

FACULTY OF SCIENCES
MCA V – SEMESTER REGULAR EXAMINATIONS, DEC 2016
OBJECT ORIENTED & SYSTEM DEVELOPMENT

PAPER – III

Time: 3 hours]

[Max. Marks: 70

Note: Answer all questions from Section – A and Section – B

Section – A

Answer the following questions in not more than **ONE** page each: (5x4=20)

1. Write any three applications of UML.
2. Write the difference between Action States and Activity States in Activity Diagram
3. What is Deployment Diagram? Give example
4. What is Use-Case-Driven Process?
5. What is Analysis & Design?

Section – B

Answer the following questions in not more than **FOUR** page each: (5x10=50)

6. a) Explain Basic Structural models in UML?
(OR)
b) What is an Interface? Explain object Diagram, components with examples in detail.
7. a) Explain different diagrams that are present in the UML?
(OR)
b) Explain Events and Signals, Processes and threads of Modeling?
8. a) What is Architectural modeling? Explain Artifact diagrams with example.
(OR)
b) What is pattern? Explain Deployment diagram with example?
9. a) What is unified process? Explain 4ps' in software development process with neat diagram.
(OR)
b) Explain the Architecture centric process and Iterative and Incremental process.
10. a) What is Core workflow? Explain the capturing requirements as use cases.
(OR)
b) Write a note on
i) Implementation ii) Test

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FACULTY OF SCIENCES
MCA V – SEMESTER REGULAR EXAMINATIONS, DEC 2017
OBJECT ORIENTED SYSTEM DEVELOPMENT

PAPER – III

Time: 3 hours]

[Max. Marks: 70

Note: Answer all questions from Section – A and Section – B

Section – A

Answer the following questions in not more than **ONE** page each: (5x4=20)

1. Why UML model is needed.
2. What is signal and how to show it in UML?
3. What are the steps to model a design pattern?
4. Write example subsystems for simple ATM example.
5. Why requirement capture is difficult.

Section – B

Answer the following questions in not more than **FOUR** page each: (5x10=50)

6. a) What is Class Diagram? When to use class diagrams? Explain with examples.
(OR)
b) i) Differentiate between generalization and aggregation.
ii) Write about different relationships.
7. a) What is activity diagram? Mention the Elements of activity diagram? Write an example activity diagram.
(OR)
b) i) What is State chart diagram? When to use it?
ii) Define Event, State, transitions and show them with examples.
8. a) i) Differentiate between component and development diagram.
ii) Write about patterns and frameworks.
(OR)
b) Write short note on
i) Systems and models
ii) Collaborations.
9. a) Explain the life cycle of unified process development.
(OR)
b) Write about architecture-centric process.
10. a) Write about Capturing use cases and creation of analysis model form use-cases.
(OR)
b) Write short note on following:

i) Role of Design in Software life cycle. ii) Testing.

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FACULTY OF SCIENCES
MCA V – SEMESTER REGULAR EXAMINATIONS, FEB 2019
OBJECT ORIENTED SYSTEM DEVELOPMENT

PAPER – III

Time: 3 hours]

[Max. Marks: 70

Note: Answer all questions from Section – A and Section – B

Section – A

Answer the following questions in not more than **ONE** page each: (5x4=20)

1. Define the following relationships in UML.
i) Dependency ii) Realization iii) Aggregations.
2. Explain in brief Activity diagram?
3. Discuss Patterns and Frameworks?
4. Describe Iterative Process?
5. Define Testing? Give examples.

Section – B

Answer the following questions in not more than **FOUR** page each: (5x10=50)

6. a) i) Draw and explain class diagram for library management system?
ii) Discuss the common mechanism in UML.
(OR)
b) i) Define Object. Draw the object diagram for student Information System.
ii) Write Principles of Modeling.
7. a) Explain the components present in Activity Diagram with an example?
(OR)
b) What is State Chart Diagram? Explain with an example.
8. a) What are the different pattern and frameworks? Explain Artifact diagrams.
(OR)
b) Discuss Deployment diagram with two examples.
9. a) Write a note on four P's in Unified Software Development Process.
(OR)
b) i) Discuss in brief about Use-Case-Driven Process.
ii) An Architecture-Centric Process.
10. a) Write a short note on i) Capturing Requirements as use cases. ii) Implementation.
(OR)
b) Write a note on Analysis Design and Test.

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Code No.1753

FACULTY OF SCIENCES
MCA V – SEMESTER REGULAR EXAMINATIONS, DEC- 2021
OBJECT ORIENTED SYSTEM DEVELOPMENT
PAPER – III

TIME: 2.00 Hours]

MAX. MARKS: 70

Answer any **FIVE** from the following questions in not more than **FOUR** pages each: (5x14=70)

1. State common properties in a Class Diagram. Explain them with an example each.
2. Discuss Use Cases. Draw Use Case diagram for Library application system.
3. Draw the state chart diagram of a ATM. Consider any transaction performed by the customer in one session. ✓ 2020
4. Explain about Activity diagram with an example. ✓ 19
5. Explain the basic elements of deployment diagram and give UML notations. 19
6. What are collaborations explain with suitable example. ✓ Dec 16 2020
7. Explain detail about the Four Ps. ✓ 2016
8. Discuss about Iterative and incremental process. ✓ Dec 16
9. Explain about Implementation. ✓ Dec 16
10. What is the Requirements capture? ✓
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FACULTY OF SCIENCES
MCA V – SEMESTER REGULAR EXAMINATIONS, DEC -2017
SOFTWARE REUSE TECHNIQUES

PAPER – IV (b)

[Max. Marks: 70]

Time: 3 hours]

Note: Answer all questions from Section – A and Section – B

Section – A

Answer the following questions in not more than **ONE** page each:

(5x4=20)

1. What are object components? Give an example.
2. Write briefly about Builder Prototype.
3. Write short notes on 'Façade' Structural Pattern.
4. Write short notes on 'Master-Slave' Design Pattern.
5. Explain briefly about 'broker' architectural pattern.

Section – B

Answer the following questions in not more than **FOUR** pages each:

(5x10=50)

6. a) List the basic principles to be followed to achieve systematic software reuse.
(OR)
b) Write elaborately about the significance of elements of software reuse.
c) What are use case components? Explain about their importance in SE.
7. a) Distinguish between Factory method pattern and Abstract Factory. Write also about the implementation issues of Factory method pattern.
(OR)
b) Write in detail about Creational Pattern with examples.
c) Discuss about Singleton.
8. a) Discuss in detail about Composite and Decorator structural patterns.
(OR)
b) Write elaborately about any two behavioral patterns.
9. a) Discuss about the essential features of mediator behavioral pattern.
(OR)
b) Distinguish between template pattern and visitor pattern from the view point of motivation and applicability.
10. a) Write about importance of Architectural Patterns. List all the types and elaborate any two of them.
(OR)
b) List and briefly explain the advantages and disadvantages in Pipes and Filters.
c) Discuss the process of implementing a blackboard pattern.

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FACULTY OF SCIENCES
MCA V – SEMESTER REGULAR EXAMINATIONS, FEB -2019
SOFTWARE REUSE TECHNIQUES

PAPER – IV (b)

Time: 3 hours]

[Max. Marks: 70

Note: Answer all questions from Section – A and Section – B

Section – A

Answer the following questions in not more than **ONE** page each: (5x4=20)

1. What is Software? What do you mean by software reuse? Explain different techniques for the reuse of the software?
2. How we can use a design pattern? Explain with a suitable example?
3. Explain in detail about the applicability and benefits of Structural Patterns?
4. What is a behavioral pattern? What are the different behavioral patterns available?
5. Differentiate between behavioral and architectural patterns?

Section – B

Answer the following questions in not more than **FOUR** pages each: (5x10=50)

6. a) What is Object? What are the object components? Explain them in detail?
(OR)
b) Briefly demonstrate about the applications of Software Reuse? Explain the different component subsystems involved in it?
7. a) What is a design pattern? Explain about different design patterns in software reuse?
(OR)
b) What are the participants and benefits of a singleton pattern?
8. a) Discuss about any two structural patterns along with structure?
(OR)
b) What is a structural pattern? Explain the motivation and consequences of different patterns?
9. a) Compare the benefits of mediator and observer patterns with a suitable example?
(OR)
b) Explain about the applications of the following:
i) Client dispatcher-server
ii) Publisher-subscriber.
10. a) Write a short notes on any two:
i) Pipes and filters pattern
ii) Model-view-controller pattern
(OR)
b) What is an architectural pattern? Explain in detail about reflection, control patterns with a suitable example for each?

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FACULTY OF SCIENCES
MCA V – SEMESTER REGULAR EXAMINATIONS, DEC 2017
INFORMATION SECURITY

PAPER – V (b)

Time: 3 hours]

[Max. Marks: 70

Note: Answer all questions from Section – A and Section – B

Section – A

Answer the following questions in not more than **ONE** page each: (5x4=20)

1. What are the characteristics of information?
2. What are prevailing legal bodies to act against the cyber crime?
3. What is fire wall? Discuss about some existing fire walls?
4. What are access controls?
5. Write about the employment policies involved in security implementation.

Section – B

Answer the following questions in not more than **FOUR** page each: (5x10=50)

6. a) Explain about the denial of service (DOS) and distributed denial of service (DDOS)?

(OR)

- b) Write about NSTI SSC Security Model?

7. a) Explain the different planning approaches to mitigate the risk?

(OR)

- b) What the security laws used in US? Explain.

8. a) What is the Network fire wall?

(OR)

- b) Explain Information security education Requirements.

9. a) Write about different types of attacks on cryptosystems?

(OR)

- b) Discuss in detail about RSA Algorithms?

10. a) Discuss about employment policies and practices should be adopted in an organization with respective of security?

(OR)

- b) Briefly explain about bull's eye-method?

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FACULTY OF SCIENCES
MCA V – SEMESTER REGULAR EXAMINATIONS, FEB -2019

INFORMATION SECURITY

PAPER – V (b)

Time: 3 hours]

[Max. Marks: 70

Note: Answer all questions from Section – A and Section – B

Section – A

Answer the following questions in not more than **ONE** page each: (5x4=20)

1. What are the Characteristics of Information?
2. Briefly discuss Recommended Risk Control Practices.
3. What is Virtual Private Network? Discuss in brief.
4. Write a short note on Cryptology.
5. What do you mean by Digital Forensics?

Section – B

Answer the following questions in not more than **FOUR** page each: (5x10=50)

6. a) Discuss NSTISSC Security Model.
(OR)
b) What is the need for Security? Explain in detail.
7. a) Compare Quantitative and Qualitative Risk Control Practices.
(OR)
b) What is Risk? Discuss Risk Control Strategies.
8. a) Explain Security Blue Print.
(OR)
b) Define Firewall. Explain Firewall Architecture.
9. a) Explain RSA Algorithm with an example.
(OR)
b) Discuss different types of Protocols for Secure Communication.
10. a) Explain the Technical aspects of Implementing Information Security.
(OR)
b) Write in detail about Employment Policies and Practices in Security.

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FACULTY OF SCIENCES
MCA V – SEMESTER REGULAR EXAMINATIONS, DEC- 2016
SOFTWARE TESTING

PAPER – I

Time: 3 hours]

[Max. Marks: 70

Note: Answer all questions from Section – A and Section – B

Section – A

Answer the following questions in not more than **ONE** page each: (5x4=20)

1. What is Boundary Value Testing?
2. Write a short note on Dataflow Testing.
3. Discuss briefly Interaction Testing.
4. What is Class Testing? Discuss briefly.
5. Write about Software Testing Excellence.

Section – B

Answer the following questions in not more than **FOUR** page each: (5x10=50)

6. a) Discuss in detail about Decision Table Based Testing?
(OR)
b) Write about Equivalence Class Testing with a suitable example.
7. a) Explain Retrospective on Structural Testing.
(OR)
b) What is Path Testing? Explain in detail.
8. a) Discuss different levels of Testing in detail.
(OR)
b) Discuss in detail about System Testing.
9. a) Define Object Oriented Testing. Explain the issues involved in Object Oriented Testing.
(OR)
b) Explain GUI Testing in detail.
10. a) Write in detail about Test Driven Development.
(OR)
b) Discuss the following
i) Exploratory Testing ii) Model Based Testing

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FACULTY OF SCIENCES
MCA V – SEMESTER REGULAR EXAMINATIONS, DEC- 2017
SOFTWARE TESTING

PAPER – I

Time: 3 hours]

[Max. Marks: 70

Note: Answer all questions from Section – A and Section – B

Section – A

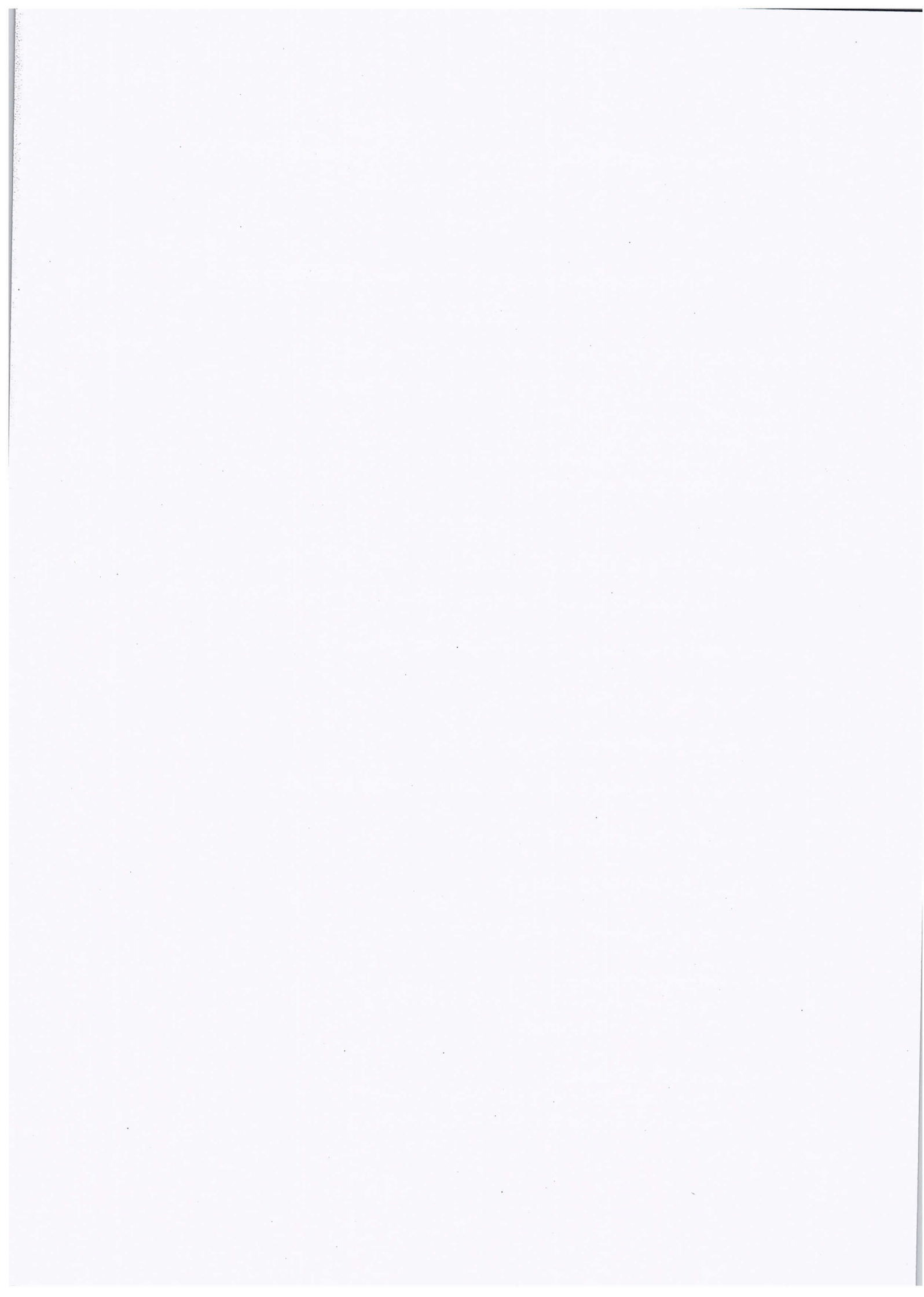
Answer the following questions in not more than **ONE** page each: (5x4=20)

1. What are guidelines for boundary value testing? Explain.
2. What are Test Coverage Metrics?
3. Explain about Call graph-based integration.
4. Describe state chart-based system testing.
5. Give a closer look at the NIST study.

Section – B

Answer the following questions in not more than **FOUR** page each: (5x10=50)

6. a) Explain about worst-case testing, special value testing and random testing.
(OR)
b) Discuss about retrospective on functional testing.
7. a) Explain about basis path testing.
(OR)
b) Briefly discuss about data flow testing.
8. a) What are alternative life cycle models? Explain in detail.
(OR)
b) Explain about path-based integration.
9. a) Discuss about methods as units.
(OR)
b) What is GUI? Explain GUI testing.
10. a) Explain the following:
i) Recommendations for all pairs testing.
ii) Java and J Unit example.
(OR)
b) Explain the following:
i) Appropriate models for model-based testing
ii) Mapping test practices to diverse projects.
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FACULTY OF SCIENCES
MCA V – SEMESTER REGULAR EXAMINATIONS, JAN- 2019
SOFTWARE TESTING

PAPER – I

Time: 3 hours]

[Max. Marks: 70

Note: Answer all questions from Section – A and Section – B

Section – A

Answer the following questions in not more than **ONE** page each: (5x4=20)

1. Differentiate between Functional and Non-Functional testing with examples?
2. Write a short notes on Structural Testing?
3. Write shot notes of System Testing.
4. Write about GUI Testing.
5. Give a closer look at the NIST study.

Section – B

Answer the following questions in not more than **FOUR** page each: (5x10=50)

6. a) What is functional testing? Write steps involved in creating the equivalence classes under equivalence testing?
(OR)
b) What is decision table? What is its composition?
7. a) Explain about Data Flow Graph in detail? What is the importance of it to perform data flow testing?
(OR)
b) What is path testing? Explain in detail about different levels of path testing?
8. a) What is Software Testing? Briefly demonstrate about different levels of testing?
(OR)
b) Explain in detail about interaction testing? Differentiate between unit and integration testing techniques?
9. a) What is an Object? Discuss about Object Oriented System Testing in detail?
(OR)
b) What is Integration Testing? State the benefits and the need for integration testing.
- 10.a) Briefly demonstrate about model based testing technique with a suitable example?
(OR)
b) Differentiate between Exploratory Testing and All Pairs Testing with a suitable example for each?

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FACULTY OF SCIENCES
MCA V – SEMESTER REGULAR EXAMINATIONS, DEC- 2021
SOFTWARE TESTING
PAPER – I

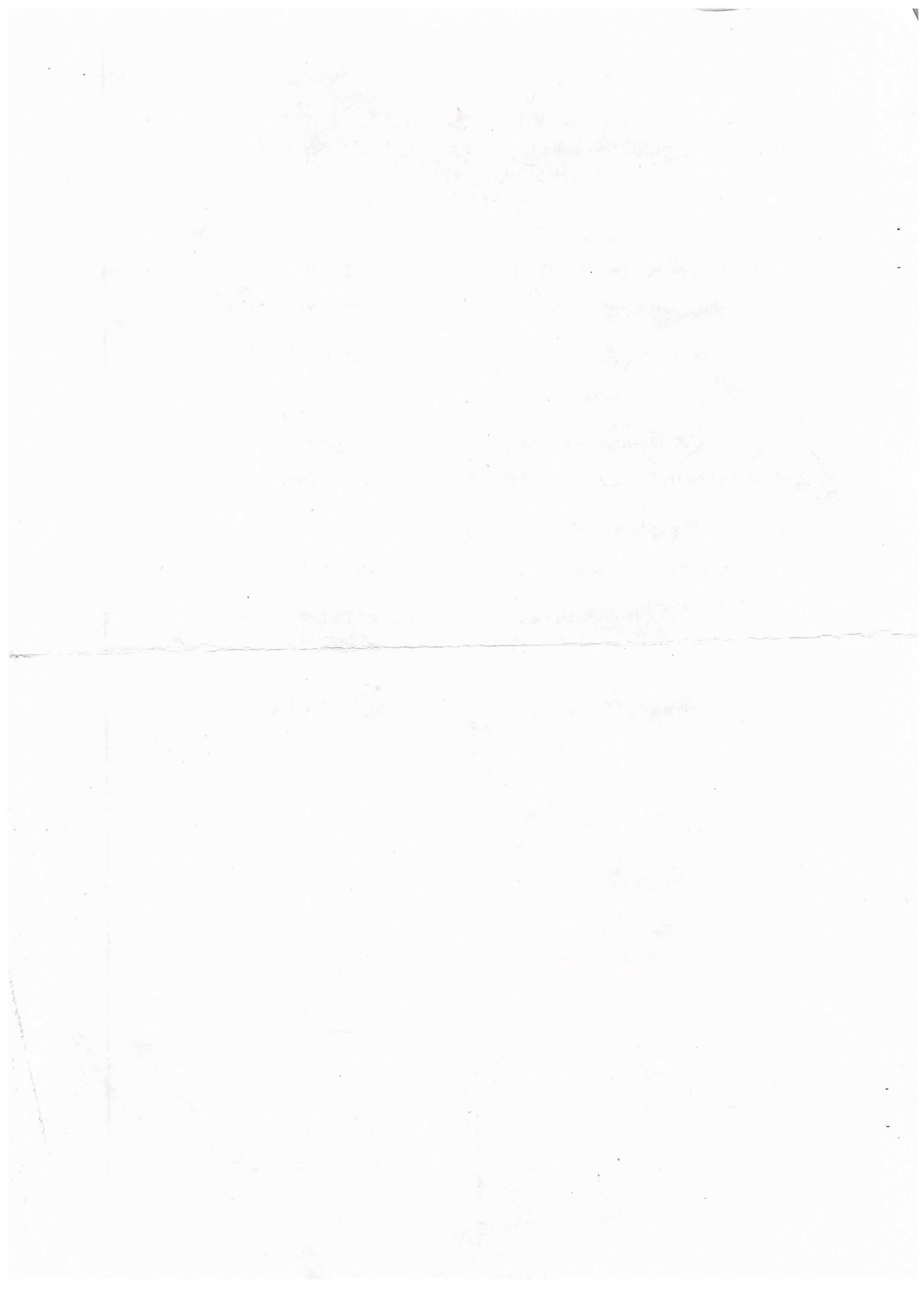
TIME: 2.00 Hours]

[MAX. MARKS: 70

Answer any **FIVE** from the following questions in not more than **FOUR** pages each: (5x14=70)

1. What is Boundary value testing? Briefly explain its different variations of it. MAR 21
2. What are decision Tables? Give a brief note on Decision Table Techniques. MAR 21
3. Give a brief note on DD-Paths. MAR 21
4. What is Define/Use Testing? Explain Du-paths for stocks, Locks and totalLocks.
5. With example briefly write about Call Graph-Based Integration and its approaches. 2020
6. What is a Thread? Explain Model-Based Threads.
7. List and explain issues in Testing Object-Oriented Software. MAR 21
8. Give a brief note on Object-Oriented Integration Testing. 2020
9. Write about the All Pairs Technique. MAR 21
10. List the characteristics of Systems of Systems and Sample Systems of Systems.

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FACULTY OF SCIENCES
MCA V – SEMESTER REGULAR EXAMINATIONS, DEC- 2017
MIDDLEWARE TECHNOLOGIES

PAPER – II

Time: 3 hours]

[Max. Marks: 70

Note: Answer all questions from Section – A and Section – B

Section – A

Answer the following questions in not more than **ONE** page each:

(5x4=20)

1. Differentiate between general middleware and specific middleware.
2. What different interfaces are associated with EJB implementation?
3. Write about life cycle of state-full session bean.
4. What are advantages of CORBA?
5. Write short note on Marshaling and Remoting.

Section – B

Answer the following questions in not more than **FOUR** page each:

(5x10=50)

6. a) Write in detail about RPC and Client-Server building blocks.
(OR)
b) Explain about WSDL and REST services.
7. a) Describe about different EJB architectures.
(OR)
b) Write short note on
 - i) Roles in EJB
 - ii) Steps for deployment and implementing EJB.
8. a) Write a program for implementing stateless session bean.
(OR)
b) i) Write and explain life cycle of entity bean.
ii) Write about EJB clients.
9. a) Differentiate between EJB and CORBA.
(OR)
b) i) Write about ORB model.
ii) Explain about IDL and write an example IDL program.
10. a) Describe about Proxy and stub in COM technology.
(OR)
b) i) Explain about COM interfaces.
ii) Explain about NET architecture.

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FACULTY OF SCIENCES
MCA V – SEMESTER REGULAR EXAMINATIONS, JAN- 2019
MIDDLEWARE TECHNOLOGIES

PAPER – II

Time: 3 hours]

[Max. Marks: 70

Note: Answer all questions from Section – A and Section – B

Section – A

Answer the following questions in not more than **ONE** page each: (5x4=20)

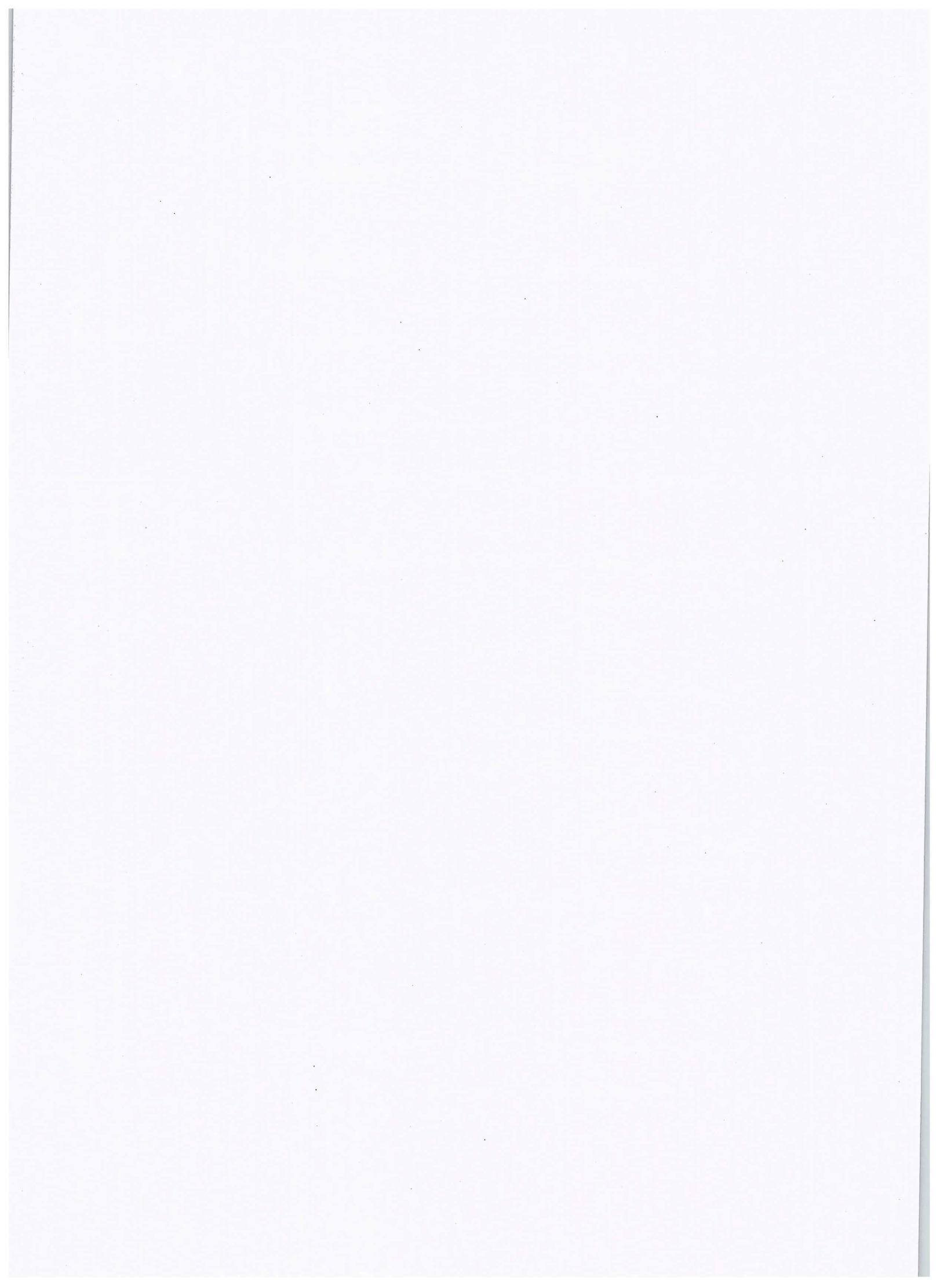
1. Write about different types of middleware.
2. Write about different roles in EJB.
3. What is the difference between Session Bean and Entity Bean?
4. Write short note on IDL.
5. Describe about different data types available in COM.

Section – B

Answer the following questions in not more than **FOUR** page each: (5x10=50)

6. a) Explain about Web services SOA, SOAP.
(OR)
b) Describe about different servers available?
7. a) Write about EJB architecture.
(OR)
b) Give the steps to building and deploying EJBS.
8. a) Write an example EJB application using Session Bean.
(OR)
b) Write short note on following.
 - i) Life cycle of entity bean
 - ii) EJB clients.
9. a) Write in detail about CORBA architecture.
(OR)
b) Write a short note on
 - i) ORB
 - ii) CORBA alternatives.
10. a) Write about object creation invocation and destruction in COM.
(OR)
b) Write an application program using .Net.

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FACULTY OF SCIENCES
MCA V – SEMESTER REGULAR EXAMINATIONS, DEC- 2016
MIDDLEWARE TECHNOLOGIES

PAPER – II

Time: 3 hours]

[Max. Marks: 70

Note: Answer all questions from Section – A and Section – B

Section – A

Answer the following questions in not more than **ONE** page each: (5x4=20)

1. Write about Object Server and Web Server
2. Draw and explain the EJB Software architecture
3. Write about the Session bean
4. Explain briefly how EJB and CORBA are related/associated
5. What is Remoting?

Section – B

Answer the following questions in not more than **FOUR** page each: (5x10=50)

6. a) Explain about the building blocks of client-server technologies.
b) Distinguish between General Middleware and Service-specific Middleware.
(OR)
c) Write about SOA and SOAP.
d) Write about WSDL and REST.
7. a) Explain in detail about the role of EJB in the 3-tier architecture.
(OR)
b) Write about the roles relating to EJB environment who support and maintain the EJB architecture consistently.
8. a) Distinguish between Stateful and Stateless Bean.
b) Write in detail about Entity Bean.
(OR)
c) List and explain the steps involved in the implementation of EJB.
d) Describe the transactions that take place when a client calls a Bean.
9. a) Explain the client and server sides of CORBA object Request Broker.
(OR)
b) Describe the architecture of CORBA.
10. a) Discuss about .NET architecture with the help of a neat sketch.
(OR)
b) Perform a comparative study between COM and CORBA.

FACULTY OF SCIENCES
MCA V – SEMESTER REGULAR EXAMINATIONS, DEC- 2021
MIDDLEWARE TECHNOLOGIES
PAPER – II

TIME: 2.00 Hours]

[MAX. MARKS: 70

Answer any **FIVE** from the following questions in not more than **FOUR** pages each: (5x14=70)

1. What are characteristics of client/server computing? Explain about various kinds of client/server architectures.
2. Explain in detail about Web services. ✓
3. Discuss about EJB containers in detail. ✓ 19
4. Explain about writing the EJB and roles in EJB. 2020
5. What is an entity bean? Explain about the life cycle of an entity bean. 19
6. Describe building an application with EJB and sample code. ✓ 19 2020
7. Explain about primitive and constructed types of IDL with suitable examples. ✓
8. Discuss about exploring CORBA services and CORBA facilities. ✓
9. Explain the following:
 - i) COM data types
 - ii) Operations of remoting in .Net framework. ✓
10. Explain the following:
 - i) COM data type mapping
 - ii) Similarities and differences of COM and CORBA. ✓

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FACULTY OF SCIENCES
MCA V – SEMESTER REGULAR EXAMINATIONS, DEC 2016
MOBILE COMPUTING

PAPER – V (a)

Time: 3 hours]

[Max. Marks: 70

Note: Answer all questions from Section – A and Section – B

Section – A

Answer the following questions in not more than **ONE** page each:

(5x4=20)

1. Write about Signal Propagation
2. Write the applications of Satellite Systems
3. Write about Bluetooth
4. Write about Mobile IP
5. Write about www

Section – B

Answer the following questions in not more than **FOUR** page each:

(5x10=50)

6. a) Write about Multiplexing?
b) Write about Modulation.
(OR)
c) Compare and Contrast FDMA and CDMA.
7. a) Explain various forms of Telecommunication systems.
(OR)
b) Write about Broadcast Systems.
8. a) Write about Infrared Vs Radio Transmission.
(OR)
b) Write about AdHoc Networks?
c) Write about IEEE 802.11?
9. a) Explain Mobile Transport layer.
b) Explain Traditional TCP.
(OR)
c) Explain TCP over 2.5/3G Wireless Networks.
10. a) Explain the features of Windows CE.
(OR)
b) Write about Wireless Application Protocol.

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FACULTY OF SCIENCES
M.C.A. V – SEMESTER REGULAR EXAMINATIONS, DEC 2017
MOBILE COMPUTING

PAPER – V (a)

Time: 3 hours]

[Max. Marks: 70

Note: Answer all questions from Section – A and Section – B

Section – A

Answer the following questions in not more than **ONE** page each: (5x4=20)

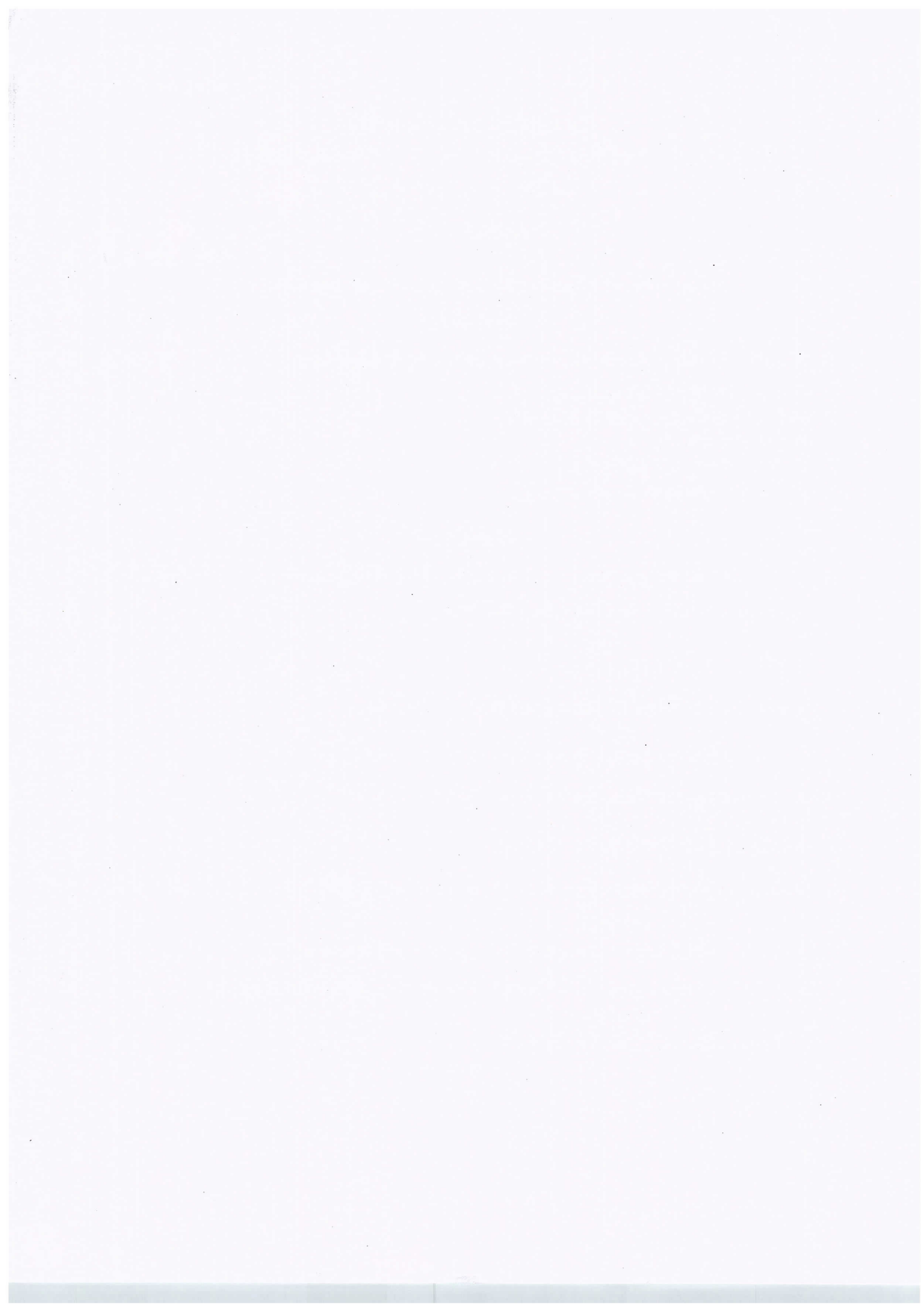
1. What is CDMA? Discuss in brief.
2. What are the Characteristics of GSM?
3. Describe Bluetooth.
4. Briefly discuss TCP snooping.
5. What are the features of Windows CE?

Section – B

Answer the following questions in not more than **FOUR** page each: (5x10=50)

6. a) Discuss in detail about FDMA and CDMA.
(OR)
b) Discuss Multiplexing in detail.
7. a) Discuss Handover Procedure and Security in GSM.
(OR)
b) Explain the Cyclic Representation of Data.
8. a) Compare Infrared and Radio Transmission.
(OR)
b) Explain in detail about HIPERLAN.
9. a) Discuss in detail about Dynamic Source Routing in MANET.
(OR)
b) Write in detail about Encapsulation operation of Mobile IP.
10. a) Explain in detail about WAP protocol architecture with neat diagram?
(OR)
b) Discuss Palm OS and Symbian OS in detail.

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FACULTY OF SCIENCES
M.C.A. V – SEMESTER REGULAR EXAMINATIONS, FEB-2019

MOBILE COMPUTING

PAPER – V (a)

Time: 3 hours]

[Max. Marks: 70

Note: Answer all questions from Section – A and Section – B

Section – A

Answer the following questions in not more than **ONE** page each: (5x4=20)

1. Give a short note on Near and Far Terminals.
2. What are the Disadvantages of GSM?
3. Define Ad Hoc Networks. Why Ad Hoc Networks are needed?
4. What is Time-Out Freezing?
5. Write a short note on WWW.

Section – B

Answer the following questions in not more than **FOUR** page each: (5x10=50)

6. a) Compare and Contrast SDMA, FDMA, TDMA, CDMA.
(OR)
b) Define Mobile Computing? Explain the Applications of Mobile Computing.
7. a) Explain GSM Architecture with a neat sketch.
(OR)
b) What is Satellite System? Discuss the applications of satellite system.
8. a) Write short notes on Radio Interface and Handover.
(OR)
b) Explain about Bluetooth Technology.
9. a) What are the Routing Protocols for MANETs? Explain in detail.
(OR)
b) Discuss DHCP and its characteristics in detail.
10. a) Discuss different types of Mobile Operating Systems in detail.
(OR)
b) Explain about the components of WAP architecture and its application environment.

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-2-

9. a) What is a precedence graph (or) Serializability graph? How is it related to conflict serializability. How is it related to two-phase locking?

(OR)

- b) What functionality does the recovery manager of a DBMS provide? What does the transaction manager do?

10. a) Write about ARIES Recovery Technique?

(OR)

- b) What is an authorization graph? Explain SQL's GRANTS REVOKE Command in terms of their effects on this graph. In particular, discuss what happens when users pass on privileges that they receive from someone else.

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FACULTY OF SCIENCES
M.C.A. V – SEMESTER REGULAR EXAMINATIONS, JAN-2022
MOBILE COMPUTING
PAPER – V (a)

TIME: 2.00 Hours]

[MAX. MARKS: 70

Answer any **FIVE** from the following questions in not more than **FOUR** pages each: (5x14=70)

1. Discuss about CDMA and spread Aloha multiple access.
2. Explain in detail about multipath propagation and multiplexing.
3. Describe digital audio broadcasting and digital video broadcasting. ✓
4. Explain about UMTS radio interface and UTRAN. ✓
5. Discuss about medium access control layer of IEEE 802.11. ✓
6. Describe link manager protocol, L2CAP, security and SDP of Bluetooth. ✓
7. What is dynamic route sourcing? Give an overview of ad-hoc routing protocols. ✓
8. Explain about classical TCP improvements. ✓
9. Explain the following:
 - i) Features of Symbian OS
 - ii) Wireless application protocol. ✓
10. Explain the following:
 - i) Features of Palm OS ✓
 - ii) File systems.

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CONFIDENTIAL

MEMORANDUM FOR THE DIRECTOR, FBI

SUBJECT: [Illegible]

DATE: [Illegible]

TO: [Illegible]

FROM: [Illegible]

RE: [Illegible]

1. [Illegible]

2. [Illegible]

3. [Illegible]

4. [Illegible]

5. [Illegible]

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22. [Illegible]

23. [Illegible]

24. [Illegible]

FACULTY OF SCIENCES
MCA V – SEMESTER REGULAR EXAMINATIONS, DEC -2016
E-COMMERCE

PAPER – IVb

Time: 3 hours]

[Max. Marks: 70

Note: Answer all questions from Section – A and Section – B

Section – A

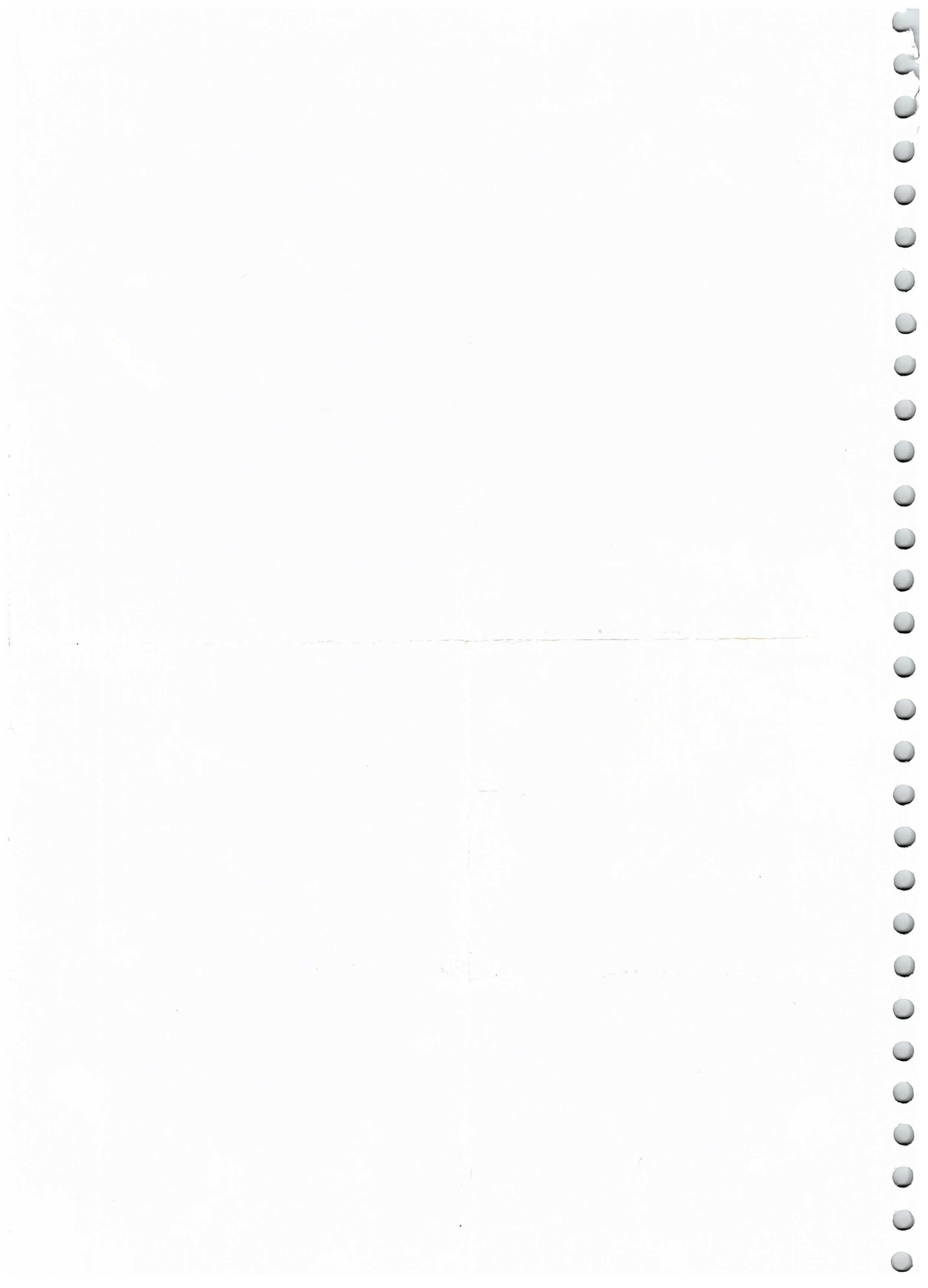
Answer the following questions in not more than **ONE** page each: (5x4=20)

1. Write a note on Anatomy of E-Commerce Application?
2. Discuss the process of Credit card based electronic payment systems
3. What is MIME?
4. What are the different types of Digital Documents?
5. What is Desktop Video Processing?

Section – B

Answer the following questions in not more than **FOUR** pages each: (5x10=50)

6. a) Discuss various challenges to e-commerce?
(OR)
b) Write a note on i) Consumer oriented electronic commerce.
ii) Mercantile Process Models.
7. a) Describe various payment systems with pros and cons of each of them.
(OR)
b) What is electronic payment system? Explain Risk and electronic payment system.
8. a) What is value added Networks? Explain EDI software Implementation?
(OR)
b) Write a note on i) Work flow Automation.
ii) Supply chain management.
9. a) What is Corporate Digital Library? Explain Dimensions of Internal Electronic Commerce System?
(OR)
b) Explain Online Marketing Process and Market Research?
10. a) What are the Paradigms for Search and Resource Discovery? Explain.
(OR)
b) What is Consumer Data Interface? Explain Emerging tools of CDI?



FACULTY OF SCIENCES
MCA V – SEMESTER REGULAR EXAMINATIONS, DEC -2017
ELECTRONIC - COMMERCE

PAPER – IV (a)

Time: 3 hours]

[Max. Marks: 70

Note: Answer all questions from Section – A and Section – B

Section – A

Answer the following questions in not more than **ONE** page each:

(5x4=20)

1. Write about E-Commerce Consumer Applications.
2. What are the types of Electronic Payment Systems?
3. What is Electronic Data Interchange?
4. What are the types of Digital Documents?
5. What is Information Filtering?

Section – B

Answer the following questions in not more than **FOUR** pages each:

(5x10=50)

6. a) Explain the E-Commerce Framework.
(OR)
b) Explain Mercantile Models from the Consumer's Perspective and Mercantile Models from the Merchant's Perspective.
7. a) Explain Digital Token Based Electronic Payment Systems.
(OR)
b) Explain Credit Card Based Electronic Payment Systems.
8. a) Explain the legal, security and privacy issues in Electronic Data Interchange.
(OR)
b) Write about Work Flow Automation and Co-ordination.
9. a) Discuss the issues behind Document Infra Structure.
(OR)
b) Explain Information based marketing.
10. a) Discuss various emerging tools in consumer Data Interface.
(OR)
b) Explain Desktop Video Processing and Desktop Video Conferencing.

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FACULTY OF SCIENCES
MCA V – SEMESTER REGULAR EXAMINATIONS, FEB -2019
ELECTRONIC - COMMERCE

PAPER – IV (a)

Time: 3 hours]

[Max. Marks: 70

Note: Answer all questions from Section – A and Section – B

Section – A

Answer the following questions in not more than **ONE** page each: (5x4=20)

1. What do you mean by Consumer Oriented Electronic Commerce?
2. How to design Electric Payment Systems.
3. What are the issues related to EDI? Discuss.
4. Enumerate advertising on Internet.
5. What is Information search and retrieval?

Section – B

Answer the following questions in not more than **FOUR** pages each: (5x10=50)

6. a) Discuss the importance of electric commerce framework? What is Media Convergence?
(OR)
b) Describe consumer oriented applications and mercantile process models.
7. a) Differentiate between smart card and credit card electronic payment systems.
(OR)
b) What are the different types of electronic payment systems? Explain the process of Designing the electronic payment systems.
8. a) What is EDI? Explain EDI Applications in Business and discuss its implementation.
(OR)
b) Write a note on EDI Envelope for Message Transport and Internet Based EDI.
9. a) Explain Dimensions of Internal Electronic Commerce Systems and Digital Documents.
(OR)
b) What is On-line marketing process? Explain Information based marketing.
10. a) What is consumer search? Explain the paradigms of search and resource discovery?
(OR)
b) Explain the following terms:
 - i) Multimedia and Digital Video
 - ii) Consumer Data Interface.

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Code No.1754A

FACULTY OF SCIENCES
MCA V – SEMESTER REGULAR EXAMINATIONS, JAN -2022

ELECTRONIC - COMMERCE

PAPER – IV (a)

TIME: 2.00 Hours]

[MAX. MARKS: 70

Answer any **FIVE** from the following questions in not more than **FOUR** pages each: (5x14=70)

1. i) Describe the generic framework for electronic commerce. 19
ii) Explain Electronic Commerce Organization Applications.
2. Explain in detail about E- Commerce Applications.
3. i) Describe the two basic types of smart cards. ✓ 21
ii) How the payment transaction sequence is happens in the Electronic cheque system and explain its advantages.
4. i) What are the Risks in e-commerce payment system.
ii) Types of electronic payment system. ✓ 21
5. What is workflow co-ordination? Define work-flow co-ordination in intra Organizational commerce. 21
6. i) Define EDI. Explain about EDI layered Architecture. 21
ii) Explain the probabilistic information retrieval models.
7. i) Briefly discuss about Digital documents. ✓ 21
ii) Explain how advertising is carried out on Internet. 21
8. Describe the online marketing process. 19
9. i) Write about different types of desktop video conferencing. 21
ii) What is meant by Home entertainment? What is the role and scope of E-Commerce in Home Entertainment market?
10. Explain in detail about Information search and Retrieval system. 21

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