Or

10. (a) How to create cookies and objects in ASP? Give an example.

(b) With example program how to connecting the data in ASP.

(MCS40112)

M.Sc. DEGREE EXAMINATION, APRIL 2019.

Fourth Semester

Computer Science

Paper I – WEB TECHNOLOGIES

(Regulation 2012 – 2013)

Time : Three hours Maximum : 70 marks

UNIT – I

1. (a) What is web browser? What are the components of web browser? How to search information through web browser?

(b) Describe the features of Post Office Protocol.

Or

2. (a) Explain about various layers of Transfer Control Protocol and give its functionalities.

(b) Write about the working e– mail protocol.

UNIT – II

3. (a) Write about client socket, server socket and datagram socket.

(b) What is remote method invocation? What is purpose of stub and skeleton in RMI? Give the limitations of RMI.

Or

4. (a) How many types of lists supported by HTML? Explain each on in brief.

(b) Write an HTML program for user registration form which contain Name, Date of birth, Gender, Qualification.

UNIT – III

5. (a) Describe the various methods of Navigator, Math, String and Window Objects.

(b) Write a java script to validate an email address using regular expression.

Or

6. (a) Explain about various conditions statements supported by VB script.

(b) Write VB script program to demonstrate sub procedures.

UNIT – IV

7. (a) What is CGI? How does web server and CGI program interact? List the important CGI environment variables.

(b) Write a DHTML to change the background image if the user moves the mouse over it.

Or

8. (a) Describe the rules for well-formed XML document.

(b) Explain the following terms with example related to DTD in XML :

(i) Elements

(ii) Attributes and Entities

(iii) Internal and External entities

(MCS40116)

M.Sc. DEGREE EXAMINATION, APRIL 2019.

Fourth Semester

Computer Science

Paper – I : DOT NET PROGRAMMING

(Regulation 2016 – 2017)

Time : Three hours Maximum : 70 marks

Answer ONE question from each unit.

All questions carry equal marks. (5 × 14 = 70)

UNIT – I

1. (a) Write about different data types in Visual Basic 2012.

(b) How to handle exceptions in VB? Explain with proper syntax?

Or

2. Explain about the following controls with suitable:

(a) Radio button control

(b) Group box control

(c) Color dialog control

(d) Open file dialog control

(e) Folder Browser dialog control

UNIT – II

3. What is basic structure of C#? Discuss different selection and control statements in C#.

Or

4. (a) State and describe different member access modifiers in C#.

   (b) What is constructor? Write about different types of constructors in C# with syntax.

UNIT – III

5. Discuss about various navigations controls with suitable example.

Or

6. (a) List the different object models associated with ASP.NET and highlight the features of each object.

   (b) Write about the validator controls and their applications in ASP.NET.

UNIT – IV

7. Write a program using ADO.NET to connect to the north wind database and read the names of the employees. The employee table has two fields namely first name and last name.

Or

8. (a) Describe in detail the lifecycle of web form.

   (b) What is use catalog zone control? Explain any one Catalog zone control in a program.

UNIT – V

9. What is data cache? Write ASP.Net program to adding the item to cache, retrieving the data from the cache and deleting the item from the cache.

Or

10. (a) Describe the features of WCF 4.5.

    (b) Explain about silver light architecture and its components.

(MCS40216)

M.Sc. DEGREE EXAMINATION, APRIL 2019

Fourth Semester

Computer Science

Paper II — MOBILE COMPUTING

(Regulation 2016-2017)

Time : Three hours Maximum : 70 marks

Answer ONE question from each Unit

All questions carry equal marks.

(5 × 14 = 70)

UNIT I

1. Discuss about significance of TCP/IP protocol stack in world wide web.

Or

2. (a) Explain different types of networks which are used in mobile computing.

(b) Write about mobile computing paradigm.

UNIT II

3. Explain about GPRS architecture system and also compare GSM and GPRS.

Or

4. Write about the following wireless technologies :

(a) Blue tooth

(b) WMAN – WiMAX

UNIT – III

5. How does mobile IP work? What are the challenges with mobile IP with respect to high speed mobility? How does cellular IP solve some of these challenges?

Or

6. (a) What is the role of Reverse tunneling in route optimization? Explain in detail.

(b) Explain about agent advertisement and delivery.

UNIT IV

7. How does the selective transmission improve the transmission efficiency? What are the modifications required in the TCP receiver to implement selective retransmission protocol?

Or

8. (a) Explain fast transmission and fast recovery.

(b) Why do we go for ITCP? What the advantages and disadvantages of it?

UNIT V

9. (a) Describe different characteristics of Next Generation Networks.

(b) Write about transport independent service paradigm.

Or

10. Write short notes on the following :

(a) Mio — NFS

(b) Symbian OS

(c) WML Script.

(MCS403A16)

M.Sc. DEGREE EXAMINATION, APRIL 2019.

Fourth Semester

Computer Science

Paper III — CLOUD COMPUTING

(Regulation 2016-17)

Time : Three hours Maximum : 70 marks

Answer ONE question from each Unit.

All questions carry equal marks.

(5 × 14 = 70)

UNIT I

1. (a) Explain about GPU Computing, Exascale and beyond.

(b) Explain SOA with its applications.

Or

2. Discuss in detail different system models for distributed and cloud computing.

UNIT II

3. (a) What is the need of live VM Migration steps and performance effects?

(b) Explain the differences between full-virtualization and para-virtualization.

Or

4. (a) Discuss about virtualization for datacenter automation.

(b) How virtualization can be implemented in the multi-core processors?

UNIT III

5. (a) Draw and explain Microsoft Windows Azure.

(b) Describe different issues in cloud security and trust management.

Or

6. Discuss different service models of cloud computing with architectures.

UNIT IV

7. (a) What is the role of power managers in cloud resource scheduling and management? Explain briefly.

(b) Briefly explain about Borrowed Virtual Time (BVT).

Or

8. (a) What is resource bundling? Explain combinational auctions?

(b) Write about stability of two — level resource allocation architecture.

UNIT V

9. (a) Explain mega store architecture with example.

(b) What is Chubby? Explain how it is useful to cloud?

Or

10. (a) State and describe different storage models.

(b) Describe the functionalities of AmazonS3.

UNIT V

9. (a) Explain about knowledge acquisition and validation techniques.

(b) Write short notes on expert system shell.

Or

10. Discuss about common sense ontologies and case — based reasoning.

(MCS403B16)

M.Sc. DEGREE EXAMINATION, APRIL 2019.

Fourth Semester

Computer Science

Paper III — ARTIFICIAL INTELLIGENCE

(Regulation 2016)

Time : Three hours Maximum : 70 marks

Answer ALL questions.

All questions carry equal marks.

UNIT I

1. (a) Analyze 8-puzzle, Chess, Bridge game and Theorem proving problems with respect to the following problem characteristics:

(i) Is the problem decomposable?

(ii) Can solution step be ignored?

(iii) Is the good solution absolute or relative?

(iv) Is the solution state or a path?

(v) What is the role of knowledge?

(b) State and explain Turing test.

Or

2. (a) Explain Depth First Search (DFS) and Breadth First Search (BPS) with suitable example.

(b) Solve the following crypt arithmetic constraint satisfaction problem.

SEND + MORE = MONEY

UNIT II

3. By using the resolution principle prove that whether "Marcus hated Caesar" or not? Given:

(a) Marcus was man.

(b) Marcus was a Pompeian.

(c) All Pompeians were Romans.

(d) Caesar was a ruler.

(e) All Romans were either loyal to Caesar or hated him.

(f) Everyone is loyal to someone.

(g) People only try to assassinate rulers they are not loyal to.

(h) Marcus tried to assassinate Caesar.

Or

4. (a) Differentiate procedural and declarative knowledge.

(b) Discuss about various issues in knowledge representation.

UNIT III

5. (a) Illustrate directed dependency directed back tracking with example.

(b) Write frame for student information system.

Or

6. (a) Describe the logics for non-monotonic reasoning.

(b) What are the advantages and disadvantages of semantic net? Represent the following Sentence in the semantic net:

"Football is a game, It is played by ball, It is popular in Europe."

UNIT IV

7. Explain about goal stack planning algorithm with Block World problem.

Or

8. (a) Explain about Augmented transition network.

(b) Briefly explain about discourse integration and pragmatic processing.