

F 3722

(Pages : 2)

Reg. No.....

Name.....

B.TECH. DEGREE EXAMINATION, NOVEMBER 2010

Eighth Semester

Branch : Computer Science and Engineering

PRINCIPLES OF PROGRAMMING LANGUAGES (R)

(Supplementary)

Time : Three Hours

Maximum : 100 Marks

Part A

Answer all questions.

Each question carries 4 marks.

1. Briefly explain the role of programming languages.
2. Write short notes on language paradigms.
3. Explain with examples type checking.
4. Discuss about structured data types.
5. Explain about sequence control.
6. Explain abstract data types.
7. Explain about polymorphism.
8. Discuss in detail subprogram control.
9. What is meant by parallel programming? Explain.
10. Explain exception handling in JAVA and write their features.

(10 × 4 = 40 marks)

Part B

Answer all questions.

Each question carries 12 marks.

11. Discuss in detail "Design issues of programming language".

(12 marks)

Or

12. Write notes on 'language paradigms'.

(12 marks)

13. Explain about assignment and initialisation.

(12 marks)

Or

Turn over

Reg. No.....

14. Explain "Declarations and type checking for data structures".

(12 marks)

Name.....

15. Discuss about storage management.

(12 marks)

B.TECH. DEGREE EXAMINATION, NOVEMBER 2010

16. Explain in detail implicit and explicit sequence control.

(12 marks)

17. Write notes on "attributes of data control".

(12 marks)

PRINCIPLES OF PROGRAMMING LANGUAGES (R)

18. Explain the following: (Supplementary)

Maximum Marks 100

(a) Abstract data types revisited.

Time : Three Hours

(b) Polymorphism.

(6 + 6 = 12 marks)

19. Write notes on :

(a) Advances in language design.

(b) Parallel programming.

Write short notes on language paradigms. (6 + 6 = 12 marks)

Or

3. Explain with examples type checking.

20. Write notes on "Exception handling" in JAVA.

Discuss about structured data types. (20 marks)

Write short notes on sequence control. (6 + 6 = 12 marks)

6. Explain abstract data types.

7. Explain about polymorphism.

8. Discuss in detail subprogram control.

9. What is meant by parallel programming? Explain.

10. Explain exception handling in JAVA and write their features.

(10 x 4 = 40 marks)

Part B

Answer all questions.

Each question carries 12 marks.

(12 marks)

11. Discuss in detail "Design issues of programming language".

Or

(12 marks)

12. Write notes on language paradigms.

(12 marks)

13. Explain about assignment and initialization.

Or

Turn over

F 3758

Reg. No.....

Name.....

B.TECH. DEGREE EXAMINATION, NOVEMBER 2010

Eighth Semester

Branch : Computer Science and Engineering

E-COMMERCE—(Elective II) (R)

(Supplementary)

Time : Three Hours

Maximum : 100 Marks

Part A

Answer all questions.

Each question carries 4 marks.

1. What is meant by WWW ? Name some popular Internet Browsers.
2. Discuss the E-commerce architecture.
3. What is Fire wall ? Explain.
4. What is data encryption ? Explain.
5. What is a credit card ? Explain.
6. What are the risk in Electronic Payment System ?
7. What is EDI and explain internet boned EDI ?
8. Explain the need for EDI standard.
9. What is mobile computing, explain ?
10. Explain how Broad Band Telecommunication helps in E-commerce ?

(10 × 4 = 40 marks)

Part B

Each question carries 12 marks.

11. Explain WWW architecture and internet service provider. (12 marks)
Or
12. Give the anatomy of E-commerce and its applications. (12 marks)
13. Explain CS security threats and explain how it can over come. (12 marks)
Or
14. Mention different types of security measures and describe each in detail. (12 marks)
15. Explain the design procedure of electronic payment system. (12 marks)
Or
16. What are different types of e-payment system ? Explain its advantages and disadvantages. (12 marks)
17. What is document library ? Explain. (12 marks)
Or
18. (i) Explain EDI in WWW. (6 marks)
(ii) Explain internal information system. (6 marks)
19. Explain Mobile computing and Wireless computing in detail. (12 marks)
Or
20. Short notes on :
(i) SMDS. (6 marks)
(ii) Asynchronous transfer mode. (6 marks)

[5 × 12 = 60 marks]

[2 x 15 = 30 marks]

(ii) Vaidicshronona shayatek pora

(8 marks)

(i) SMD2

(8 marks)

30. Shoch pora on :

0

18. Exhbatu Morje computerng and Mirejasa computerng in qetaj

(15 marks)

(ii) Exhbatu internej informetion adata

(8 marks)

18. (i) Exhbatu EDI in WWW

(8 marks)

0

15. Mpat is document prajy ; Exhbatu

(15 marks)

18. Mpat are different tybes of e-payment adata ; Exhbatu its advantages and disadvantages

(15 marks)

0

18. Exhbatu the qetaju process of electronic payment adata

(15 marks)

14. Mention different tybes of security measures and describe each in qetaj

(15 marks)

0

13. Exhbatu CS security threats and exhbatu how it can ovet come

(15 marks)

13. Give the structure of E-commerce and its applications

(15 marks)

0

11. Exhbatu WWW architecture and internet adata browser

(15 marks)

Each question carries 15 marks

Part B

(10 x 4 = 40 marks)

10. Exhbatu how Broad Band Telecommunication helps in E-commerce ;

a. Mpat is worje computerng' exhbatu ;

8. Exhbatu the need for EDI adata

7. Mpat is EDI and exhbatu internet based EDI ;

6. Mpat are the tyk in Electronic Payment System ;

5. Mpat is a credit card ; Exhbatu

4. Mpat is qata encryption ; Exhbatu

3. Mpat is Fire wall ; Exhbatu

2. Describe the E-commerce architecture

1. Mpat is meant by WWW ; Name some popular internet browsers

Each question carries 4 marks

Answer all questions

Part A

Time : Three Hours

Maximum : 100 Marks

(Supplementary)

E-COMMERCE—(Ejective II) (B)

Bhanch : Computer Science and Engineering

Eight Semester

B'LECH' DEGREE EXAMINATION, NOVEMBER 2010

Name

Reg. No

E 3128

F 3759

Reg. No.....

Name.....

B.TECH. DEGREE EXAMINATION, NOVEMBER 2010

Eighth Semester

Branch : Computer Science and Engineering/Information Technology

CLIENT SERVER COMPUTING—(Elective II) (RT)

(Supplementary)

Time : Three Hours

Maximum : 100 Marks

Answer all the questions.

Part A

Each question carries 4 marks.

1. What is meant by Hetrogenous computing ?
2. Mention the advantages and disadvantages of client server computing.
3. Discuss about client/server development tools.
4. What is request for service ? Explain the basic service provided by NOS.
5. Compare Multiprogramming with Multitasking.
6. Discuss about advantages of multiple processor.
7. Discuss about "semaphores".
8. Discuss "Critical Sections".
9. Discuss about "Kernal Structure".
10. Describe inter processor communication.

(10 × 4 = 40 marks)

Part B

Each question carries 12 marks.

11. Write notes on client server computing and cross platform computing. (12 marks)
Or
12. Discuss about client-server databases. (12 marks)
13. Explain the fundamentals of client server design. (12 marks)
Or
14. Discuss about client server communication protocol. (12 marks)
15. Write notes on multi programming. (12 marks)
Or
16. Explain Windows NT for developing client-server application. (12 marks)
17. How to create semaphore and explain semaphore implementations in NT. (12 marks)
Or
18. Write notes on :
(i) Context switching.
(ii) Preemptive systems. (12 marks)
19. Write notes "Communication protocols". (12 marks)
Or
20. Discuss the importance of the Kernel structure for network communication. (12 marks)

[5 × 12 = 60 marks]

F 3791

(Pages : 2)

Reg. No.....

Name.....

B.TECH. DEGREE EXAMINATION, NOVEMBER 2010

Eighth Semester

Branch : Computer Science and Engineering

MULTIMEDIA SYSTEMS—Elective III (R)

(Supplementary)

Time : Three Hours

Maximum : 100 Marks

Answer all the questions.

Part A

Each question carries 4 marks.

1. What is Multimedia ? Give example of time-independent media.
2. List the basic tools in multimedia and explain its uses.
3. What is sound card ? Explain.
4. Short note on 'Fractal compression technique'.
5. Explain about CD-interactive in detail.
6. What is MIDI ? List different MIDI interface components.
7. Short note on component classes.
8. List different problems related to multimedia programming. Explain methods to limit any one problem.
9. What is Multimedia network ? Explain.
10. Explain pc based video conferencing system.

(10 × 4 = 40 marks)

Part B

Each question carries 12 marks.

11. Write about Authoring tools in Multimedia. (12 marks)
- Or*
12. Discuss some Hardware and software applications of multimedia. (12 marks)
 13. What is image compression ? Explain JPEG compression technique in detail. (12 marks)

Or

Turn over

14. (i) Explain hepermedia and hyper test. (6 marks)
(ii) Explain TIFF file format used for images. (6 marks)
15. (i) What is CD ? Compare CD and Floppy disk. (4 marks)
(ii) Explain the various modes of CD ROM. (8 marks)

Or

16. Explain the principle 'Quick time' in detail. (12 marks)
17. Explain Transform classes and format classes in a multimedia framework. (12 marks)

Or

18. What is Synchronization ? Explain. (12 marks)
19. Write short note on 'future multimedia' and explain how it will change the present scenario. (12 marks)

Or

20. (i) Explain any *one* video capture technique. (6 marks)
(ii) What are moving pictures ? Explain any one method of realistic image synthesis. (6 marks)

[5 × 12 = 60 marks]

F 3704

Reg. No..... CS

Name

B.TECH. DEGREE EXAMINATION, NOVEMBER 2010

Eighth Semester

Branch : Computer Science and Engineering/Information Technology

SECURITY IN COMPUTING (R,T)

(Supplementary)

Time : Three Hours

Maximum : 100 Marks

Answer all the questions.

Part A

Each question carries 4 marks.

1. What is Hackers ?
2. What is Trojan Horse ?
3. Mention the different protection mechanisms of OS.
4. What are all the different types of holes ?
5. What is Cryptography ?
6. Mention the important features of modern symmetric key algorithms.
7. What is secure socket layer ?
8. What is Firewalls ?
9. What do you mean by data security ?
10. Explain the security requirements in database.

(10 × 4 = 40 marks)

Part B

Answer all, each carries 12 marks.

11. (a) Explain the different aspects of network security.
Or
(b) Discuss in detail about security services and mechanisms.
12. (a) Discuss in detail about discretionary and Mandatory Access Control.
Or
(b) Discuss in detail about access control and remote execution in UNIX.
13. (a) Discuss in detail about Fiestal network and DES algorithm.
Or
(b) Write a technical note on Digital Signature.
14. (a) With neat diagram, explain about IP security architecture.
Or
(b) Discuss in detail about Secure Electronic Transaction.
15. (a) Discuss in detail about MAC for multilevel security.
Or
(b) Explain about the security issues in data security and also explain about statistical database security.

(5 × 12 = 60 marks)

F 3760

Reg. No.....*CS*.....

Name.....

B.TECH. DEGREE EXAMINATION, NOVEMBER 2010

Eighth Semester

Branch : Computer Science Engineering/Information Technology

DISTRIBUTED COMPUTING—(Elective II) (RT)

(Supplementary)

Time : Three Hours

Maximum : 100 Marks

Answer all the questions.

Part A

Each question carries 4 marks.

1. What are the advantages and disadvantages of distributed systems ?
2. Distinguish between Centralized and Distributed system.
3. Discuss file service architecture.
4. Discuss about name services.
5. Define the distributed mutual exclusion problem.
6. What is meant by clock synchronization ? Explain.
7. Discuss about Resource Management.
8. Discuss about "threads" and "process".
9. Discuss the methods of transaction recovery.
10. Explain dead locks in distributed systems.

(10 × 4 = 40 marks)

Part B

Answer any five questions.

Each question carries 12 marks.

11. Write notes on "evolution and characteristics of Distributed System. (12 marks)
12. Discuss about network technology and protocols used in DS. (12 marks)
13. Discuss in detail the file service architecture. (12 marks)
14. Discuss about distributed file systems. (12 marks)
15. Write notes on :
 - (i) Mutual exclusion. (6 marks)
 - (ii) Clock synchronization. (6 marks)
16. What is RPC ? Explain the need of marshalling ? What is stub matching ? (12 marks)
17. Write notes on "Scheduling algorithms". (12 marks)
18. Explain in detail process migration mechanism. (12 marks)
19. Explain server crash failures and Byzantine failures. (12 marks)
20. Define fault tolerance. Describe various approaches to masking faults. (12 marks)

[5 × 12 = 60 marks]

F 3793

(Pages : 2)

Reg. No.....

Name.....

B.TECH. DEGREE EXAMINATION, NOVEMBER 2010

Eighth Semester

Branch : Computer Science and Engineering / Information Technology.

NEURAL NETWORKS (Elective III) (R T)

(Supplementary)

Time : Three Hours

Maximum : 100 Marks

Part A

Answer all questions.

Each question carries 4 marks.

1. Explain with a diagram, a components of artificial neuron.
2. Define linear separability.
3. What are the types of CPN ? Explain.
4. What is meant by supervised training ?
5. What are the applications of BPN ?
6. What is Kebenon layer ? How to train this layer ?
7. How is Boltzmann machine used to optimize non-linear problems ?
8. What is meant by statistical networks ? Mention its advantages .
9. Discuss about associative memories.
10. Discuss Recurrent networks.

(10 × 4 = 40 marks)

Part B

Each question carries 12 marks.

11. (a) Compare the characteristics of artificial neuron and biological neuron.

(6 marks)

Or

- (b) Discuss learning rules in ANN.

(6 marks)

12. Explain the following : —

(i) Single layer networks.

(6 marks)

(ii) Multilayer networks.

(6 marks)

Turn over

13. Explain training algorithm used in Basic propagation net.

(12 marks)

Or

14. Explain in detail the applications of BPN.

(12 marks)

15. Discuss training methods used in CPN network.

(12 marks)

Or

16. Explain the applications of full (CPN) counter propagation network.

(12 marks)

17. State the application algorithm used in Cauchy's machine.

(12 marks)

Or

18. Explain artificial heat methods.

(12 marks)

19. Explain about continuous BAM.

(12 marks)

Or

20. What are the two types of learnings in the ART net ?

(12 marks)

[5 × 12 = 60 marks]

Part B

Each question carries 12 marks.

11. (a) Compare the characteristics of artificial neuron and biological neuron.

(8 marks)

Or

(b) Discuss learning rules in ANN.

(6 marks)

12. Explain the following: —

(6 marks)

(i) Single layer networks

(6 marks)

(ii) Multilayer networks

Turn over

F 3711

(Pages : 2)

Reg. No.....

Name.....

B.TECH. DEGREE EXAMINATION, NOVEMBER 2010

Eighth Semester

Branch – Computer Science and Engineering

HIGH PERFORMANCE COMPUTING (R)

(Supplementary)

Time : Three Hours

Maximum : 100 Marks

Answer all questions.

Part A

1. What is parallel processing? Explain.
2. Explain the concept of multiprogramming and time sharing system.
3. What are the classification of pipeline processors?
4. Short note on 'General pipeline'.
5. Differentiate between static and dynamic network.
6. Explain mesh connected network in detail.
7. What is meant by loosely coupled multiprocessors?
8. How parallelism in programs are detected?
9. Explain dynamic data flow computer.
10. How the data flow computers differ from the conventional computers?

(10 × 4 = 40 marks)

Part B

11. Explain the three architectural classification schemes briefly. (12 marks)

Or

12. Explain the Indian contribution to parallel processing. (12 marks)

13. Explain the classification of pipeline processors in detail. (12 marks)

Or

14. Explain the design of pipelined instruction unit. (12 marks)

15. Explain Associative array processing in detail. (12 marks)

Or

Turn over

- 16. Explain SIMD array processors in detail. (12 marks)
- 17. Explain all the process synchronisation mechanisms. (12 marks)

Or

- 18. Explain the tightly coupled multiprocessor in detail. (12 marks)
- 19. Explain the different data flow computer architecture. (12 marks)

Or

- 20. Explain static data flow computer in detail. (12 marks)

[5 × 12 = 60 marks]

Maximum : 100 Marks

Answer all questions.

Part A

- 1. What is parallel processing? Explain.
- 2. Explain the concept of multiprocessing and time sharing system.
- 3. What are the classification of pipeline processors?
- 4. Short note on 'General pipeline'.
- 5. Differentiate between static and dynamic network.
- 6. Explain mesh connected network in detail.
- 7. What is meant by loosely coupled multiprocessors?
- 8. How parallelism in programs are detected?
- 9. Explain dynamic data flow computer.
- 10. How the data flow computers differ from the conventional computers?

(10 × 4 = 40 marks)

Part B

- 11. Explain the three architectural classification schemes briefly. (12 marks)

Or

- 12. Explain the Indian contribution to parallel processing. (12 marks)
- 13. Explain the classification of pipeline processors in detail. (12 marks)

Or

- 14. Explain the design of pipelined instruction unit. (12 marks)
- 15. Explain Associative array processing in detail. (12 marks)

Turn over

F 3731

(Pages : 2)

Reg. No.....

Name.....

B.TECH. DEGREE EXAMINATION, NOVEMBER 2010

Eighth Semester

Branch : Computer Science and Engineering / Information Technology

ARTIFICIAL INTELLIGENCE (R, T)

(Supplementary)

Time : Three Hours

Maximum : 100 Marks

Answer all questions.

Part A

Each question carries 4 marks.

1. Discuss problem characteristics.
2. What is meant by bi-directional search?
3. What is informed search?
4. What is Iterative deepening?
5. Discuss Alpha-Beta cut-off.
6. What is meant by semantic net?
7. Discuss about learning knowledge acquisition.
8. What is unification?
9. Discuss search strategies.
10. What is meant by Recursive search?

(10 × 4 = 40 marks)

Part B

Each question carries 12 marks.

11. Write notes on problems and problem spaces.

Or

12. Explain constraint satisfaction search and breadth first search.
13. Describe A* algorithm with suitable example.

Or

14. How does hill climbing ensure greedy local search? What are the problems of hill climbing?

Turn over

15. Describe knowledge structures and imperfect decisions.

Or

16. Construct semantic net representations for the following :

Pomepeian (Marcus),
Blacksmith (Marcus)

Marry have the green flowered vase to her favourite cousin.

17. Discuss representation of knowledge and reasoning with logic.

Or

18. Explain forward and backward chaining with suitable examples.

19. Write notes on :

- (a) Meta predicates.
- (b) Meta interpreters.

Time : Three Hours

(6 + 6 = 12 marks)

Or

20. Explain the implementation of semantic nets in prolog.

[5 × 12 = 60 marks]

(10 × 4 = 40 marks)

Part B

Each question carries 12 marks.

11. Write notes on problems and problem spaces.

Or

12. Explain constraint satisfaction search and breadth first search.

13. Describe A* algorithm with suitable example.

Or

14. How does hill climbing ensure greedy local search? What are the problems of hill climbing?

Turn over