Shri Vile Parle Kelavani Mandal's

DWARKADAS J. SANGHVI COLLEGE OF ENGINEERING

(Autonomous College Affiliated to the University of Mumbai)

NAAC Accredited with "A" Grade (CGPA : 3.18)

Department of Computer Engineering

Academic Year 2022-2023

Continuous Assessment: Term Test – I

T.E. (Semester VI)

DIV-B

Course: Information Security (DCSC-604)

Duration: 1 hour

BF
LC
DC

Maximum Marks: 25

Instructions:

1. Draw neat labelled diagrams wherever necessary.
2. Read the questions carefully. Question 1 is compulsory except for the internal options. Solve any two question out of three (Q2 to Q3)

Q.No.	Question	Max. Marks
1.	Discuss various key option and their security in double and triple DES. Explain key generation process in single DES. OR Discuss in details how single DES algorithm is susceptible to various attacks.	[05]
2.	Convert following input text into cipher form using Mix Column technique. **Input Text** 7b 7c 76 ca **Cont. Matrix** 02 03 01 02	[10]
3.	Discuss the key expansion process of AES 128 algorithm. Generate word w4,w5 from given word w0,w1,w2 w0={34,75,56,88} w1={ 24,75,A2, B3} w3={31,E2,12,00} Rconst: { 01,00,00,00} S Box (w3) 31 E2 12 00 C7 98 C9 63	[10]
4	Analysis various attacks on RSA algorithm, convert input text ABCD into cipher text using RSA algorithm. { Consider index position value of A B C D = 01 02 03 04 } {consider p=11 ,q=13}	[10]

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Department of Computer Engineering
Academic Year 2021-2022
Term Test – I

Course Name: Advance Algorithm
Class: TE (A & B)
Date: 19/04/2021
Maximum Marks: 25

Course Code: DJ19CEC602
Semester: VI
Time: 8.30 am – 9.30 am

Set- II

Instructions:

1. **Question Number 1 is Compulsory.**
2. Attempt any **THREE** out of remaining questions.
3. Please write your Question Paper Set Number on the Answersheet.

Q. No	Questions	Max. Marks
1.	Explain Small-o, Small-omega and Tilde with simple examples.	04
2.	Perform Amortized Analysis of Stack using Potential Method.	07
3.	Perform the Complexity Analysis of Randomized Quick Sort in detail. (Give detailed derivation)	07
4.	Define Black Depth of Red-Black Tree. Show Red-Black Tree that results from successive insertion of keys: 8, 2.2, -16, 10, 18, 6, 20, 24	07
5.	Explain AND/OR tree complexity analysis of Tic-Tac-Toe.	07

ALL THE BEST!

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Department of Computer Engineering
Academic Year 2021-2022
Term Test – I

Course Name: Business Analytics | **Course Code: DJ19CEEC6013**
Class: TE A, B | **Sem:** VI
Date: 18/04/2022 | **Time:** 08:30 am – 9:30 am
Maximum Marks: 25

Instructions:
(1) Assume suitable data wherever required, but justify it.
(2) All questions are compulsory.
(3) Figure to the right indicates full marks.

Q. No	Questions	Bloom's Level	CO mapped	Max. Marks
1.	Given SASHELP.CARS Alphabetic List of Variables and Attributes # Variable Type Len Format Label 9 Cylinders Num 8 5 DriveTrain Char 5 8 EngineSize Num 8 Engine Size (L) 10 Horsepower Num 8 7 Invoice Num 8 DOLLAR8 15 Length Num 8 Length (IN) 11 MPG_City Num 8 MPG (City) 12 MPG_Highway Num 8 MPG (Highway) 6 MSRP Num 8 DOLLAR8 1 Make Char 13 2 Model Char 40 4 Origin Char 6 3 Type Char 8 13 Weight Num 8 Weight (LBS) 14 Wheelbase Num 8 Wheelbase (IN) Sort Information Sortedby Make Type Validated YES Character Set ANSI Assume suitable values for input and state it explicitly. A) Predict the output of the following code : (5 M) proc freq data=sashelp.cars; tables Origin Type DriveTrain; run; B) Convert the code above to 2-way Frequency and 3-way Frequency. (3 M)	Knowledge, Apply	CO1	08
2.	Predict the output of the following code : data cars_new; set sashelp.cars; where Origin ne "USA"; Profit = MSRP-Invoice; Source = "Non-US Cars"; format Profit dollar10.; keep Make Model MSRP Invoice Profit Source; run; Assume suitable values for input and state it explicitly.	Knowledge, Apply	CO1	05
3.	With a use case clearly differentiate and explain the following: (3 Marks each) 1) Business Analytics 2) Descriptive Analytics 3) Predictive Analytics 4) Prescriptive Analytics	Knowledge, Apply	CO2	12

*** All the Best ***

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Department of Computer Engineering
Academic Year 2021-2022
Term Test - I

Course Name: Human Machine Interaction **Course Code: DJ19CEEC6023**

Class: TE B **Semester:** VI

Date: 18-04-2022 **Time**: 7:00 - 8:00 AM

Maximum Marks: 25

Instructions:

1. Please solve questions in order with clear and dark ink pens
2. Draw figures wherever required
3. Write SAPID on each page top right corner and Sign with Name at the end of each page

Q. No	Questions	Bloom's Level	CO mapped	Max. Marks
1	Differentiate between direct & indirect manipulation.	Analyse	4	05
2	Compare GUI versus Web Design	Analyse	4	05
3	What do you mean by persona? Mention steps in constructing persona.	Understand	2	05
4	Explain Psychopathology of Everyday Things.	Comprehension	1, 2	05
5	Explain seven stages of action.	Synthesis	1	05