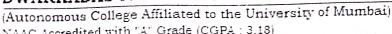


Shri Vile Parle Kelavani Mandal's

# DWARKADAS J. SANGHVI COLLEGE OF ENGINEERING





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 00 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
2-3	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.	
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 ABCD = 01 02 03 04 } {consider p=11,q=13}	[10]

10111010

12488

PTe mod n

10119 1010

1000 11011



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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

( = C1 + 80

### **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.	
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!

200



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

Course Name: Business Analytics

Class: TE A, B

Date: 18/04/2022 Maximum Marks: 25 Course Code: DJ19CEEC6013

Sem: VI

Time: 08:30 am - 9:30 am

#### Instructions:

(1) Assume suitable data wherever required, but justify it.

(2) All questions are compulsory.

Q. No	Figure to the right indicates full marks.  Questions	Bloom's	CO	Max.
		Level	mapped	Marks
1.	Given SASHELP.CARS		CO1	08
	Alphabetic List of Variables and Attributes  Variable Type Len Format Label  Lymphans Nut if  Lymphans Char is		· *	1.4
	1			
	11 MISS GDV Norm 8 MEG (Gdv)			
	2 Monter 1, ther 10 4 Origin Char 6 3 Twise Untar 8 13 Veright Nath 8 Veright (LDS)			
	14 Vinentaise Num 8 (Vinentaiser (N))  Sort Information Sortedby Nake Type	Knowledge,		
	Validated YES Character Set ANSI	Apply		
	Assume suitable values for input and state it explicitly.			
	A) Predict the output of the following code: (5 M) proc freq data=sashelp.cars;	Section 1		
	tables Origin Type DriveTrain;			
	run;			
		□ 1 1 1 1 1 2 1 2 1 1 2 1 1 1 1 1 1 1 1		
	B) Convert the code above to 2-way Frequency and 3-way Frequency. (3 M)			
2./	Predict the output of the following code:		CO1	05
	data cars_new;			
	set sashelp.cars;			
	where Origin ne "USA"; Profit = MSRP-Invoice;	Knowledge,		
	Source = "Non-US Cars";	Apply		
	format Profit dollar10.; keep Make Model MSRP Invoice Profit Source;	Alphiy		
		25		
	run;			
	Assume suitable values for input and state it explicitly.		000	10
3.	With a use case clearly differentiate and explain the following: (3 Marks		CO2	12
	each)	Vnowledge		
	1) Business Analytics	Knowledge,		
	2) Descriptive Analytics	Apply		
	<ul><li>3) Predictive Analytics</li><li>4) Prescriptive Analytics</li></ul>			
,	4) Prescriptive Analytics			

profit.

profit.

profit.

profit.

profit.

profit.

Invoice.

\*\* All the Best \*\*\*



## SHRI VILEPARLE KELAVANI MANDAL'S DWARKADAS J. SANGHVI COLLEGE OF ENGINEERING



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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 mapp ed	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
15	Explain seven stages of action.	Synthesis	1	05