

**K.S.R.M. COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA**  
**B.Tech. V Semester (CSE) (R15) Degree Examinations**  
**(1505501) WEB TECHNOLOGIES**  
**Model Question Paper**

Time: 3 Hrs

Marks: 70

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**Note: Answer All Five Units**

**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**

**(1505502) COMPUTER NETWORKS**

**B.Tech. V Semester (CSE) (R15) Degree Examinations**

**Time: 3 Hrs.**

**Max. Marks: 70**

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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. Write about Wireless LAN 802.11? (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 Distance vector 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**

**(1505503) SOFTWARE ENGINEERING**

**B.Tech. V Semester (CSE) (R15) Degree Examinations**

**Time: 3 Hrs**

**Max. Marks: 70**

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Note: Answer any **FIVE** questions by choosing one 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. a) Explain the procedure of Eliciting the Requirements. (7M)
- b) Explain in-detail about Activity Diagrams. (7M)

**(OR)**

4. Explain in-detail about CRC Modeling. (14M)

**UNIT-III**

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

**(OR)**

6. a) Discuss about the Taxonomy of Architectural Styles. (6M)
- b) Explain the design principles for Class-based components. (8M)

**UNIT-IV**

7. a) Write the Golden rules for User Interface design. (9M)
- b) Explain Boundary Value Analysis in Testing. 5M

**(OR)**

8. a) Explain how do we evaluate the User Interface Design (6M)
- b) Explain in-detail about various Code Reviews (8M)

**UNIT-V**

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

**(OR)**

10. a) Write about Risk Management. (7M)
- b) What is meant by Software Reverse Engineering and explain it. (7M)

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**Model Question Paper**

**(1505504) COMPILER DESIGN**

**B.Tech. V Semester (CSE) (R15) 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)

**K.S.R.M. COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA**  
**Model Question Paper**  
**(1505505) ADVANCED COMPUTER ARCHITECTURE**  
**(CBCC-I)**

**B.Tech. V Semester (CSE) (R15) Degree Examinations**

**Time: 3 Hrs.**

**Max. Marks: 70**

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

**UNIT – I**

1. Explain the following
  - a) Shared-Memory Multiprocessors. (10 M)
  - b) Distributed-Memory Multicomputer. (4 M)

**(OR)**

2. a) Explain about Data, Control and Resource dependencies with one example?  
How you detect the parallelism in a program using “Bernstein’s” conditions? (7 M)
- b) Describe Static Interconnection Networks. (7 M).

**UNIT-II**

3. a) Explain Massive Parallelism for Grand Challenges. (7 M)
- b) Explain any two speed-up performance Laws. (7 M)

**(OR)**

4. a) What is the cache coherence problem? Describe Snoopy Bus protocols. (7 M)
- b) Describe Directory Based Protocols. (7 M)

**UNIT-III**

5. a) Explain the system organization of Cray Y-MP 816 with a block diagram. (7M)
- b) Describe the Fujitsu VP2000 series supercomputer Architecture. (7M)

**(OR)**

6. a) Discuss The MasParMP-1 Architecture. (7M)
- b) Describe Inter processor Communication mechanisms in CM-5 Architecture. (7M)

**UNIT-IV**

7. Explain the different latency hiding techniques with examples. (14 M)

**(OR)**

8. a) Describe The Caltech Mosaic C Architecture. (7M)
- b) Describe The Kendall Square Research KSR-1 Architecture. (7M)

**UNIT-V**

9. Explain Parallel Programming Models. (14 M)

**(OR)**

10. Describe Shared-Variable Program Structures. (14 M)

**Subject Code: 1515505**  
**K.S.R.M. COLLEGE OF ENGINEERING (Autonomous), KADAPA**  
**B.Tech. V Semester (R15)**

**Model Paper**  
**Subject: COMPUTER ORGANIZATION**

Time: 3 Hours

Max. Marks: 70

Answer any five questions, choosing **ONE** question from each unit.

All questions carry equal marks.

**UNIT I**

1. (a) Explain about functional units computer with a neat sketch 7 M  
(b) Discuss about Basic operational concepts of computer. 7 M

**(OR)**

2. (a) Explain register and bus transfers 7 M  
(b) Explain about arithmetic and logic microoperations. 7 M

**UNIT II**

3. (a) Write short notes on computer instructions. 7 M  
(b) Design a microprogram sequencer for a control memory. 7 M

**(OR)**

4. (a) Explain the instruction cycle with a flowchart. 10 M  
(b) Explain about Address sequencing. 4 M

**UNIT III**

5. (a) Mention different types of instruction formats. 7 M  
(b) What is an addressing mode? Explain different types of addressing modes. 7 M

**(OR)**

6. (a) Explain in detail about arithmetic pipeline with example 7 M  
(b) Discuss about parallel processor system. 7 M

**UNIT IV**

7. (a) Explain about Asynchronous data transfer. 10 M  
(b) Mention different modes of transfer. 4 M

**(OR)**

8. (a) Explain DMA transfer in a computer system with the help of a diagram. 10 M  
(b) Explain about Daisy-chain priority interrupt. 4 M

**UNIT V**

9. Explain the following memory types. 3.5\*4=14 M  
(a) Auxiliary memory      (b) Associative memory  
(c) Cache memory          (d) Virtual memory.

**(OR)**

10. (a) Explain interprocessor communication and synchronization. 4 M  
(b) Explain about characteristics of multiprocessors. 10 M

**K.S.R.M COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA**  
**MODEL QUESTION PAPER**  
**FOUR YEAR B. TECH (R15) DEGREE EXAMINATIONS, JANUARY 2021**  
**Fifth Semester Examination**  
**Sub: Managerial Economics And Financial Analysis**

Time: 3 Hrs.

Max Marks : 70

Note : Answer any **FIVE** questions by choosing one from each unit.

**All** questions carry equal marks. UNIT - I

**UNIT – I**

1. What is Managerial Economics? Explain its focus area? (14)M

**(Or)**

2. (a) Define the law of Demand. What are its determinants and exceptions? (7)M

(b) Explain about survey methods of demand forecasting? (7)M

**UNIT – II**

3. (a) What are ISO QUANT and ISO COST? (7)M

(b) Explain COBB-DOUGLAS production function. (7)M

**(Or)**

4. Define Break Even Analysis. Explain its significance and limitations. (14)M

**UNIT – III**

5. How to determine the price under perfect competition market. (14)M

**(Or)**

6. (a) Define market. Explain any five methods of pricing based on strategy. (7)M

(b) What are the features of monopoly? (7)M

**UNIT – IV**

7. (a) What are the sources of raising capital in different methods? (7)M

(b) Distinguish between sole trader and partnership (7)M

**(Or)**

8. 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.

a) Average rate of return b) Net present value (14M)

**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

**UNIT – V**

9. Journalize the following transactions in the books of SSK Ltd.

(14)M

Date	Particulars	Amount
2015 Jan 1.	Business started with Capital of	20,000
„ 2.	Goods Purchased from Rao	5,000
„ 3.	Sold goods for cash	2,000
„ 4.	Sold goods to jyothi	3,000
„ 5.	Purchased goods for cash	1,500
„ 12.	Furniture bought for cash	2,000
„ 18.	Discount allowed	1,000
„ 20.	Cash received from jyothi on account	2,950
„ 24.	Cash paid to Rao	2,000
„ 28.	Salary paid	1,500
„ 31.	Rent paid to landlord	500

**(Or)**

10. What are the important ratios? Explain any five of them with examples to understand financial statement.

(14)M