

1B1N25142

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Reg. No:.....

Name:

FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE

First Semester BVOC SD Degree Examination, November 2025

SFD1CJ101- Programming Fundamentals with C

(FYUGP 2025 Admission onwards)

Time: 2 hours

Max. Marks : 60

PART – A

All questions can be attended.
Each question carries Two mark.
Ceiling -20 Marks

		COs	Knowledge Level(KL)	Marks
1	List any two features of C language ?	CO1	KL-1 (Remember)	2
2	Define variables ? Give one example ?	CO1	KL-1 (Remember)	2
3	Mention any two mathematical functions in C ?	CO2	KL-1 (Remember)	2
4	What is the use of the break statement ?	CO2	KL-2 (Understand)	2
5	Define entry-controlled and exit-controlled loops ?	CO2	KL-2 (Understand)	2
6	Write the syntax for declaring a two-dimensional array ?	CO4	KL-2 (Understand)	2
7	What is recursion ?	CO5	KL-1 (Remember)	2
8	Differentiate between call by value and call by reference ?	CO5	KL-4 (Analyze)	2
9	What is the use of the strlen() function?	CO5	KL-2 (Understand)	2
10	Write the syntax for declaring a pointer ?	CO5	KL-1 (Remember)	2
11	Name any two functions used for dynamic memory allocation in C ?	CO5	KL-1 (Remember)	2
12	Give the syntax for opening a file in read mode ?	CO5	KL-1 (Remember)	2

PART – B

All questions can be attended.
Each question carries six marks.
Ceiling -30 Marks

		COs	Knowledge Level(KL)	Marks
13	Explain the structure of a C program with a neat diagram ?	CO1	KL-2 (Understand)	6
14	Explain the different data types supported by C with examples ?	CO1	KL-2 (Understand)	6
15	Demonstrate the working of the switch statement with an example program ?	CO2	KL-3 (Apply)	6
16	Explain with an example how to declare, initialize, and access a two-dimensional array	CO4	KL-3 (Apply)	6
17	Explain command line arguments with an example ?	CO3	KL-2 (Understand)	6
18	Explain input and output operations on files with examples ?	CO5	KL-2 (Understand)	6

PART - C

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

		COs	Knowledge Level(KL)	Marks
19	Write a program to generate the Fibonacci series up to n terms using a while loop ?	CO6	KL-3 (Apply)	10
20	What are structures. Explain the syntax to create a structure with an example.	CO4	KL-2 (Understand)	10

1 x 10 = 10 Marks

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Reg. No:.....

Name:

FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE

First Semester BVOC SD Degree Examination, November 2025

SFD1CJ102- Web Programming

(FYUGP 2025 Admission onwards)

Time: 2 hours

Max. Marks : 60

PART – A

All questions can be attended.
Each question carries Two mark.
Ceiling -20 Marks

		COs	Knowledge Level(KL)	Marks
1	Classify different types of HTML lists with examples.	CO1	U	2
2	Explain the term Web Programming	CO1	U	2
3	Compare and contrast HTML 4 and HTML 5	CO1	U	2
4	Summaries the purpose of the <canvas> tag in HTML.	CO1	U	2
5	Outline the basic structure of an HTML document.	CO1	U	2
6	Construct an HTML web page to display an image using background image tag.	CO1	Ap	2
7	Infer the importance of using CSS selectors.	CO2	U	2
8	Demonstrate how to insert a background color in a web page using CSS.	CO2	U	2
9	Explain the significance of the margin and padding properties in CSS.	CO2	U	2
10	Infer the CSS form validation.	CO2	U	2
11	Compare == and === operators in JavaScript.	CO3	U	2
12	Demonstrate the use of a for loop in JavaScript.	CO3	U	2

PART – B

All questions can be attended.
Each question carries six marks.

Ceiling -30 Marks

		COs	Knowledge Level(KL)	Marks
13	Demonstrate how to design a basic HTML page that includes headings, paragraphs, lists, and images.	CO1	U, Ap	6
14	Show how to create tables in HTML and adding rows and columns with example.	CO1	U, Ap	6
15	Explain how different CSS properties can be used to create responsive boxes and columns.	CO2	U	6
16	Compare and contrast inline, internal, and external CSS. Which is more effective for large projects?	CO2	U	6
17	Show how JavaScript functions can be used to perform arithmetic operations.	CO3	U	6
18	Construct a web page with validating a form with both HTML attributes and JavaScript.	CO4	Ap	6

PART - C

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

		COs	Knowledge Level(KL)	Marks
19	You are working with your college website. Construct a webpage that contains a navigation bar, a table displaying data, and a contact form. Utilize HTML for structure, CSS for design, and JavaScript for client-side validation.	CO4	Ap	10
20	Outline and explain the importance of event-driven programming in JavaScript by relating it to real-world web applications.	CO3	Ap	10

1 x 10 = 10 Marks

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Reg. No:.....

Name:

FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE

First Semester BVOC SD Degree Examination, November 2025

SFD1CJ103 - Discrete Mathematics

(FYUGP 2025 Admission onwards)

Time: 2 hours

Max. Marks : 60

PART – A

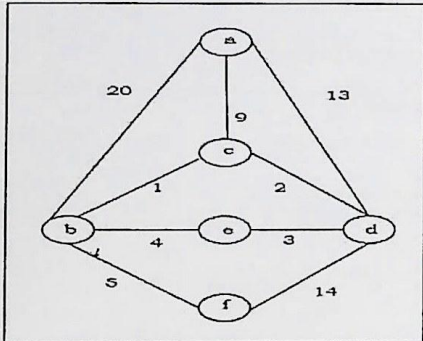
All questions can be attended.
Each question carries Two mark.

Ceiling -20 Marks

		COs	Knowledge Level(KL)	Marks
1	Construct the truth table of $p \vee q$?	CO1	K2 – Understanding	2
2	Prove that $p \vee \bar{p}$ is a tautology?	CO1	K3 – Applying	2
3	What is universal quantifiers?	CO1	K1 – Remembering	2
4	Find $A \cup B$ and $A \cap B$ if $A = \{1, 2, 3\}$ and $B = \{2, 3, 4, 5\}$	CO2	K2 – Understanding	2
5	Draw a Venn diagram to represent $(A \cap B)$	CO2	K3 – Applying	2
6	Write the difference between injective (one-to-one) and subjective (onto) functions	CO2	K2 – Understanding	2
7	Define Euler digraphs	CO3	K1 – Remembering	2
8	Explain the Travelling Salesman Problem (TSP) with an example	CO4	K2 – Understanding	2
9	Define a Hamiltonian graph with an example.	CO3	K1 – Remembering	2
10	Explain Prim's Algorithm?	CO4	K2 – Understanding	2
11	Draw a tree with 5 vertices and identify all pendant vertices	CO3	K3 – Applying	2
12	Define a rooted tree and give an example	CO3	K1 – Remembering	2

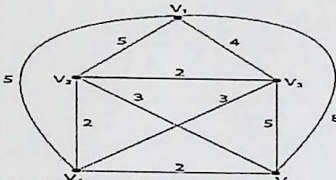
PART – B

All questions can be attended.
Each question carries six marks.
Ceiling -30 Marks

		COs	Knowledge Level(KL)	Marks
13	Construct truth table of i. $(p \vee q) \vee \bar{p}$ ii. $(p \rightarrow p) \rightarrow (p \rightarrow \bar{p})$	CO1	K3 – Applying	6
14	Explain tautology, contradiction, and contingency with suitable examples.	CO1	K2 – Understanding	6
15	Let $A = \{1, 2, 3, 4\}$, $B = \{2, 3, 5, 6\}$. (a) Find $A \cup B$, $A \cap B$, $A - B$, and $B - A$. (b) Draw a Venn diagram to represent the operations	CO2	K3 – Applying	6
16	Find a walk, trail, path and cycle in the following graph? 	CO3	K3 – Applying	6
17	Explain isomorphism?	CO3	K2 – Understanding	6
18	Find out the minimum spanning tree using kruskal's algorithm? 	CO4	K3 – Applying	6

PART - C

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

		COs	Knowledge Level(KL)	Marks
19	Construct truth tables for the following statements and determine whether they are tautologies or not: (a) $(p \vee \neg p)$ (b) $(p \wedge \neg p)$ (c) $(p \rightarrow q) \vee (q \rightarrow p)$	CO1	K4 – Analyzing	10
20	Use the nearest-neighbor method to solve the following travelling salesman problem, for the graph shown in figure starting at vertex v_1 . 	CO4	K4 – Analyzing	10

1 x 10 = 10 Marks

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Reg. No:.....

Name:

FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE
First Semester BVOC SD Degree Examination, November 2025
SFD1FM105 - IT Security Fundamentals
 (FYUGP 2025 Admission onwards)

Time: 1 ½ 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 is Cyber Security?	CO1	2	2
2	List any 4 methods to prevent cyber attacks.	CO1	2	2
3	What is Phishing?	CO1	2	2
4	Explain any two losses due to security attack.	CO2	2	2
5	Give any 4 types of Cyber attack?	CO2	1	2
6	What is Social Engineering?	CO3	1	2
7	What is netiquette?	CO3	1	2
8	What is Network Security?	CO4	1	2
9	Explain Virus.	CO4	2	2
10	List few best practices to be followed as online etiquette.	CO5	1	2

PART – B

All questions can be attended.
Each question carries six marks.

Ceiling -24 Marks

		COs	Knowledge Level (KL)	Marks
11	Explain in detail common security threats.	CO2	2	6
12	What is Hacking? Explain different types of hacking in detail.	CO3	2	6
13	“A strong password is your first line of defense against cyber threats.” Justify your answer.	CO3	5	6
14	Why Vulnerability management is important?	CO4	2	6
15	Explain the difference between HTTP and HTTPS.	CO5	4	6

PART - C

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

		COs	Knowledge Level(KL)	Marks
16	Discuss safe browsing practices and tips that should be followed to avoid online threats.	CO2	5	10
17	Explain Security Goals- CIA triad in detail. Also explain the security awareness best practices that should be followed by any user.	CO2, CO5	2	10

1 x 10 = 10 Marks

FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE

First Semester BVOC AUTOMOBILE/ BVOC SD Degree Examination, November 2025

SFD1FS113/AUE1FS113- Introduction to Computers and Office Automation

(FYUGP 2025 Admission onwards)

Time: 1 ½ hours

Max. Marks : 50

PART-A

Answer all questions. Each question carries two mark.
Ceiling -16 Marks

1. Differentiate between input and output devices with one example each.
2. What is secondary storage? Give two examples.
3. Define system software with examples.
4. List any four uses of MS Word.
5. What is the use of the table feature in Word?
6. What is the difference between a worksheet and a workbook?
7. Give two examples of spreadsheet functions.
8. What is the role of slide master in presentations?
9. What is the significance of headers and footers in documents?
10. Name any two modern ICT tools used in offices.

PART-B

Answer all questions. Each question carries six marks.
Ceiling -24 Marks

11. Explain different types of computer memory with examples.
12. Discuss six formatting tools in word processing software.
13. Explain with examples the use of formulas and functions in spreadsheets.
14. How can pictures and videos be inserted in a PowerPoint presentation?
15. Explain the integration of Word and Excel in preparing reports with examples.

PART - C

Answer any one questions.
Each question carries ten marks.

16. Write an essay on the classification of computers, their features, and applications.
17. Discuss in detail how office automation tools improve efficiency in organizations.

1x 10 = 10 Marks

FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE

First Semester BVOC SD Degree Examination, November 2025

STA1MN112(P) - Descriptive Statistics for Data Analysis

(FYUGP 2025 Admission onwards)

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	Define Primary Data and Secondary Data with one example.	CO1	U	3
2	List out any three methods of collecting Primary Data.	CO1	U	3
3	What are the disadvantages of secondary data?	CO1	U	3
4	The following data gives the number of children per family. Construct a discrete frequency distribution 1, 4, 3, 2, 0, 1, 2, 0, 2, 1, 2, 1	CO4	U	3
5	Define statistics.	CO1	U	3
6	Calculate the Arithmetic Mean from the following data 3, 12, 20, 10, 5	CO4	U	3
7	Define median.	CO4	U	3
8	Define Quartile deviation .	CO4	U	3
9	Ramu thrown two fair coins simultaneously. Calculate the probability of the following events: i. Both heads. ii. No head	CO5	R	3
10	Define sample space.	CO5	R	3

PART – B

All questions can be attended.
Each question carries six marks.

Ceiling -36 Marks

		COs	Knowledge Level(KL)	Marks
11	Define data. Explain different types of data with suitable examples.	CO1	U	6

12	Explain the following : i. Histogram ii. Frequency Polygon iii. Ogives	CO3	R	6														
13	Construct a less than ogive for the following data <table><tr><th>class</th><th>Frequency</th></tr><tr><td>0-10</td><td>3</td></tr><tr><td>10-20</td><td>6</td></tr><tr><td>20-30</td><td>15</td></tr><tr><td>30-40</td><td>9</td></tr><tr><td>40-50</td><td>5</td></tr><tr><td>50-60</td><td>2</td></tr></table>	class	Frequency	0-10	3	10-20	6	20-30	15	30-40	9	40-50	5	50-60	2	CO3	R	6
class	Frequency																	
0-10	3																	
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20-30	15																	
30-40	9																	
40-50	5																	
50-60	2																	
14	Describe any three types of diagrammatic representation data.	CO3	R	6														
15	Explain various measures of central tendency.	CO4	U	6														
16	Find the standard deviation for the following data 5, 15, 17, 11, 2, 8, 10, 6	CO4	U	6														
17	For the data given below : 8, 10, 6, 5, 12, 7, 4, 3, 15, 5, 3, 5, 4, 20 Find a) median b)mode c) range d) quartile deviation	CO4	U	6														
18	Explain three conceptual approaches to the probability	CO5	R	6														

PART - C

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

		COs	Knowledge Level(KL)	Marks
19	Define dispersion. Explain various measures of dispersion with suitable example.	CO4	U	10
20	a) Define Addition theorem for two and three events. b) Explain conditional probability. c) Define Baye's theorem. d) Explain multiplication theorem of probability.	CO5	R	10

1 x 10 = 10 Marks