

Code No: R15A0514**MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY
(Autonomous Institution – UGC, Govt. of India)****III B.Tech I Semester Supplementary Examinations, April 2023****Computer Networks****(CSE)**

Roll No									
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Time: 3 hours**Max. Marks: 75****Note:** This question paper contains two parts A and B

Part A is compulsory which carries 25 marks and Answer all questions.

Part B Consists of 5 SECTIONS (One SECTION for each UNIT). Answer FIVE Questions, Choosing ONE Question from each SECTION and each Question carries 10 marks.

PART-A (25 Marks)

- 1). a What is data network? [2M]
- b Describe switching and how it is used in networks? [3M]
- c Explain Sliding window protocols in data link layer. [2M]
- d Explain error detection and correction in detail [3M]
- e How does DHCP protocol work? [2M]
- f Illustrate on Sub netting and super netting. [3M]
- g Demonstrate on Crash recovery in Transport layer [2M]
- h what is Real time transport protocol [3M]
- i Give brief note on E-mail [2M]
- j Summarize with neat sketch SSH protocol. [3M]

PART-B (50 MARKS)**SECTION-I**

- 2 Discuss the functionalities of different layers in OSI Model with the help of diagrams. [10M]

OR

- 3 Illustrate the working of twisted pair cable with the help of diagram and list out the advantages and disadvantages. [10M]

SECTION-II

- 4 Design an algorithm for CRC. Calculate the checksum for given $M(x) = x^7+x^6+x^4+x^3+x+1$ and the generator polynomial is $g(x) = x^4+x+1$ using CRC on both sending side, receiving side. [10M]

OR

- 5 List out the functionalities of bridge, switch, router and gateways. [10M]

SECTION-III

- 6 Explain in detail about IPV4 and IPV6 protocols with help of neat sketch. [10M]

OR

- 7 With neat sketch explain ARP,RARP Protocols [10M]

SECTION-IV

- 8 Illustrate elements of Transport layer protocols. [10M]

OR

- 9 Explain Sliding window protocol in detail [10M]

SECTION-V

- 10 List out the various functionalities of application layer. [10M]
OR
- 11 Describe how does HTTP works? Explain with a neat sketch. [10M]

Code No: **R15A0517****MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY****(Autonomous Institution – UGC, Govt. of India)****III B.Tech I Semester Supplementary Examinations, April 2023****Computer Graphics****(CSE)**

Roll No									
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Time: 3 hours**Max. Marks: 75****Note:** This question paper contains two parts A and B

Part A is compulsory which carries 25 marks and Answer all questions.

Part B Consists of 5 SECTIONS (One SECTION for each UNIT). Answer FIVE Questions, Choosing ONE Question from each SECTION and each Question carries 10 marks.

PART-A (25 Marks)

- 1). a Write is raster-scan systems? [2M]
- b How to perform mid-point circle and ellipse algorithms [3M]
- c What is reflection and shear transformation [2M]
- d Write short notes viewing coordinate reference frame. [3M]
- e Differentiate Bezier curve and B-spline curve [2M]
- f Explain polygon rendering methods [3M]
- g What is Classification method [2M]
- h Explain depth sorting methods [3M]
- i What are the computer animation languages. [2M]
- j List out general computer animation functions [3M]

PART-B (50 MARKS)**SECTION-I**

- 2 Explain boundary-fill and flood-fill algorithms with example [10M]
OR
- 3 Explain the following with example
(i) Video-display devices [5M]
(ii) Raster-scan systems [5M]

SECTION-II

- 4 Explain viewing functions with examples. [10M]
OR
- 5 Explain Sutherland Hodgeman polygon clipping algorithm with example [10M]

SECTION-III

- 6 Explain polygon surfaces and quadric surfaces with example. [10M]
OR
- 7 Explain the following 3-D geometric transformation techniques.
(i) Translation [5M]
(ii) Rotation [5M]

SECTION-IV

8 Explain area sub division method with example [10M]

OR

9 Explain the following

(i) BSP Trees

[5M]

(ii) Octree method

[5M]

SECTION-V

10 Illustrate the importance of motion specifications

[10M]

OR

11 Explain the following

(i) Computer animation functions

[5M]

(ii) Computer animation languages

[5M]

Code No: **R15A0513****MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY**
(Autonomous Institution – UGC, Govt. of India)**III B.Tech I Semester Supplementary Examinations, April 2023****Operating Systems**
(CSE)

Roll No									
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Time: 3 hours**Max. Marks: 75****Note:** This question paper contains two parts A and B

Part A is compulsory which carries 25 marks and Answer all questions.

Part B Consists of 5 SECTIONS (One SECTION for each UNIT). Answer FIVE Questions, Choosing ONE Question from each SECTION and each Question carries 10 marks.

PART-A (25 Marks)

- 1). a Why is the operating system important? [2M]
- b Distinguish between Kernel and OS? [3M]
- c What do you mean by Semaphore in OS? Why is it used? [2M]
- d Differentiate between process and thread? [3M]
- e Differentiate logical address and physical address. [2M]
- f What is swapping in memory management? [3M]
- g What is the use of paging in operating system? [2M]
- h List the various File Attributes used in Files. [3M]
- i Describe about Language based protection in OS. [2M]
- j What is starvation in operating system? [3M]

PART-B (50 MARKS)**SECTION-I**

- 2 State the essential properties of the following types of operating systems.
 - (i) Batch [5M]
 - (ii) Multi Programmed [5M]

OR

- 3 State the advantages of using virtual machines. [10M]
Describe about java virtual machine with neat sketch.

SECTION-II

- 4 Demonstrate queuing-diagram representation of process scheduling. [10M]

OR

- 5 What are monitors? Determine the syntax of a monitor. [10M]

SECTION-III

- 6 Explain memory management in detail [10M]

OR

- 7 Explain the concepts of paging and segmentation [10M]

SECTION-IV

- 8 Define file and what are different file access methods [10M]

OR

- 9 Explain Directory structure and types of directory structures [10M]

SECTION-V

- 10 Give a detailed description about deadlocks and its characterization. [10M]
OR
- 11 Describe Access matrix and different methods used for implementing Access Matrix. [10M]

Code No: R15A0065**MALLA REDDY COLLEGE OF ENGINEERING & TECHNOLOGY
(Autonomous Institution – UGC, Govt. of India)****III B.Tech I Semester Supplementary Examinations, April 2023****Management Science****(CSE)**

Roll No									
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Time: 3 hours**Max. Marks: 75****Note:** This question paper contains two parts A and B

Part A is compulsory which carries 25 marks and Answer all questions.

Part B Consists of 5 SECTIONS (One SECTION for each UNIT). Answer FIVE Questions, Choosing ONE Question from each SECTION and each Question carries 10 marks.

PART-A (25 Marks)

- 1). a What is scalar chain principle? [2M]
- b Mention any three leadership styles. [3M]
- c Explain about line organization. [2M]
- d Write a short note on EOQ. [3M]
- e What do you mean by PMIR? [2M]
- f Briefly discuss about man power planning. [3M]
- g What is crash time? [2M]
- h Explain the project cost analysis. [3M]
- i Why mission is important for company? [2M]
- j Distinguish between objective and policy. [3M]

PART-B (50 MARKS)**SECTION-I**

- 2 Taylor is known as father of scientific management. Explain his contributions towards management. [10M]

OR

- 3 “Two factor theory is superior to need theory” do you agree. In this context discuss two factor theory in brief. [10M]

SECTION-II

- 4 Compare and contrast line, staff and functional authority. [10M]

OR

- 5 Explain marketing strategies for saturation and decline stages of PLC with examples. [10M]

SECTION-III

- 6 Define training. Explain the types of the job training methods. [10M]

OR

- 7 Do you think performance appraisal is on regular basis? In this context explain the steps in performance appraisal. [10M]

SECTION-IV

- 8 Briefly explain various steps in Programme Evaluation and Review Technique. [10M]

OR

- 9 A project has the following time schedule [10M]

Activity	Time in months	Activity	Time in months
1-2	2	3-7	5
1-3	2	4-6	3
1-4	1	5-8	1
2-5	4	6-9	5
3-6	8	7-8	4
		8-9	3

Draw the network and compute critical path.

SECTION-V

- 10 What is SWOT analysis? What is the significance of SWOT analysis for strengthening an organization? [10M]

OR

- 11 Examine the steps in strategy formulation and implementation. [10M]
