

K.S.R.M. COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA
Model Question Paper
(1805501) WEB TECHNOLOGIES
B.Tech. V Semester (CSE) (R18) Degree Examinations

Time: 3 Hrs

Marks: 70

Note: Answer any **FIVE** questions choosing **ONE** question from each unit.
All questions carry **Equal** marks.

UNIT I

1. a) What is a web server? 2M
- b) Mention any three web servers and explain them. 12M

OR

2. a) How to handle HTTP requests & response? Explain in detail. 10M
- b) Write a short note on client/server model. 4M

UNIT II

3. a) How can we insert a table in html? Explain in detail with suitable example. 7M
- b) Create a simple HTML page which demonstrates the use of the various types of lists. 7M

OR

4. a) What is CSS? Explain in detail about various types of style sheets. 7M
- b) Describe all the ways of creating Arrays in Java Script? 7M

UNIT III

5. a) Explain about PHP data types in detail. 7M
- b) Explain different types of operators in PHP. 7M

OR

6. a) How to define a class in PHP? Explain in detail about classes. 7M
- b) Write a PHP program that explains the use of abstract classes. 7M

UNIT IV

7. a) How to set a cookie on user computer? Explain with an example 7M
- b) What is a session? Explain briefly about sessions. 7M

OR

8. a) Explain briefly how to redirect the HTTP headers to different locations. 7M
- b) Explain briefly how to use the header () function in different ways. 7M

UNIT V

9. a) Explain briefly about the POST method with example. 10M
- b) Differentiate GET and POST methods. 4M

OR

10. a) Write PHP code to connect to a MySQL Database. 6M
 - b) Explain the following functions with examples. 8M
- (a) Mysql_connect () (b) mysql_close ()
(c) mysql_query() (d) mysql_select_db().

K.S.R.M. COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA
Model Question Paper
(1805502) DATABASE MANAGEMENT SYSTEMS

B.Tech. V Semester (CSE) (R18) Degree Examinations

Time: 3 Hrs.

Max. Marks: 70

Note: Answer any **FIVE** questions choosing **ONE** question from each unit.
All questions carry **Equal** marks.

UNIT-I

1. a) Write about Database users and Administrators 7M
b) Explain Database system architecture with a neat diagram. 7M

(OR)

2. a) Write and explain the relational operations with an example. 7M
b) Briefly write about ER model. 7M

UNIT- II

3. a) Write about SQL Data Definition. 7M
b) Write and explain aggregate functions with an examples. 7M

(OR)

4. a) Write about Triggers. Explain it with an example. 7M
b) Briefly write about Tuple Relational Calculus. 7M

UNIT-III

5. a) Write about problems caused by Redundancy. 7M
b) Write about First, Second, BCNF and Third normal forms. 7M

(OR)

6. a) What is Functional dependency? Write about Decompositions. 7M
b) What is Multi-Valued, Join dependency? Write about Fourth and Fifth normal forms. 7M

UNIT-IV

7. Write and explain about Query Processing with a neat sketch. 14M

(OR)

8. a) What is a Transaction? Write about properties of Transaction. 7M
b) Write about the Transaction Isolations levels. 7M

UNIT -V

9. a) Write about Two-phase locking protocol. 7M
b) Write about Deadlock handling. 7M

(OR)

10. a) Write about Recovery algorithms. 7M
b) Write about Remote Backup systems. 7M

K.S.R.M. COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA

**Model Question Paper
(1805503) COMPUTER NETWORKS**

B.Tech. V Semester (CSE) (R18) Degree Examinations

Time: 3 Hrs.

Max.Marks:70

Note: Answer any **FIVE** questions choosing **ONE** question from each unit.

All questions carry **Equal** marks.

UNIT-I

1. What is a network? Name the reference models. Explain the OSI reference model? (14M)

(OR)

2. What is Data and Signal. Write about unguided transmission media? (14M)

UNIT-II

3. a) Write about Error detection and correction techniques? (7M)

- b) Write about One bit sliding window protocol? (7M)

(OR)

4. Explain in detail about Carrier Sense multiple access protocol? (14M)

UNIT-III

5. What is routing algorithm? Explain briefly about Shortest path routing algorithm. With an example? (14M)

(OR)

6. a) What is addressing? Explain about IPV4 addressing. (10M)

- b) Write about Fragmentation? (4M)

UNIT-IV

7. Explain in detail about UDP. (14M)

(OR)

8. Explain about the elements of transport protocols? (14M)

UNIT-V

9. Write about Domain Name System? (14M)

(OR)

10. Write about E Mail? (14M)

K.S.R.M. COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA
Model Question Paper
(1805504) SOFTWARE ENGINEERING
B.Tech. V Semester (CSE) (R18) Degree Examinations

Time: 3 Hrs.

Max. Marks: 70

Note: Answer any **FIVE** questions choosing **ONE** question from each unit.
All questions carry **Equal** marks.

UNIT-I

1. a) Define Software Engineering. Write about Manager's and Practitioner's Myths. (7M)
- b) Discuss about the phases of Unified Process Model. (7M)

(OR)

2. a) Write the Characteristics of Software. (6M)
- b) Explain in-detail about Spiral Process Model. (8M)

UNIT-II

3. Explain the procedure of Eliciting the Requirements. (14 M)

(OR)

4. Explain in-detail about Requirements Engineering. (14M)

UNIT-III

5. Write about various Design Concepts that help in designing. (14M)

(OR)

6. What is Software Architecture? List and explain Architectural Styles. (14M)

UNIT-IV

7. a) Discuss the Golden rules for User Interface Design. (7 M)
- b) Explain User Interface design steps. (7 M)

(OR)

8. Discuss about various Black-box Testing Strategies in detail. (14 M)

UNIT-V

9. Write a short note on COCOMO Model. (14M)

(OR)

10. a) Write about Risk Management. (7M)
- b) Write about Metrics for Project estimation (7M)

K.S.R.M. COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA
Model Question Paper
(1805507) DISTRIBUTED SYSTEMS
B.Tech. V Semester (CSE) (R18) Degree Examinations

Time: 3 Hrs.

Max. Marks: 70

Note: Answer any **FIVE** questions choosing **ONE** question from each unit.
All questions carry **Equal** marks.

UNIT I

1. a) What are the different benefits of resource sharing? Explain about its significance? 5M
- b) Explain in detail the distributed information systems 5M

OR

2. a) Explain the layered and object-based architectures. 5M
- b) Explain with neat diagram the basic client server model. 5M

UNIT II

3. a) With neat diagram explain the concept of threads in distributed systems. 5M
- b) Write short notes on distributed servers 5M

OR

4. a) Explain the basic RPC Operation and explain the issues. 5M
- b) What are the issues in socket programming and explain how it is solved by using the message – passing interface(MPI) 5M

UNIT III

5. a) What is clock synchronization and explain Berkeley Algorithm. 5M
- b) Explain Lamport's logical clock with neat diagram 5M

OR

6. a) Write about bully algorithm and summarize how it is different from other election algorithms 5M
- b) What is Mutual Exclusion and explain the Centralized Algorithms with neat diagram. 5M

UNIT IV

7. a) Explain Sequential Consistency and Casual Consistency? 5M
- b) Write short notes on Monotonic Reads and Monotonic Writes in Client-Centric Consistency model. 5M

OR

8. a) Explain the basic mechanism for managing the replicated content 5M
- b) Explain the Primary-based Consistency protocol. 5M

UNIT V

9. a) What are the basic concepts related to processing failures 5M
- b) Explain the two forms of error recovery and also explain why receiver based message logging is generally considered better than sender based logging. 5M

OR

10. a) Explain the basic reliable multicasting schemes in reliable group communication 5M
- b) Explain the Two-Phase Commit protocol in Distributed Commit 5M

K.S.R.M. COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA
Model Question Paper
(1805508) COMPILER DESIGN
B.Tech. V Semester (CSE) (R18) Degree Examinations

Time: 3 Hrs.

Max. Marks: 70

Note: Answer any **FIVE** questions choosing **ONE** question from each unit.

All questions carry **Equal** marks.

UNIT-I

1. a) What is compiler? Explain different phases of compiler, showing output of each phase for example statement $x=y+z*10$, where x, y, and z are float variables. (10M)
- b) Write regular definitions for the tokens: identifiers and integer constants. (4M)

(OR)

2. a) Explain input buffering concept in lexical analysis phase. (7M)
- b) Write short notes on LEX tool. (7M)

UNIT-II

3. a) What is recursive descent parser? Write recursive descent parser for the following

grammar:

$$E \rightarrow TE^1$$

$$T \rightarrow FT^1$$

$$F \rightarrow (E) | id$$

$$E^1 \rightarrow TE^1 | \epsilon$$

$$T^1 \rightarrow *FT^1 | \epsilon$$

(7M)

- b) By considering suitable example, explain how ambiguity in grammar can be eliminated. (7M)

(OR)

4. What is LR(1) item? Find the sets of LR(1) items for the following augmented grammar:

$$S^1 \rightarrow S$$

$$S \rightarrow CC$$

$$C \rightarrow cC$$

$$C \rightarrow d$$

(14M)

UNIT-III

5. a) Explain with example, synthesized attribute and inherited attribute. (7M)
- b) Write Syntax directed definitions for construction of syntax tree and explain it with example. (7M)

(OR)

6. a) What is type checking? Write type checking semantic rules for expressions and statements. (7M)
- b) What is structural equivalence of type expressions? Write algorithm for structural equivalence of type expressions. (7M)

UNIT-IV

7. a) What is activation record? List and explain the various fields in activation record. (4M)
- b) Explain the various data structures for implementing symbol table. (10M)

(OR)

8. Explain the following intermediate code representations.
(i) Syntax tree (ii) postfix notation (iii) Three address code (iv) Quadruple
(v) triple (vi) indirect triple
Convert the statement $a = b * -c + b * -c$ into each of the above intermediate code representations. (14M)
- UNIT-V**
9. a) Explain with example, DAG representation of basic blocks. (7M)
b) Write code generating algorithm. Translate the assignment statement
 $x := (a - b) + (a - c) + (a - c)$ into target code. (7M)
- (OR)**
10. Explain the principle sources of optimization with suitable examples. (14M)

KSRM COLLEGE OF ENGINEERING, (AUTONOMOUS) KADAPA

B.Tech V SEMESTER END EXAMINATIONS, JANUARY- 2021

*(MECHANICAL ENGINEERING)***Paper: MANAGERIAL ECONOMICS**

Time: Three Hours

Maximum: 70 Marks

Answer FIVE questions, choosing ONE question from each Unit.**All questions carry equal marks.****UNIT – I**

1. What is Managerial Economics? Explain its focus area? (14)M
(Or)
2. Explain the factors affecting the micro economics at firm level. (14)M

UNIT – II

3. A. What is law of demand? What are exceptions. (7)M
B. Define Elasticity of demand. Explain types of elasticity. (7) M
(Or)
4. Explain the methods of demand forecasting. (14)M

UNIT – III

5. What are the production functions in short run? Evaluate them. (14)M
(Or)
6. (a) Define Break Even Analysis. Explain its significance and limitations. (7)M
(b) Find BEP and Margin of safety from the following information. (7) M
Selling Price per unit Rs.10, Variable cost per unit Rs. 6, Fixed costs are Rs. 40,000.
Actual sales in units are 25,000. (7)M

UNIT – IV

7. (a) Explain the price-output under monopolistic competition market. (7)M
(b) Distinguish Perfect competition and imperfect competition. (7)M
(Or)
8. Define Pricing. Explain methods of pricing with suitable examples (14)M

UNIT – V

9. (a) What are internal and external sources of raising finance? (9)M
(b) Explain the concept of time value of money. (5)M

(Or)

10. From the following information of two projects of each costing Rs.300000 each, rank the projects under the following methods if the company is about to yield 10% per annum. (14M)

a. Payback Period b. Average rate of return c. Net present value

Cash flows after taxes plus depreciation

Year	1	2	3	4	5
Project-I	80,000	1,50,000	1,10,000	60,000	50,000
Project-II	1,50,000	1,10,000	80,000	50,000	40,000