

VINAYAKA MISSIONS RESEARCH FOUNDATION, SALEM

(Deemed to be University)

M.SC(COMPUTER SCIENCE) DEGREE EXAMINATION – November 2018

First Semester

DSCC – I MATHEMATICAL FOUNDATION FOR COMPUTER SCIENCE

Time: Three hours

Maximum: 70 marks

PART – A

(5 x 6 = 30)

(Answer ALL Questions)

1. a) Explain the precedence rules.
(OR)
b) Describe a natural deduction system.
2. a) Discuss about matrix encoding.
(OR)
b) Write short notes hamming distance.
3. a) Explain phases of project scheduling.
(OR)
b) Discuss about crahing of networks.
4. a) Explain the applications of chi-square.
(OR)
b) Describe correlation and regression of coefficients.
5. a) Explain the relations to partial ordering.
(OR)
b) Discuss about elements of transport network.

PART – B

(4 × 10 = 40)

(Answer any four Questions)

6. Explain the tautologies in details.
7. Explain the laws of equivalence.

8. Discuss about cryptography with example.
9. Describe error detecting capability of an encoding.
10. Explain assignment problem and its solution by Hungarian method.
11. Discuss about probability and cost considerations in project scheduling.
12. Explain the tests based on normal population.
13. Explain the directed and undirected graphs.

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First Semester

DESIGN AND ANALYSIS AND ALGORITHMS

Time: Three hours

Maximum: 70 marks

PART – A

(5 x 6 = 30)

1. a) Explain the algorithm specification.
(OR)
b) Describe the computational complexity.
2. a) Discuss about merge sort with example.
(OR)
b) Write short notes on knapsack problem
3. a) Explain the all pair shortest path.
(OR)
b) Explain flow shop scheduling.
4. a) Discuss about graph coloring.
(OR)
b) Describe traveling salesperson.
5. a) Explain basic concept of NP-Hard.
(OR)
b) Write about E-Approximation.

(P.T.O)

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PART – B

(4 × 10 = 40)

(Answer any FOUR Questions)

6. Explain the performance analysis space and time complexity.
7. Explain the analysis of quick sort with example.
8. Discuss about binary search with example.
9. Describe in details minimum cost spanning tree.
10. Explain in detail traveling salesman problem.
11. Discuss about 8-queens problem with example.

Sl.No.1937

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M.Sc. (COMPUTER SCIENCE) DEGREE EXAMINATION – November- 2018
First Semester

DSCC – III ADVANCED OPERATING SYSTEM

Time: Three hours

Maximum: 70 marks

PART – A

(5 x 6 = 30)

(Answer ALL Questions)

1. a) Explain the distributed and real time operating systems.
(OR)
b) Describe multithreading.
2. a) Discuss about mutual exclusion.
(OR)
b) Explain producer consumer problem.
3. a) Write about procedure calls.
(OR)
b) Discuss about file caching schemes.
4. a) Explain the internal representation of files.
(OR)
b) Describe allocation of disk blocks.
5. a) Explain structure of file system.
(OR)
b) Discuss about disk related commands.

PART – B

(4 × 10 = 40)

(Answer any FOUR Questions)

6. Explain the evolution of operating systems
7. Explain the operating system concepts
8. Discuss about inter process communication
9. Describe the dining philosophers problem
10. Explain in details implementing RPC mechanism
11. Discuss about architecture of Unix operating system
12. Explain the process states and transition

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First Semester

SEC - I ESSENTIALS OF COMMUNICATION SKILLS

Time: Three hours

Maximum: 70 marks

PART – A

I. Answer ALL questions:

(5 x 6 = 30)

1. a) List the various parts of speech with examples.

(OR)

- b) Change the following sentences from active to passive

i) Shiela wrote a letter of apology.

ii) Some one has broken the window

iii) The teacher taught grammar to students

2. a) Explain present tense, past tense and future tense with an example each.

(OR)

- b) Explain simple compound and complex sentences.

3. a) Define communication.

(OR)

- b) Explain how a conversation should be maintained.

4. a) Write a note on listening.

(OR)

- b) Write a note on speaking skills.

5. a) What is the importance of reading skills?

(OR)

- b) Write a note on the importance of writing skills.

PART – B

II. Answer any FOUR questions:

(4 x 10 = 40)

6. Write an essay on vocabulary and explain its importance.

7. Write an essay on the importance of communication skills.

8. List the four main skills in communication with examples.

9. Write an essay on the importance of group discussion.

10. List the skills involved in interview in detail.

11. List the non-verbal communication with examples.

12. List ten tips to improve writing skills.

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M.Sc. (COMPUTER SCIENCE) DEGREE EXAMINATION – November 2018
First Semester

MOBILE COMPUTING

Time: Three hours

Maximum: 70 marks

PART – A

(5 × 6 = 30)

(Answer ALL Questions)

1. a) Explain the wireless transmission.
(OR)
b) Describe mobile and wireless devices.
2. a) Discuss about GSM.
(OR)
b) Explain protocols.
3. a) Write about IEEE S02.11.
(OR)
b) Discuss about Bluetooth.
4. a) Explain the packet delivery.
(OR)
b) Describe routing strategies.
5. a) Explain the architecture of WAP.
(OR)
b) Discuss about applications of WAP.

PART – B

(4 × 10 = 40)

(Answer any Four Questions)

6. Explain the medium access control.
7. Explain the simplified reference model.
8. Discuss about telecommunication system.
9. Describe the satellite system.
10. Explain in details security and link management.

11. Discuss about adhoc networks.
12. Explain the wireless application protocol (WAP).

Sl.No.1494

Sl.No.1457

Course Code: 72617107

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M.Sc(COMPUTER SCIENCE) DEGREE EXAMINATION – November 2018

First Semester

INTRODUCTION TO COMPUTER TECHNOLOGY

Time: Three hours

Maximum: 70 marks

PART – A

(6 × 5 = 30)

(Answer ALL Questions)

1. a) Explain the classification of computer.
(OR)
b) Describe number system.
2. a) Discuss about memory units.
(OR)
b) Write short magnetic tape.
3. a) Explain the programming languages.
(OR)
b) Explain domain name and addresses.
4. a) Discuss about multimedia tools.
(OR)
b) Describe the types of information systems.
5. a) Discuss about computer programmes.
(OR)
b) Explain the special purpose programming tools.

PART – B

(4 × 10 = 40)

(Answer any FOUR Questions)

6. Explain the anatomy of a digital computer.
7. Explain the logic gates with example.
8. Discuss about memory organization in details.
9. Describe in details Computer networks.
10. Explain advantages and disadvantages of internets.
11. Discuss about E-commerce data processing.

12. Explain the system development life cycle.
