1B2A25430 (Pages : 2) Reg. No:.....

Name: .....

FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE

Second Semester B.Sc Degree Examination, April 2025

CSC2CJ101 – Fundamentals of Programming (C Language)

(FYUGP 2024 Admission)

Time: 2 hours Max. Marks : 70

PART – A

All questions can be attended.
Each question carries **Three** mark.
Ceiling -24 Marks

		COs	Knowledge Level(KL)	Marks
1	What is mean by Arithmetic expression?	CO1	Understand	3
2	Explain any 3 Bitwise operators.	CO1	Remember	3
3	What is a string? How do we read a string ?	CO4	Understand	3
4	What is a pointer? How do we declare a pointer?	CO5	Analise	3
5	What is a Token?	CO1	Remember	3
6	Write a program to determine the given number is odd or even.	CO6	Evaluate	3
7	What is an identifier? Write the rules for naming an identifier.	CO1	Remember	3
8	What is the use of command line arguments?	CO3	Apply	3
9	What is a character set? What are the different character set used in C?	CO1	Remember	3
10	Explain any 3 string handling functions.	CO2	Understand	3

PART – B

All questions can be attended.
Each question carries **six** marks.
Ceiling -36 Marks

		COs	Knowledge Level(KL)	Marks
11	What is mean by recursion? Explain with an example.	CO5	Evaluate	6
12	What is the use of <math.h> header file? Explain any 3 mathematical functions.	CO1	Understand	6
13	Briefly explain about different types of function calls.	CO4	Analyse	6
14	Explain about type conversion in C	CO1	Understand	6
15	Explain about storage classes in C.	CO4	Create	6

16	What is a unary operator? Briefly explain any 3 unary operator.	CO1	Remember	6
17	Briefly explain about formatted input and output operation.	CO1	Understand	6
18	Differentiate Structure and Union.	CO5	Apply	6

PART - C

Answer any ***one*** questions.
Each question carries **Ten** marks.

		COs	**Knowledge Level(KL)**	**Marks**
19	Explain about Dynamic memory allocation with suitable examples.	CO5	Evaluate	10
20	Explain about Control statements in C. Illustrate each.	CO2	Apply	10

1 x 10 = 10 Marks

1B2A25431 (Pages : 2) Reg. No:.....

Name: .....

FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE

Second Semester B.Sc Degree Examination, April 2025

CSC2MN102 – Introduction to Data Science

(FYUGP 2024 Admission)

Time: 2 hours Max. Marks : 70

PART – A

All questions can be answered.

Each question carries **Three** marks.

Ceiling -24 Marks

Q.No	Question	COs	KL	Marks
1	Define the key components of data science and list how they interact.	CO1	2	3
2	Differentiate correlation and causation.	CO4	3	3
3	What is PCA? Explain.	CO5	1	3
4	Differentiate Skewness and Kurtosis	CO2	3	3
5	What is univariate EDA?	CO1	1	3
6	Give importance of Boxplot in EDA	CO3	4	3
7	What is data cleaning? Describe two common techniques for handling missing data in a dataset.	CO2	3	3
8	Explain the concept of noisy data. How can you handle noisy data during the data cleaning process?	CO2	4	3
9	What are some common data visualization techniques used to represent categorical data? Provide examples of when to use bar charts or pie charts.	CO3	3	3
10	What is clustering in unsupervised learning?	CO5	2	3

PART – B

All questions can be answered. Each question carries **six** marks.

Ceiling -36 Marks

		COs	KL	Marks
11	Explain the difference between structured, semi-structured, and unstructured data with relevant examples.	CO1	2	6
12	Describe the roles of mean, median, and mode in summarizing data and illustrate their application with examples.	CO2	4	6

13	Write a Python code snippet to calculate the mean, median, and mode of the list [25, 30, 15, 20,45, 50, 30] .	CO3	3	6
14	Demonstrate how Python libraries like Pandas and NumPy assist in handling missing data during preprocessing.	CO6	3	6
15	Describe the main difference between classification and regression tasks in supervised learning. Provide an example of a problem for each.	CO4	1	6
16	What is the difference between normalization and standardization? When should each technique be applied during data pre-processing?	CO6	1	6
17	Explain the concept of removing outliers in data preparation. How does the presence of outliers affect machine learning models?	CO6	4	6
18	Demonstrate how Python libraries like Pandas and NumPy assist in handling missing data during preprocessing.	CO6	3	6

PART - C

Answer any ***one*** question.

Each question carries **Ten** marks.

		COs	**KL**	**Marks**
19	a) Assess the importance of exploratory data analysis (EDA) in the data science workflow and justify why it is essential for successful data-driven decision-making.	CO3	5	3
	b) Explain any three data visualization plots used for EDA.			7
20	Categorise Machine learning algorithms and briefly explain each of them. Give examples and applications for each.	CO5	4	10

1 x 10 = 10 Marks

1B2A25432 (Pages : 2) Reg. No:.....

Name: .....

FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE

Second Semester B.Sc Degree Examination, April 2025

CSC2FM106 – Digital Empowerment Through Ethical Standards.

(FYUGP 2024 Admission)

Time: 1.5 hours Max. Marks : 50

PART – A

All questions can be attended.
Each question carries **Two** mark.
Ceiling -16 Marks

		COs	Knowledge Level(KL)	Marks
1	What do you mean by Digital Revolution?	CO1	2	2
2	What is your understanding on Artificial Intelligence?	CO2	2	2
3	What is Cloud Computing?	CO2	2	2
4	What is M-Governance?	CO2	2	2
5	What is DigiLocker?	CO2	2	2
6	What do you know about MOOCs?	CO3	3	2
7	Write a short paragraph on Networking Tools.	CO4	4	2
8	What is Cyber attack?	CO5	4	2
9	Write a short note on IoT?	CO2	2	2
10	What is your understanding on IPR?	CO5	6	2

PART – B

All questions can be attended.
Each question carries **six** marks.
Ceiling -24 Marks

		COs	Knowledge Level(KL)	Marks
11	Write a paragraph on the challenges of Pre-digital age.	CO1	1	6
12	Explain the importance of Digital Infrastructure.	CO1	3	6
13	What are the four pillars of Digital Emergence in Kerala? Explain.	CO3	3	6
14	Write a paragraph on Cyber Laws.	CO5	4	6
15	What is your understanding on Digital Tools?	CO4	3	6

PART - C

Answer any *one* questions.

Each question carries **Ten** marks.

		COs	**Knowledge Level(KL)**	**Marks**
16	What is your understanding on Online learning platforms? Explain in detail with examples.	CO5, CO6	5	10
17	What is the role of K-DISC in Digital Empowerment? Explain.	CO6	6	10

1 x 10 = 10 Marks