

**For Candidates Admitted From 2018**

2018 MIT 21C ROLL NO.....  
M.Sc., DEGREE EXAMINATIONS, APRIL 2019  
SEMESTER - II INFORMATION TECHNOLOGY  
C# PROGRAMMING

Time: 3 Hrs

Max. Marks: 75

**PART - A (10 X 2 = 20)**

**ANSWER ALL THE QUESTIONS**

1. List out the various characteristics of C#.
2. Define the switch statement in C#.
3. State differences between Classes and Structs.
4. Define Enumerations.
5. What are destructors?
6. Define Abstract classes.
7. How to define an interface?
8. Define Events.
9. What is debugging?
10. List out the various web based applications on .NET.

**PART - B (5 x 5 = 25)**

**ANSWER ALL THE QUESTIONS**

11. a. Explain in detail about literals in C#.  
(or)  
b. Write short notes on decision making and looping in C#.
12. a. Discuss about the methods in C#.  
(or)  
b. Explain in detail about the manipulating strings.
13. a. Discuss about constructors in C#.  
(or)  
b. Explain in detail about the concept of Polymorphism.
14. a. Discuss about the concept of implementing interfaces.  
(or)  
b. Write short notes on delegates.

15. a. Mention the various types of errors in C#.  
(or)  
b. How to create window forms in .NET? Explain.

**PART - C (3 x 10 =30) .**

**ANSWER ANY THREE QUESTIONS**

16. Discuss about the various types of operators in C# with an example.
17. Explain in detail about the handling arrays in C#.
18. Define Inheritance. Write in detail about the various types of Inheritance in C# with an example.
19. Write short notes on Operator overloading in C#.
20. Describe about the concept of Exception handling.

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**For Candidates Admitted From 2018**

2018 MIT 22C

ROLL NO.....

**M.Sc.,DEGREE EXAMINATIONS, APRIL 2019  
SEMESTER - II INFORMATION TECHNOLOGY  
DATA ANALYTICS AND R PROGRAMMING**

**Time: 3 Hrs**

**Max. Marks: 75**

**PART - A (10 X 2 = 20)**

**ANSWER ALL THE QUESTIONS**

1. List the primitives that specify a data mining task.
2. Define correlation analysis with an example.
3. What are the data mining applications?
4. Define Clustering.
5. Define Big Data Analytics.
6. List out the challenges of Big Data Analytics.
7. What is Subsetting in R Objects?
8. How to Installing the dplyr package?
9. What are the Scoping Rules of R?
10. List out the debugging tools in R ..

**PART:-B (5 x 5 = 25)**

**ANSWER ALL THE QUESTIONS**

11. a) Give the classification of data mining systems.  
(or)  
b) Explain about Mining Various Kinds of Association Rules.
12. a) Discuss about Rule based classification. Give example.  
(or)  
b) Explain in detail about the Constraint-Based Cluster Analysis.
13. a) Discuss about the Industry examples of Big Data.  
(or)  
b) Write short notes on Big Data Analytics Methodology.

- 14) a) Discuss about the Getting Data In and Out of R.

(or)

- b. Describe about using the Textual and Binary Formats for Storing Data.

15. a. Give a detailed note on Control Structures in R.

(or)

- b. Write short notes on Functions in R.

**PART - C (3 x 10 = 30)**

**ANSWER ANY THREE QUESTIONS**

16. Discuss the Data Mining Functionalities.
17. Explain in detail about Bayesian classification in detail.
18. Discuss about the Architectures, Frameworks, and Tools for Big Data Analytics.
19. Write short notes on Subsetting R Objects.
20. Write in detail about Loop Functions in R.

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2018 MIT 23C

ROLL NO.....

M.Sc.,DEGREE EXAMINATIONS, APRIL 2019

SEMESTER - II INFORMATION TECHNOLOGY

NETWORK SECURITY

Time: 3 Hrs

Max. Marks: 75

**PART - A (10 X 2 = 20)**

**ANSWER ALL THE QUESTIONS**

1. Define Data Integrity.
2. What is Brute-force attack?
3. What is AES?
4. What is public-key cryptosystem?
5. What four requirements were defined for Kerberos?
6. What is Hash function?
7. Define S/MIME.
8. Draw IPSec ESP format.
9. What are the four stages of a typical virus goes through during its lifetime?
10. Define Honeypot.

**PART - B (5 X 5 = 25)**

**ANSWER ALL THE QUESTIONS**

11. a. Write notes on Model for Network Security.  
(or)  
b. Discuss on DES.
12. a. Distinguish between Conventional and Public -key encryption.  
(or)  
b. Explain about Elliptic Curve Cryptography.
13. a. Write about X.509 Authentication Service.  
(or)  
b. Short notes on Digital Signatures.
14. a. With a suitable diagram to describe the IP Security architecture.  
(or)  
b. Discuss on Pretty Good Privacy.

15. a) Write notes on Password Selection Strategies.

(or)

- b) Describe about Trusted System.

**PART - C (3 X 10 = 30)**

**ANSWER ANY THREE QUESTIONS**

16. Discuss the different types of security services, mechanisms and attacks in detail.
17. Write the detailed description of RSA algorithm with example.
18. Explain the Message Authentication Functions in detail.
19. Discuss on Secure Electronic Transaction (SET).
20. Explain about Firewall design principles.

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For Candidates Admitted From 2018

2018 MIT 24C

ROLL NO.....

M.Sc., DEGREE EXAMINATIONS, APRIL 2019  
SEMESTER - II INFORMATION TECHNOLOGY  
SOFT COMPUTING

Time: 3 Hrs

Max. Marks: 75

PART - A (10 X 2 = 20)

ANSWER ALL THE QUESTIONS

1. List out the various characteristics of Neural Networks.
2. What are the learning methods?
3. Define Backpropagation.
4. What is local Minima?
5. What is Plasticity?
6. Define ART.
7. What is Partition?
8. List out the operations on Fuzzy relations.
9. What are Fuzzy rule based system?
10. Define Defuzzification.

PART - B (5 X 5 = 25)

ANSWER ALL THE QUESTIONS

11. a) List out the Model of an Artificial Neuron.  
(or)  
b) Explain about MADALINE Network.
12. a) Discuss about the single layer Artificial Neural Network.  
(or)  
b) Describe about the selection of various parameters in BPN.
13. a) Write short on vector Quantization.  
(or)  
b) Explain in detail about the ART2.
14. a) Discuss about the properties of Crisp sets.  
(or)

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b) Describe about the Crisp relations.

15. a) Give a detailed note on Crisp logic.  
(or)  
b) Explain the Predicate logic.

PART - C (3 X 10 = 30)

ANSWER ANY THREE QUESTIONS

16. Discuss about the Neural Networks architectures.
17. Explain in detail about Back propagation learning.
18. Write in detail about ART1.
19. Write notes on Fuzzy sets.
20. Explain in detail about the Fuzzy logic.

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