



**ANJUMAN-I-ISLAM'S
KALSEKAR TECHNICAL CAMPUS, NEW PANVEL**

Approved by : All India Council for Technical Education, Council of Architecture, Pharmacy Council of India New Delhi,
Recognised by : Directorate of Technical Education, Govt. of Maharashtra, Affiliated to : University of Mumbai.

- SCHOOL OF ENGINEERING & TECHNOLOGY
- SCHOOL OF PHARMACY
- SCHOOL OF ARCHITECTURE

DEPARTMENT OF COMPUTER ENGINEERING

REV:00	CLASS TEST - 02	EXM-04 B
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CLASS:- TE	SEM:- V
COURSE:- TCS	DATE:- 24/10/2018
DURATION:- 60 Min.	MARKS:- 20

CLASS TEST- 02

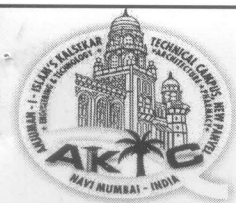
Q.01 Attempt any Five: (10 Marks)		Marks	CO
a)	set of all strings that contain atleast one occurrence of "00" over $\Sigma = \{0,1\}$	02	CO3
b)	Odd palindrome over $\Sigma = \{a,b,c\}$	02	CO3
c)	$L = \{ a^i b^j c^k \text{ where } j=k+i ; i,k \geq 1 \}$	02	CO3
d)	set of all strings that contain alternate sequence of 0's and 1's over $\Sigma = \{0,1\}$	02	CO3
e)	$L = \{ a^n b^n ; n \geq 1 \}$	02	CO3
f)	$L = \{ a^m b^n c^n ; m,n \geq 1 \}$	02	CO3
Q.02 Attempt any One: (05 Marks)			
a)	Explain Rice's Theorem	05	CO6
b)	Design PDA for recognizing the following language : $L = \{ w c w^R \text{ where } w \in \{a,b\}^* \text{ and } w^R = \text{Reverse of } w \}$	05	CO4
Q.03 Attempt any One: (05 Marks)			
a)	Design Turing Machine to check for well formedness of parenthesis.	05	CO5
b)	Write a short note on : Chomsky Hierarchy	05	CO3

CRITERION : 2.2.2, 3.2.2.

FILE NO : P25, P31

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DEPARTMENT OF COMPUTER ENGINEERING

CLASS:- TE

SEM:- V

SUBJECT:- MMS

DATE:- 22/08/2018

DURATION:- 60 mins.

MARKS:- 20

UNIT TEST 02

Q.01 Attempt any 5: (10 Marks)

	Marks	CO
a) Differentiate between containers and codecs in video file format	2	CO2
b) What is Interlacing effects in Analog video?	2	CO2
c) List and explain in short types of Video Signals?	2	CO2
d) Justify the Statement <i>"Usual bit stream encoding is the linear pulse-code modulation is used in Audio file format."</i> (Name of Format is Expected)	2	CO3, CO4
e) Define the two types of CODEC.	2	CO2
f) Define STEGNOGRAPHY?	2	CO6

Q.02 Attempt any 1: (05 Marks)

a) Explain H.261 encoder with labeled diagram.	5	CO3
b) Draw WAVE file Format and explain in short?	5	CO3

Q.03 Attempt any 1: (05 Marks)

a) Short Note on: RTSP Protocol	5	CO5
b) Explain in detail Tunnels for IP Multicast in Mbone.	5	CO5



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REV:00

QUESTION PAPER CLASS TEST 01/ 02

EXM-04 A

CLASS:- TE CO	SEM:- V
COURSE:- AA	DATE:- 22/ 10 / 2018
DURATION:- 60 Min.	MARKS:- 20

CLASS TEST 02

Q.01 Attempt any Five: (10 Marks)		Marks	CO
a)	What is flow network? Give its example.	02	CO2
b)	Explain "flow" with example.	02	CO2
c)	Explain residual network with example.	02	CO 2
d)	What are admissible edges & admissible network?	02	CO 5
e)	Prove that admissible network is acyclic.	02	CO 5
f)	What do you mean by "preflow"? Explain.	02	CO 5
Q.02 Attempt any One: (06 Marks)			
a)	Prove that $ f \uparrow f' = f + f' $, where $f \uparrow f'$ is augmentation.	06	CO 5
b)	Prove that $f(S, T) = f $, where $f(S, T)$ is net flow across cut (S, T).	06	CO 5
Q.03 Attempt any One: (04 Marks)			
a)	Write the algorithm to determine whether two line segments intersect.	04	CO 3
b)	Explain "sweeping" with diagram.	04	CO 3

CRITERION : 2.2.2, 3.2.2.

FILE NO : P25, P31

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REV:00	QUESTION PAPER CLASS TEST 02	EXM-04 B
CLASS:- TE	SEM:- V	
COURSE:- DBMS	DATE:- 22/10/2018	
DURATION:- 60 mins.	MARKS:- 20	
Q.01 Attempt any 5: (10 Marks)	Marks	CO
Consider the employee database where the primary keys are underlined. Give an expression in SQL for the following queries: employee(<u>employee-name</u> , street, city) works(<u>employee-name</u> , company-name, salary) company(<u>company-name</u> , city) manages(<u>employee-name</u> , manager-name)		
a) Find all employees in the database who earn more than each employee of Small Bank Corporation	2	CO4
b) Find all employees in the database who do not work for First Bank Corporation.	2	CO4
c) Find all the employees who earn more than the average salary of all employees of their company.	2	CO4
d) Give all employees of 'IBM' a 40% raise.	2	CO4
e) List all the employees who live in the same cities as their managers	2	CO4
f) Modify database so that 'Swapnil' now lives in 'Navi Mumbai'	2	CO4
Q.02 Attempt any 1: (05 Marks)		
a) What is transaction? Discuss ACID properties of transaction?	5	CO6
b) Explain Shadow Page recovery?	5	CO6
Q.03 Attempt any 1: (05 Marks)		
a) Explain conflict serializability and view serializability with examples?	5	CO6
b) Companies manufacture ranges of products which are purchased by customers. The relational schema for this operation is given as :- Company(Company-code, Company-name, Director#, Director-name, {product-name, cost, {cust#, customer-name, address}}) where {} represents a repeating groups. i) State the definitions of first, second and third normal forms. ii) Normalize the above relation to third normal form.	5	CO5



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EXM-04B

CLASS:- T.E. COMPUTER

SEM:- Vth

SUBJECT/COURSE:- MICROPROCESSOR (MP)

DATE:- 23/10/2018

DURATION:- 1Hr.

Max. MARKS:- 20

Unit Test - 02

Q- 01 Attempt any 5 : (10 Marks)

Marks

CO

a)	Explain the steps to interface RAM memory with 8086 μ processor.	2	CO4
b)	List out Integer & floating point pipeline stages in Pentium processor.	2	CO6
c)	Draw cache memory organization supported by Pentium processor.	2	CO6
d)	Draw segment discriptor in 80386 DX, write meaning of it's bits.	2	CO4
e)	Draw & explain flag register of 80386 DX.	2	CO6
f)	Draw block diagram of 8255 PPI.	2	CO4

Q - 02 Attempt any 1 (05 Marks)

a)	Draw & explain any 2 operating modes of PIT - 8253/8254.	5	CO4
b)	Write short notes on – Branch prediction logic.	5	CO6

Q - 03 Attempt any 1 (05 Marks)

a)	Draw and explain PENTIUM processor. (any 4 blocks)	5	CO6
o)	Explain address translation mechanism in protected mode of 80386 DX processor.	5	CO6



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EXM-04 B

CLASS:- TE

SEM:- V

SUBJECT:- CN

DATE:- 24 / 10 / 2017

DURATION:- 60 mins.

MARKS:- 20

CLASS TEST 02

Q.01 Attempt any 5: (10 Marks)

Marks

CO

a) ARP and RARP

2

CO-4

b) Classes of IP Addresses (with range).

2

CO-4

c) Subnetting and Supernetting

2

CO-4

d) Byte Number, Sequence Number, Acknowledgment Number

2

CO-5

e) Hamming distance

2

CO-5

f) TCP and UDP

2

CO-5

Q.02 Attempt any 1: (05 Marks)

a) Explain Classless Inter Domain Routing (CIDR).

5

CO-4

b) Why there is a need for congestion control? What are the different mechanisms? Explain them.

5

CO-4

Q.03 Attempt any 1: (05 Marks)

a) Explain how TCP handles error control and flow control.

5

CO-5

b) What are different types of routing ? Explain Distance Vector routing.

5

CO-4



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SEM:- V

SUBJECT:- CN

DATE:- 24 / 10 / 2017

DURATION:- 60 mins.

MARKS:- 20

CLASS TEST 02

Q.01 Attempt any 5: (10 Marks)

Marks

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a) ARP and RARP

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CO-4

c) Subnetting and Supernetting

2

CO-4

d) Byte Number, Sequence Number, Acknowledgment Number

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CO-5

e) Hamming distance

2

CO-5

f) TCP and UDP

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CO-5

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CO-4