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1B1N240110 (Pages : 2) Reg. No:.....

Name: .....

FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE

First Semester B.Sc Computer Science Degree Examination, November 2024

CSC1CJ101 - Fundamentals of Computers and Computations Thinking

(FYUGP 2024 Admission)

Time: 2 hours Max. Marks : 70

Course Outcome Mapping Scheme

1	2	3	4	5	6	7	8	9	10
CO1	CO1	CO1	CO5	CO4	CO2	CO1	CO4	CO6	CO4
11	12	13	14	15	16	17	18	19	20
CO1	CO2	CO5	CO2	CO6		CO1	CO2	CO4	CO1

Section A
[Answer All. Each question carries 3 marks] (Ceiling 24 Marks)

1. Briefly explain the advantages of using Computers in the real world.
2. Describe the development history of computers, specifying any three pioneers and their contributions.
3. Convert the following numbers from decimal to binary: (a) 567,(b) 85.025
4. Differentiate Inductive Reasoning and Deductive Reasoning. Give examples.
5. Discuss the different types of operating systems and their characteristics.
6. Differentiate between active and passive electronic components. Provide examples.
7. Differentiate Compiler and interpreter.
8. Define and explain the need for Device Drivers in Computers.
9. Explain the role of Algorithms in problem-solving.
10. Explain the Booting Process.

Section B
[Answer All. Each question carries 6 marks] (Ceiling 36 Marks)

11. Describe the generations of computers, highlighting the key features of each generation.
12. What is a Motherboard? Write about any four components on a Motherboard.
13. Discuss Computational Thinking and its 4 core aspects.
14. Differentiate between RAM and ROM. Explain the different types of RAM.
15. Draw a flowchart to find the bigger of two numbers.

16. Develop an algorithm to read the price of three items and print "Good", if the total bill amount is less than 1000 and print "Bad" otherwise.
17. Explain the Von Neumann architecture in detail.
18. Define ROM. Write about the different types of ROM.

Section C

[Answer any One. Each question carries 10 marks] (1 x 1 = 10 Marks)

19. Explain the functions of an operating system in detail.
20. a) Convert the Decimal 265 to Binary, Octal, and Hexadecimal showing each step.(6)
    b) Convert the binary number 11001010 to Gray Code (2)
    c) Convert the Gray Code 100111101 to binary (2)

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1B1N240112 (Pages : 1) Reg. No:.....

Name: .....

FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE

First Semester BA/B.Sc/BCOM/BBA Degree Examination, November 2024

CSC1FM105 - Data Analysis and Visualisation through Spread Sheets

(FYUGP 2024 Admission)

Time: 1.5 hours Max. Marks : 50

Course Outcome Mapping Scheme

1	2	3	4	5	6	7	8	9	10
CO1	CO3	CO2	CO2	CO3	CO4	CO4	CO5	CO1	CO1
11	**12**	**13**	**14**	**15**	**16**	**17**			
CO1	CO2	CO3	CO4	CO5	CO1	CO4			

PART – A
All questions can be attended.
Each question carries Two mark.
Ceiling -16 Marks

1. List any four features of Excel.
2. Explain the syntax of CEIL, FLOOR functions.
3. What do you mean by Data Cleansing.
4. Explain the procedure to export data from Excel to another format.
5. What is pivot table?
6. Explain the use of watch window.
7. Write the procedure to show and hide chart legends.
8. Explain the use of Form control.
9. What are formulas in Excel?
10. Write the use of Conditional Formatting.

PART – B
All questions can be attended.
Each question carries six marks.
Ceiling -24 Marks

11. Explain various cell formatting operations in Excel.
12. Write notes on any four data cleansing tasks in Excel .
13. Why HLOOKUP and VLOOKUP are known as powerful data analysis tools in Excel .
14. Explain in detail about "what - if analysis" in Excel.
15. What are Dashboards? Explain the procedure to create a dashboard in Excel.

PART - C

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

16. With the help of a diagram, explain various parts of Excel screen.

17. What is the importance of charts in Excel? List and explain various types of charts in Excel.

1 x 10 = 10 Marks

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1B1N240111 (Pages : 2) Reg. No:.....

Name: .....

FAROOK COLLEGE (AUTONOMOUS), KOZHIKODE

First Semester B.Sc Degree Examination, November 2024

CSC1MN102 - Data Science and AI (Python Programming)

(FYUGP 2024 Admission)

Time: 2 hours Max. Marks : 70

Course Outcome Mapping Scheme

1	2	3	4	5	6	7	8	9	10
CO1	CO1	CO2	CO2	CO2	CO1	CO1	CO2	CO1	CO4
11	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**
CO6	CO4	CO1	CO5	CO2	CO1	CO1	CO5	CO4	CO1

Section A
All questions can be answered. Each question carries Three marks
Ceiling -24 Marks

1. Use correct python syntax to create a *complex* number.
2. Define *recursion*.
3. What do you understand by the term *Keywords*?
4. Write a *program* for finding the average of *5* numbers.
5. Give any four *features* of Python?
6. Give two examples each for valid and invalid *variables*?
7. Write Syntax of '*for*' loop.
8. Use the *len*() function for finding the length of a string.
9. What is a *variable*? Explain.
10. List basic *data structures* available in python.

Section B
All questions can be answered. Each question carries *six* marks
Ceiling -36 Marks

11. Develop a program for finding the *factorial* of a number.
12. "*Numbers are immutable*" Analyze the statement.
13. Judge about *scope* and *lifetime* of a variable.
14. Demonstrate the use of user-defined *functions*.
15. Develop a program to check whether the given number is *prime* or not?
16. Differentiate between *tuple* and *list*.
17. Apply the function for converting an *integer* number to *string*.
18. List and describe any 4 mathematical functions.

Section C

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

19. Develop a program to create a *list* of fruits and display each one of it. Use ***for / while*** loop.

20. Explain various Data Structures in python. **(1 x 10 = 10 Marks)**