

**III Semester MSc. Information Science (Open Book Examination)
September/October, 2020
COMPUTER NETWORKS**

Time: -----

Max. Marks: 80

PART – A

Answer any four questions. Each question carries 5 marks:

4x5=20

1. What is a computer network? Give its applications.
2. How does a single bit error differ from burst error? Explain with example.
3. Define network Topology. Explain any two types with neat diagram.
4. Explain the concept of Domain Name Space (DNS) with example.
5. Describe proactive fault management used in Network Management System.
6. Briefly explain the working of image compression.

PART – B

Answer any three questions. Each question carries 10 marks

3x10=30

7. Describe digital data to digital signal conversion techniques.
8. Explain OSI reference model with neat diagram.
9. What is Logical addressing? Explain classful and classless addressing.
10. Briefly explain the process involved in error correction using Hamming Codes.
11. What is traffic shaping? Explain two techniques used to shape the traffic sent to the network.

PART – C

Answer any two questions. Each question carries 15 marks:

2x15=30

12. Write a short note on: Each carries 5 marks
 - a) Role of user agent in e-mail
 - b) SMTP
 - c) WWW
13. Describe Open-Loop Congestion control and Closed-loop Congestion control in detail.
14. a) Briefly explain the IPv4 datagram format. (10 marks)
b) Write a note on Four-Way Handshaking. (5 marks)
15. a) Discuss any two transition strategies to move from IPv4 to IPv6. (10 marks)
b) Briefly explain multicast routing. (5 marks)

**III Semester MSc. Information Science (Open Book Examination)
September/October, 2020
OOps with JAVA**

Time: -----

Max. Marks: 80

PART – A

Answer any four questions. Each question carries 5 marks:

4x5=20

1. What are the Java Buzz words? Explain.
2. Give an account on abstract classes in Java.
3. Explain primitive data types in Java.
4. What are the different forms of inheritance in Java? Explain.
5. Write the significance of using threads in Java.
6. What is garbage collection? Explain.

PART – B

Answer any three questions. Each question carries 10 marks:

3x10=30

7. Discuss different types of operators available in Java.
8. Explain different types of looping statements in Java with examples.
9. What is multithreading? Illustrate with suitable Java program.
10. Describe exception handling in Java with suitable Java program.
11. Explain life cycle of Java thread with a neat diagram.

PART – C

Answer any two questions. Each question carries 15 marks:

2x15=30

12. Discuss different types of selection statements with suitable examples.
13. Explain method overloading and overriding with suitable examples.
14. Describe life cycle of Java Applet in detail.
15. Discuss PHP in detail.

**III Semester MSc. Information Science (Open Book Examination)
September/October, 2020
Software Engineering**

Time: -----

Max. Marks: 80

PART – A

Answer any four questions. Each question carries 5 marks:

4x5=20

1. Briefly explain the emergence of software engineering.
2. Explain different types of cohesion.
3. Write the importance of DFD's in good software design.
4. Differentiate verification and validation.
5. Write the characteristic of good software design.
6. Give an account on goals of UML.

PART – B

Answer any three questions. Each question carries 10 marks:

3x10=30

7. Discuss software design activities.
8. Write a note on function point metric.
9. Explain the symbols used in DFD's.
10. Discuss Gantt chart with an example.
11. Describe the categories of risk.

PART – C

Answer any two questions. Each question carries 15 marks:

2x15=30

12. Explain spiral model in detail.
13. Discuss the characteristics of User Interface.
14. Explain different types of project size estimation metrics.
15. Describe project scheduling and staffing.

**III Semester MSc. Information Science (Open Book Examination)
September/October, 2020
Elective 1: E-COMMERCE**

Time: -----

Max. Marks: 80

PART – A

Answer any four questions. Each question carries 5 marks: 4x5=20

1. What is E-commerce? Discuss various benefits of E-commerce.
2. Briefly explain enterprise application integration.
3. Discuss the properties of electronic cash.
4. Explain the features and applications of smart cards.
5. Briefly explain the features of online shopping.
6. Write a note on cyber law.

PART – B

Answer any three questions. Each question carries 10 marks: 3x10=30

7. Briefly explain the legal issues related to E-commerce.
8. Discuss various types of e-commerce models.
9. Explain the framework of enterprise architecture.
10. Describe direct connection model and network model with neat diagram.
11. Discuss E-Payment Risks to Customer.

PART – C

Answer any two questions. Each question carries 15 marks: 2x15=30

12. Explain the life cycle of Site building from Page to Stage with neat diagram.
13. a) Discuss the security requirements in electronic payment systems. (10 marks)
b) Explain the uses of digital signature (5 marks)
14. a) Describe the strategies for securities in cyberspace. (10 marks)
b) Write a note on malware virus. (5 marks).
15. Explain how to create an Internet Marketing Strategy.
