(MCS40112)

M.Sc. DEGREE EXAMINATION, APRIL 2017.

Fourth Semester

Computer Science

Paper I — WEB TECHNOLOGIES

(Regulation 2012)

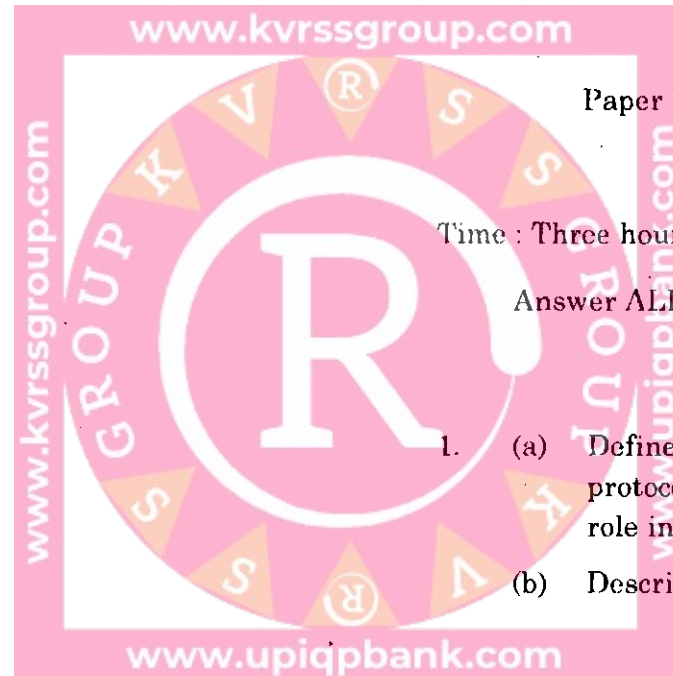Time : Three hours   Maximum : 70 marks

Answer ALL questions One from each unit.

UNIT I

1. (a) Define Internet. Explain about the internet protocols and how internet plays a crucial role in the present scenario. (7)

   (b) Describe about IMAP and IP. (7)

Or

2. (a) What is Web? What are the concepts of the web? Describe about Internet Standards. (7)

   (b) Discuss about (i) Internet applications (ii) Host Names (iii) E-mail Protocols. (7)

UNIT II

3. (a) Explain about Streams in detail. (7)

    (b) Describe about GET GRID APPLICATION program. (7)

Or

4. Create a Resume by using all options in FORMS of HTML. (14)

UNIT III

5. (a) Define Java Script. What are the ways of embedding Javascript in HTML page? Write a Java Script program for calculating the GCD of two numbers using functions. (7)

    (b) Explain the Objects of Java Script with examples. (7)

Or

6. (a) Discuss about Object and VB Script. (7)

    (b) Write a VB Script program for inserting an element into an array. (7)

UNIT IV

7. (a) Describe about Document Object Model and its collections. (7)

    (b) Discuss about Cascading Style Sheets (CSS). (7)

Or

8. (a) Differentiate XSL and XML. (7)

    (b) Describe the CCI Script Structure and its Modules. (7)

UNIT V

9. (a) Discuss about Multitier applications using Data Base Connectivity. (7)

    (b) Establish a JSP Connection for retrieving the data from a HTML file to a JSP file. (7)

Or

10. Explain

    (a) Servlet Life cycle. (4)

    (b) ASP cookies. (3)

    (c) Components of JSP (4)

    (d) Compare JSP and ASP (3)

(MCS40212)

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Paper-II : ARTIFICIAL INTELLIGENCE

(Regulation 2012)

Time : Three hours   Maximum : 70 marks

Answer ALL questions.

All questions carry equal marks.

1.   (a)   Define the problems :   (9)

      (i)   Missionaries and Cannibals
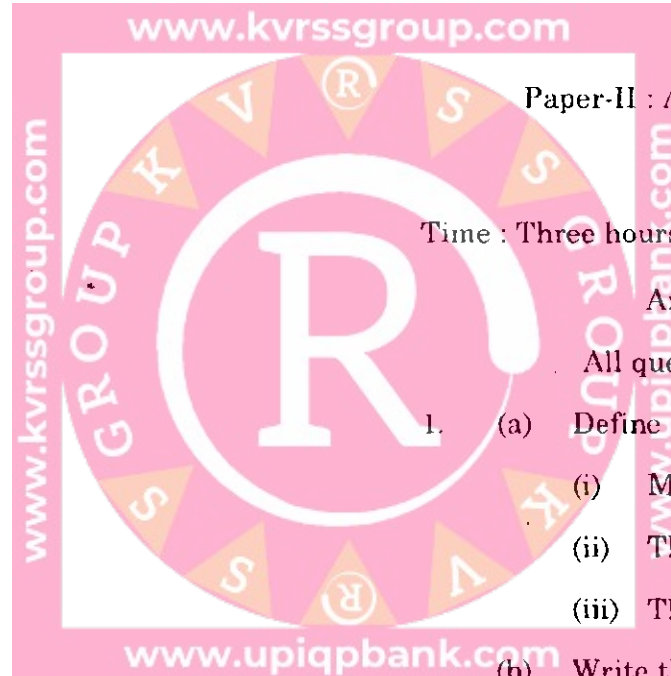
      (ii)   The Tower of Hanoi and

      (iii)   The Monkey and Bananas.

   (b)   Write the algorithm of Simple Hill Climbing. (5)

Or

   (c)   What is Best-First search? Write and explain the $A^\star$ algorithm with suitable examples. (14)

2. (a) Write Unification algorithm. (5)

(b) Consider the following facts : (9)

   (i) John likes all kinds of food.

   (ii) Apples are food.

   (iii) Chicken is food.

   (iv) Anything anyone eats and isn't killed by is food.

   (v) Bill eats peanuts and is still alive.

   (vi) Sue eats everything Bill eats.

Convert these formulas into predicate logic and write the clauses. Prove that 'John likes peanuts' using resolution.

Or

(c) Discuss the role of Matching in extracting the applicable rules. (14)

3. (a) Distinguish between Nonmonotonic reasoning and Statistical reasoning. (4)

(b) Describe ABC murder story as an implementation of JTMS. (10)

Or

(c) What are Partitioned Semantic networks? What are Frames? (4)

(d) Design a Frame system for Baseball team and give explanation. (10)

4. (a) Describe in detail the components of a planning system. (14)

Or

(b) Explain Semantic grammars and Case grammars in detail.

5. (a) Write about any two Commonsense ontologies in detail. (14)

Or

(b) Write about the Explanation and Knowledge acquisition facilities provided 14 by an Expert system.

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M.Sc. DEGREE EXAMINATION, APRIL 2017.

Fourth Semester

Computer Science

Paper III — GRID COMPUTING

(Regulation 2012)

Time : Three hours

Maximum : 70 marks

Answer ALL questions one from each Unit.

All questions carry equal marks.
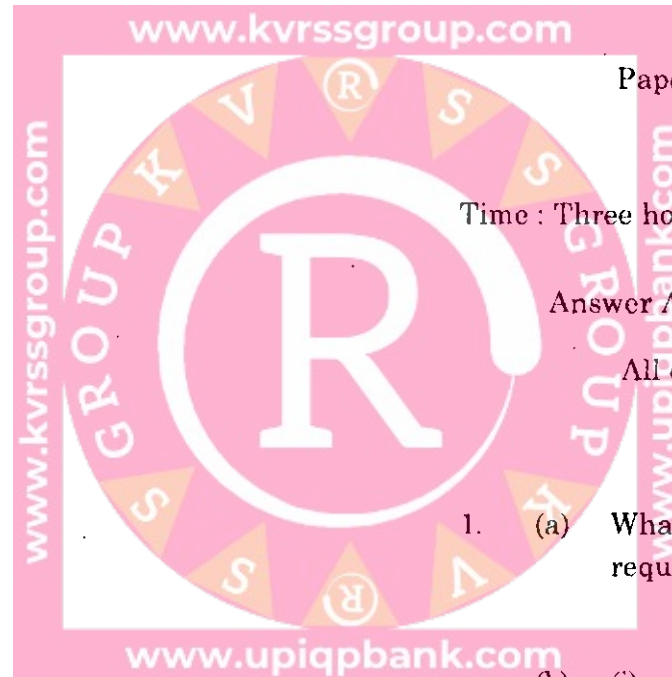
$(5 \times 14 = 70)$

UNIT I

1. (a)   What are the data and functional requirements of grid computing?

Or

(b)   (i)   Describe any two scientific applications of grid computing.

(ii)   What is grid? Describe its components with neat diagram.

UNIT II

2. (a) How are grid computing organizations classified? Write about each category.

Or

(b) Discuss briefly about organization building and using grid based solution to solve their computing data and network requirements.

UNIT III

3. (a) (i) Briefly explain the following terminologies

(1) web services

(2) Stateful web services

(3) Grid services

(4) Grid service interface.

(ii) With the help of a diagram, explain service description for web services.

Or

(b) (i) What is WSDL? Describe its components.

(ii) Explain Grid Service interoperability.

UNIT IV

4. (a) Give any use case for OGSA. Explain its actor, scenarios and functional requirements.

Or

(b) Give a high level introduction to OGSI, with a neat diagram depicting a typical web service and grid service layers.

UNIT V

5. (a) Describe in detail the architecture of GT3. with the core services supported by the same.

Or

(b) What extra services are needed in grid environment to manage data? Discuss data management and information services in GT3.

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Computer Science

Paper III — MOBILE COMPUTING

(Regulation 2012)

Time : Three hours   Maximum : 70 marks

UNIT I

1. (a)   Write about Middleware and gateways.   (7)

    (b)   Explain mobile computing through Internet.
                                                  (7)

Or

2. Explain the Architecture of mobile computing. (14)

UNIT II

3. (a)   Explain mobile computing through telephone.
                                                  (7)

    (b)   Explain mobile IP.   (7)

Or

4. Explain IPV6 in detail.   (14)

UNIT III

5. (a)   Explain GSM entities.   (7)

    (b)   Write about SMS.   (7)

OR

6. Explain the GSM architecture in detail.   (14)

UNIT IV

7. Explain the different spread spectrum technologies.   (14)

Or

8. Write about following :   (14)

    (a)   Applications on 3G

    (b)   GPRS Applications.

UNIT V

9. (a)   Explain about MANET.   (7)

    (b)   Write about Voice over IP applications. (7)

Or

10. Explain security issues in mobile computing. (14)

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