G 718   (Pages : 2)   Reg. No.....................................

Name.....................................

B.TECH. DEGREE EXAMINATION, MAY 2014

Seventh Semester

Branch : Information Technology

IT 010 702—OBJECT ORIENTED MODELLING AND DESIGN (IT)

(Improvement/Supplementary)

[2010 admissions]

Time : Three Hours   Maximum : 100 Marks

Part A

Answer all questions.
Each question carries 3 marks.

1. What is aggregation ? Explain.
2. What are operations in dynamic modeling.
3. What are subsystems ? Explain.
4. How will you represent an object ?
5. What is use-case diagram ? Explain.

                                                   (5 × 3 = 15 marks)

Part B

Answer all questions.
Each question carries 5 marks.

6. Explain advanced links and association concepts.
7. What is Data flow diagram ? Explain.
8. Explain how concurrency is identified during system design.
9. Explain adjustment of inheritance briefly.
10. Explain deployment diagram will an example.

                                                   (5 × 5 = 25 marks)

Part C

Answer all questions.
Each question carries 12 marks.

11. Discuss the object oriented themes in detail.

Or

12. With examples, discuss multiple inheritance and metadata.

                                                   Turn over

13. Describe the relationship of object and dynamic models.

Or

14. Briefly explain with examples, how do you specify operations in functional programming also bring some of the constraints.

15. Give briefly the iterating the analysis also explain about adding operations during analysis.

Or

16. Explain how to manage data stores and handling global resources.

17. Describe design optimization in detail.

Or

18. Write notes on : (a) Design of Association ; (b) Object representation.

19. Bring out the usage of UML diagrams.

Or

20. Draw class diagrams, sequence diagrams and object diagram considering an example.

(5 × 12 = 60 marks)

G 730   (Pages : 2)   Reg. No.................................

Name...................................

B.TECH. DEGREE EXAMINATION, MAY 2014

Seventh Semester

Branch : Information Technology

IT 010 703—COMPUTER GRAPHICS AND MULTIMEDIA SYSTEMS (IT)

(Improvement/Supplementary—2010 Admissions)

Time : Three Hours   Maximum : 100 Marks

Part A

Answer all questions.
Each question carries 3 marks.

1. List uses of Computer graphics.
2. Derive the equation in matrix form for rotation.
3. Discuss the advantages of hidden line removal algorithm.
4. What are the properties of Multimedia?
5. Explain coding requirements.

                                                        (5 × 3 = 15 marks)

Part B

Answer all questions.
Each question carries 5 marks.

6. Explain types of display devices.
7. What is Reflection? Explain.
8. Explain the advantages of using colour models.
9. Discuss digital image representate in detail.
10. Explain the allocation scheme in Resource Management.

                                                        (5 × 5 = 25 marks)

Part C

Answer all questions.
Each question carries 12 marks.

11. Describe different types of input devices and output devices used in computer graphics.

Or

12. Write Bresenham's line drawing algorithm. Explain it with an example.

13. Briefly describe transformation of points and straight lines.

Or

14. Describe any *one* line clipping algorithm.

15. Discuss A-Buffer Algorithm.

Or

16. Discuss in detail any *one* of the hidden line removal algorithm.

17. Discuss the MIDI concepts, devices and messages in detail.

Or

18. Explain image synthesis, analysis and transmission in detail.

19. Explain different steps involved in MPEG data compression.

Or

20. Describe Real Time process management in conventional operating system and Real-Time scheduling in process management.

$(5 \times 12 = 60 \text{ marks})$

G 741   (Pages : 2)   Reg. No....................................

Name..

B.TECH. DEGREE EXAMINATION, MAY 2014

Seventh Semester

Branch : Information Technology

IT 010 704—INTERNET WORKING (IT)

(Improvement/Supplementary—2010 Admissions)

Time : Three Hours   Maximum : 100 Marks

Part A

*Answer **all** questions.*
Each question carries 3 marks.

1. What is RARP ?

2. Explain the advantages of UDP.

3. Explain DSPF.

4. Discuss any *two* applications of DNS.

5. Explain FTP.

(5 × 3 = 15 marks)

Part B

*Answer **all** questions.*
Each question carries 5 marks.

6. Draw an IP packet header and discuss the fields.

7. Explain CIDR.

8. Discuss the BGP functionalities.

9. Explain the working of TELNET.

10. Explain IMAP.

(5 × 5 = 25 marks)

Part C

*Answer **all** questions.*
Each full question carries 12 marks.

11. (a) (i) Explain ARP and its significance.   (6 marks)

      (ii) Discuss about Classful Internet Addresses.   (6 marks)

Or

Turn over

(b) Explain :

    (i) Connectionless Datagram Delivery.   (6 marks)

    (ii) Forwarding of IP datagrams.   (6 marks)

12. (a) (i) Explain Protocol layering. Discuss its advantages and disadvantages.   (6 marks)

    (ii) Explain silly window syndrome.   (6 marks)

Or

(b) Write briefly on :

    (i) Reliable Stream Transport Service.   (6 marks)

    (ii) ICMP.   (6 marks)

13. (a) Explain RIP is detail.   (12 marks)

Or

(b) Discuss briefly the Routing Architecture and any one routing algorithm.   (12 marks)

14. (a) Explain how DHCP works ?   (12 marks)

Or

(b) Write briefly on :

    (i) NAT.

    (ii) VPN.

    (iii) DNS.   (4 + 4 + 4 = 12 marks)

15. (a) Explain SMTP in detail.   (12 marks)

Or

(b) Explain :

    (i) RTP.   (6 marks)

    (ii) RSVP.   (6 marks)

[5 × 12 = 60 marks]

G 751

(Pages : 2)

Reg. No......................................

Name..

B.TECH. DEGREE EXAMINATION, MAY 2014

Seventh Semester

Branch : Information Technology

IT 010 705—WEB APPLICATIONS DEVELOPMENT (IT)

(Improvement—Supplementary)

[2010 Admissions]

Time : Three Hours   Maximum : 100 Marks

Part A

Answer **all** *questions.*
Each question carries 3 marks.

1. What are the applications of J2EE ? Explain.
2. What is a servlet container ? Explain.
3. How debugging carried out in JSP ?
4. What is a stateless session bean ? Explain.
5. What are entity beans ? Explain.

(5 × 3 = 15 marks)

Part B

Answer **all** *questions.*
Each question carries 5 marks.

6. Explain briefly on J2EE layers.
7. What are batch statements ? Explain.
8. Explain MVe design.
9. Explain the life-cycle of EJB.
10. How do you create security on JMS ?

(5 × 5 = 25 marks)

Part C

Answer **all** *questions.*
Each question carries 12 marks.

11. Explain J2EE architecture and development methodology.

Or

12. Discuss database design and creating data access objects in detail.

Turn over

13. Explain JDBC API and discuss on retrieving and updating data.

Or

14. Describe servlet life-cycle and HTTP response header in detail.

15. Explain conditional processing and displaying values in JSP.

Or

16. Write notes on :

    (a) Application models.

    (b) Passing Control and Data between pages.

17. Explain distributed programming in detail with examples.

Or

18. Briefly explain CMP and bean managed.

19. Explain the architecture of CORBA and its uses.

Or

20. Discuss on Transaction management and deployment in detail.

(5 × 12 = 60 marks)

G 615 ‎CS

B.TECH. DEGREE EXAMINATION, MAY 2014

Seventh Semester

Branch : Computer Science and Engineering and Information Technology

OBJECT ORIENTED MODELLING AND DESIGN (R T)

(Old Scheme – Prior to 2010 Admissions)

[Supplementary]

Time : Three Hours

Maximum : 100 Marks

Part A

Answer all questions.

Each question carries 4 marks.

1. List and explain object oriented methodologies.

2. What are grouping constructs? Explain.

3. List the operations in dynamic modelling and explain.

4. Discuss the relation of functional modelling to object models.

5. Discuss the steps for analysis in object modelling.

6. How do you handle the problems of global resource sharing?

7. Discuss the overview of object design principles.

8. What is physical packaging in object design? Explain.

9. What are Notations? Explain.

10. Explain the rule of UML.

(10 × 4 = 40 marks)

Part B

Answer all questions.

Each question carries 12 marks.

11. Explain in detail the object oriented methodologies.

Or

12. With examples, explain the multiple inheritance in advanced object modelling.

Turn over

13. What are Events and States? Explain the Nested state diagrams in dynamic modelling.

Or

14. Explain a sample functional model. Bring out a comparison between functional modelling and dynamic modelling.

15. Briefly explain an Iterating process analysis with examples.

Or

16. Give a description of Architectural frameworks in system design.

17. Explain how the three models are combined.

Or

18. Discuss the role of documenting design decisions in object design.

19. Make a comparative study of Broch's methodology and Jacobson methodology.

Or

20. Discuss the mechanisms used in UML.

(5 × 12 = 60 marks)

G 657

Reg. No...................................

Name.......................................

B.TECH. DEGREE EXAMINATION, MAY 2014

Seventh Semester

Branch—Computer Science and Engineering/Information Technology

WEB TECHNOLOGIES (RT)

(Old Scheme—Prior to 2010 Admissions/Supplementary)

Time : Three Hours   Maximum : 100 Marks

Part A

Answer all questions.
Each question carries 4 marks.

1. What is meant by comments ? Explain.

2. Give a brief idea about starting and Ending of Tags.

3. With an example explain document type declaration in XML.

4. List and explain XML Applications.

5. What is customization in Java Beans ? Explain.

6. Explain introspection in Java.

7. How do you read parameter values in ISPS ?

8. What is serialized beans ? Explain.

9. Explain the steps for using a the bean from a client.

10. What are entity beans ? Explain

                                                                    (10 × 4 = 40 marks)

Part B

Answer all questions.
Each question carries 12 marks.

11. Explain in detail the features of XML and HTML.

                                    Or

12. Write notes on :

    (a) Simple XML documents.

    (b) Entity References.

                                                                    (6 + 6 = 12 marks)

13. With examples explain element type and attribute list declarations.

                                    Or

14. Give the procedure for storing XML data in HTML document.

15. Explain bound and constrained properties of Java Beans.

Or

16. Describe in detail about providing custom property editors and GUI interfaces.

17. Explain reading and setting properties of Java Beans.

Or

18. With examples explain how will you use Java beans in JSPS.

19. Explain the basics and types of EJB.

Or

20. Explain packaging and deploying beans in detail.

(5 × 12 = 60 marks)

G 688

(Pages : 2)

Reg. No..............................

Name.................................

B.TECH. DEGREE EXAMINATION, MAY 2014

Seventh Semester

Branch—Computer Science and Engineering/Information Technology

MOBILE COMPUTING (Elective I) (RT)

(Old Scheme—Prior to 2010 Admissions—Supplementary)

Time : Three Hours

Maximum : 100 Marks

Part A

Answer **all** *questions.*
Each question carries 4 marks.

1. Explain the frame structure used for time in GSM.

2. With figure describe the MOC in GSM.

3. Differentiate device portability and user mobility.

4. Briefly explain a short history of wireless communication.

5. Briefly explain the design goals of WLAN.

6. Differentiate infrastructure and ad hoc networks ?

7. Explain the entities and terminologies used in mobile IP.

8. With figure explain the working of DHCP.

9. What are the capabilities offered by WML script which is not supported by WML ?

10. Explain the components and interfaces of WAP architecture.

(10 × 4 = 40 marks)

Part B

Answer **all** *questions.*
Each question carries 12 marks.

11. With figure explain in detail the functionalities of different layers in the simplified reference model used for mobile communication ?

Or

12. Explain in detail the cellular systems.

13. With figure explain the protocol architecture of DECT.

Or

14. Illustrate the DAB frame structure. With figure, explain the components of a DAB sender.

Turn over

15. Briefly explain the MAC mechanism adopted in WLANs.

Or

16. With neat sketch, explain the several access scenarios of the WATM based on the reference model.

17. With necessary figure, illustrate Indirect-TCP ?

Or

18. With an example, explain DSR in ad hoc networks.

19. Write a note on www ?

Or

20. Illustrate in detail wireless transaction protocol.

(5 × 12 = 60 marks)