BSCS-15X

U.G. DEGREE EXAMINATION — DECEMBER, 2023.

Computer Science

Third Year

DATA COMMUNICATIONS AND NETWORKING

Time: 3 hours Maximum marks: 70

PART A — $(3 \times 3 = 9 \text{ marks})$

Answer any THREE questions.

- 1. What is Network? What are the benefits of Network?
- 2. Write two advantages and disadvantages of Star Topology.
- 3. What factors affect data Transmission?
- 4. Write short note Repeater.
- 5. List the seven layers of OSI Model.

PART B — $(3 \times 7 = 21 \text{ marks})$

Answer any THREE questions.

- 6. What are the components of data communication?
- 7. Discuss the Addressing mechanism of protocol.
- 8. Explain the functions of OSI Reference models.
- 9. Write short note on twisted pair cable.
- 10. What do you mean by two layer switches?

PART C —
$$(4 \times 10 = 40 \text{ marks})$$

Answer any FOUR questions.

- 11. Explain about data flow in detail.
- 12. Describe about the types topology in detail.
- 13. What do you mean by layered architecture? Elaborate.
- 14. Explain about TCP/IP reference model.
- 15. Explain the uses of Internet.
- 16. What do you mean by IPv4 address? Explain.
- 17. Explain about data communication and its characteristics.

BSCS-16X

U.G. DEGREE EXAMINATION — DECEMBER, 2023.

Computer Science

Third Year

INTRODUCTION TO OPERATING SYSTEMS

Time: 3 hours Maximum marks: 70

PART A — $(3 \times 3 = 9 \text{ marks})$

Answer any THREE questions.

- 1. What is Kernel?
- 2. What is process control block?
- 3. List the advantages of Multiprocessor systems.
- 4. What is Deadlock?
- 5. What is Paging?

PART B — $(3 \times 7 = 21 \text{ marks})$

Answer any THREE questions.

- 6. Write Short notes on History of Operating Systems.
- 7. Explain Operating System Structure.
- 8. Write short note on Race conditions.
- 9. Explain Semaphores with examples.
- 10. What is Inter–process communication? How it can be implemented?

PART C —
$$(4 \times 10 = 40 \text{ marks})$$

Answer any FOUR questions.

- 11. Discuss about the History of Operating System.
- 12. Give an Elaborate note on Operating System concepts.
- 13. Write in detail about Inter process communication?
- 14. Discuss about deadlock detection and recovery.
- 15. Explain about Multi programming.
- 16. Write an elaborate note on File management.
- 17. Write short note on
 - (a) Round robin scheduling.
 - (b) Priority Scheduling.

BSCS-18X

U.G. DEGREE EXAMINATION — DECEMBER, 2023.

Computer Science

Third Year

HTML AND WEB DESIGN

Time: 3 hours Maximum marks: 70

PART A — $(3 \times 3 = 9 \text{ marks})$

Answer any THREE questions out of Five questions in 100 words.

All questions carry equal marks.

- 1. What are the uses of HTML.
- 2. Write a HTML code for displaying an image in a web page and explain.
- 3. Write a HTML code for creating a class time table using <Table> tag.
- 4. What are search engines and explain its types?
- 5. Write a HTML code for displaying Text and Image in a single page.

PART B —
$$(3 \times 7 = 21 \text{ marks})$$

Answer any THREE questions out of Five questions in 200 words.

All questions carry equal marks.

- 6. Expand URL and explain its parts and types.
- 7. Write a HTML code for setting background images for a page and explain.
- 8. Create a table and differentiate cell spacing and cellpadding.
- 9. Write the steps involved in creating Edit menu using HTML Editor.
- 10. Write HTML text formatting tags with examples.

PART C —
$$(4 \times 10 = 40 \text{ marks})$$

Answer any FOUR questions out of Seven questions in 500 words.

All questions carry equal marks.

- 11. Discuss about the overview of HTML in detail.
- 12. Write a HTML code to explain the manipulation of Images.

- 13. Write a HTML code for nesting tables.
- 14. Create File menu using HTML Editor.
- 15. Write a note on subscriptions in detail.
- 16. What are the attributes involved in <P> tag and tag? Explain with examples.
- 17. Explain advanced text formatting tags with example.

BSCS-19X

U.G. DEGREE EXAMINATION — DECEMBER, 2023.

Computer Science

Third Year

INTRODUCTION TO SOFTWARE ENGINEERING

Time: 3 hours Maximum marks: 70

PART A — $(3 \times 3 = 9 \text{ marks})$

Answer any THREE questions out of Five questions in 100 words.

All questions carry equal marks.

- 1. Define Software Engineering and explain the characteristics of Software.
- 2. What is the Role of a System Analyst?
- 3. Write the basic concepts of Project scheduling.
- 4. Explain Software prototyping.
- 5. Write short note on Test case design.

PART B —
$$(3 \times 7 = 21 \text{ marks})$$

Answer any THREE questions out of Five questions in 200 words.

All questions carry equal marks..

- 6. Explain about Software product and its components.
- 7. Write a note on Project decomposition techniques.
- 8. Discuss about Quality Assurance Activities.
- 9. Write about Specification modeling and Information flow.
- 10. Explain Black box testing in detail.

PART C —
$$(4 \times 10 = 40 \text{ marks})$$

Answer any FOUR questions out of Seven questions in 500 words.

All questions carry equal marks.

- 11. Explain any three Software process models in detail.
- 12. Give a detailed note on Project Management Concepts.

- 13. Elaborate Software Configuration Management.
- 14. Discuss about the design concepts of software.
- 15. Write about Testing Strategies wit example.
- 16. What are the Phases of Software development and explain with clear diagrams.
- 17. Explain about Software Formal Technical Reviews and its advantages.