Name:
Roll No:

Rajagiri College of Social Sciences (Autonomous)
Continuous Assessment Examination - 1
September 2022
I MCA

Code: MCA101 **Total Time : 90 minutes**
Sub: Probability, Statistics and Computational Mathematics **Total Weightage: 16**

Level	Blooms Taxonomy Levels of Learning
L1	Remembering
L2	Understanding
L3	Applying
L4	Analyzing
L5	Evaluating
L6	Creating

SECTION A

Each question has a weightage of 4

Sl.no	Question	CO Mapped	Bloom's Taxonomy level
1	In a certain college, 4% of the boys and 1% of girls are taller than 1.8m. Further, 60% of the students are girls. If a student is selected at random and is found to be taller than 1.8m, what is the probability that the student is a girl ?	MCA101.1	L3
2	From the pack of 52 cards, one card is lost. From the remaining cards of a pack, two cards are drawn and both are found to be diamond cards. What is the probability that the lost card is a diamond?		
	OR		
3	Write a note on A) Conditional probability b) Bayesion classifier.		

P.T.O

SECTION B

Each question has a weightage of 4

4	A tea set has 4 sets of cups and saucers. Two of these sets are of one colour and the other two sets are of different colours (A total of 3 colours). If the cups are placed randomly on saucers, what is the probability that no cup is on a saucer of same colour ?	MCA101.2	L3
5	Two dice are thrown together. Let A be the event 'getting 6 on the first die' and B be the event 'getting 2 on the second die'. Are the events A and B independent?		
	OR		
6	In a certain college, 25% of students are failed in Math and 15% fails in Chemistry. and 10% failed in both Math and Chemistry. If a student is selected at random. (i) If he failed in chemistry then what is the probability that- he failed in Mathematics. (ii) If he failed in Mathematics then what is the probability that- he failed in Chemistry.		

Name: SWEABA
Roll No: 59

RCSS
RAJAGIRI COLLEGE OF SOCIAL SCIENCES

Rajagiri College of Social Sciences (Autonomous)
Continuous Assessment Examination - 1
September 2022
I MCA

Code: MCA102
Sub: Data Structure Using C

Total Time : 90 minutes
Total Weightage : 16

Level	Blooms Taxonomy Levels of Learning
L1	Remembering
L2	Understanding
L3	Applying
L4	Analyzing
L5	Evaluating
L6	Creating

SECTION A

Each question has a weightage of 4

Sl.no	Question	CO Mapped	Bloom's Taxonomy level
1	Apply Stack for converting an arithmetic expression to postfix form	MCA102.1	L3
2	Describe the structure used for representing polynomials. Write a program to add two polynomials.		
	OR		
3	Write a program to reverse a string using STACK		

SECTION B

Each question has a weightage of 4

4	Explain dynamic memory allocation functions with an example	MCA102.2	L2
5	Implement a circular queue using an array.		
	OR		
6	Write a program to insert, search, delete, and display the elements in a linked list		

Name: Sweeba
Roll No: 59

RCSS

Rajagiri College of Social Sciences (Autonomous)
Continuous Assessment Examination - 1
September 2022
I MCA

Code: MCA103
Sub: DBMS

Total Time : 90 minutes
Total Weightage : 16

Level	Blooms Taxonomy Levels of Learning
L1	Remembering
L2	Understanding
L3	Applying
L4	Analyzing
L5	Evaluating
L6	Creating

SECTION A

Each question has a weightage of 4

Sl.no	Question	CO Mapped	Bloom's Taxonomy level
1	Draw the ER Diagram for the following scenario and reduce it to tables. A company purchases products and sells them to its customers. Each time a sale occurs, an invoice is created listing the customer name, and a list of purchase product descriptions, the supplier name for the products, and the price of each product. The product number identifies each product and will appear again if another customer purchases the same product. Each supplier can supply many products which we can sell, but each product has only one supplier.	CSDA103.1	L2
2	Describe the different types of database users. Elucidate the role of a DBA?		
	OR		
3	Distinguish strong entity set with weak entity set? Draw an ER diagram to illustrate weak entity set and explain how its reduced to a table?		

P.T.O

SECTION B

Each question has a weightage of 4

4	Consider the Sailors-Boats-Reserves DB d. sailors (sid, sname, rating, age) boat (bid, bname, color) reserves (sid, bid, date) Write each of the following queries in SQL. 1. Find all sailors with a rating above 7. 2. Find the names of sailors who have reserved a Red boat. 3. Find the ages of sailors whose name begins and ends with B and has at least two characters. 4. List the name of boats having more than 3 reservations 5. Find the name and age of the oldest sailor.	CSDA103.2	L3
5	Discuss with relevant examples, the following: 1. GROUP BY - HAVING clause 2. EXIST clause 3. IN operator		
	OR		
6	*Explain and Illustrate the significance of TCL Commands.*		

Name: SUFABA
Roll No: 59

RCSS
RAJAGIRI COLLEGE OF SOCIAL SCIENCES

Rajagiri College of Social Sciences (Autonomous)
Continuous Assessment Examination - 1
September 2022
I MCA

Code: MCA104 **Total Time: 90 minutes**
Sub: Data Communications and Computer Networks **Total Weightage: 16**

Level	Blooms Taxonomy Levels of Learning
L1	Remembering
L2	Understanding
L3	Applying
L4	Analyzing
L5	Evaluating
L6	Creating

SECTION A

Each question has a weightage of 4

Sl.no	Question	CO Mapped	Bloom's Taxonomy level
1	Discuss digital transmission in computer networks in detail. - ***Embedded Question***	MCA 104.1	L2
2	Explain the logical connections between layers of the TCP/IP protocol suite.		
	OR		
3	Write short notes on the following: a. SMTP b. UDP c. IPv4 d. DHCP		

SECTION B

Each question has a weightage of 4

4	Compare and contrast between Twisted-Pair and Fiber-Optic cables based on their performance. - ***Embedded Question***	MCA 104.2	L2
5	Explain the different classes of unguided media.		
	OR		
6	Describe the goals of multiplexing.		

Name: Sweaba
Roll No: 59

RCSS

Rajagiri College of Social Sciences (Autonomous)
Continuous Assessment Examination - 1
September 2022
I MCA

Code: MCA105 **Total Time: 90 minutes**
Sub: Operating System with Linux as Case Study
Total Weightage : 16

Level	Blooms Taxonomy Levels of Learning
L1	Remembering
L2	Understanding
L3	Applying
L4	Analyzing
L5	Evaluating
L6	Creating

SECTION A

Each question has a weightage of 4

Sl.no	Question	CO Mapped	Bloom's Taxonomy level
1	How SSTF, SCAN and C-LOOK scheduling algorithms perform during disk I/O requests with respect to access time and bandwidth? – Embedded Question	CSDA304(2).1	L2
2	Choosing the right file allocation method is a major concern for an efficient disk space utilization: Explain?		
	OR		
3	Write short notes on: a. Kernel b. i-node c. Boot Block d. fork() e. Linux commands: man and cat		

P.T.O

SECTION B

Each question has a weightage of 4

4	Analyze and differentiate how a page of memory needs to be allocated while applying "Additional-Reference-Bits" and "Second Chance" in LRU Approximation Page Replacement algorithm. – Embedded Question	CSDA304(2).2	L3
5	5. a. Find the physical address space, number of frames and f value for the following: 1. physical address = 14 bits, frame size = 2 bits 2. physical address = 16 bits, frame size = 2 bits 5. b. Find the logical address space, number of pages and f value for the following: 1. logical address = 14 bits, page size = 2 bits 2. logical address = 16 bits, page size = 2 bits		
	OR		
6	Write short notes on: a. Dynamic linking b. MMU c. Compaction d. Commands: df and du e. Linux command: chmod		