



P.O. SUKNA, SILIGURI, DIST. DARJEELING, PIN : 734 009 Tel. : (0353) 2778002 / 04, Fax : (0353) 2778003 e-mail : sittechno@rediffmail.com sitsiliguriwb@yahoo.com

Criteria 1.1.2 - The institution adheres to the academic calendar including for the conduct of CIE

List of sample documents

- 1. Institute Academic Calendar
- 2. Sample Course Description
- 3. Sample Notification of Internal Examination
- 4. Sample Moderated Question paper of Internal Examination
- 5. Sample Question paper of Internal Examination
- 6. Sample Assignment
- 7. Sample Quiz
- 8. Sample Rubrics used for Continuous Assessment
- 9. Sample Result Sheet

SILIGURI INSTITUTE OF TECHNOLOGY Academic/activity Calendar for the year 2021

ODD SEMESTER 2021:

Sl. No.	Event	Time / Duration		
	0	Continuing batch	New batch	
1.	Commencement of University registration process (online)	N.A.	25 th August, 2021	
2.	Admission activities to be completed by	N.A.	15 th September 2021	
3.	Commencement of Academic Program (AICTE courses)	31 st August, 2021	15 th September, 2021	
4.	Biswakarma Puja			
5.	Enrolment of students	$1^{st} - 10^{th}$ September,	$1^{\text{st}} - 7^{\text{th}} \text{October 2021}$	
6.	Student's formative feedback and submission of ATR (Department Level)	2021 $28^{\text{th}} - 30^{\text{th}}$ September,	$4^{th} - 5^{th}$ October, 2021	
7.	Submission of CA I	1st Ath October 2021	2000001, 2021	
8.	Gandhi Jayanti	1 -4 October, 2021	N.A.	
9.	Mahalaya	2 ^{its} Oc	tober, 2021	
10.	Durga Puja Vacation		ober, 2021	
11.	Laxmi Puja	12 th October, 2021 - 15 th October, 2021		
12.	Registration activities to be completed by	20 th October, 2021		
13.	Induction Program (as per MAKAUT guideline) for newly admitted B.Tech 1 st year	N.A.	Subject to notification directive from competent	
14.	Games & Sports: Basketball, Futsal, Volleyball	authorities.		
15.	1 st Internal Test	21^{st} October - 24 th October 2021		
16.	Submission of CA II & PCA I	2/*** October 2021 – 29 th October 2021		
17.	Odd Semester training (In case of any holidays, training may be extended)	3 rd November - 12 th November 2021		
18.	Kali Puja	4th Nove	mbor 2021	
19.	Bhatridwitya	6 th Nove	nber 2021	
20.	Chhat Puja	10 th Nove	mber 2021	
21.	World Science Day for Peace & Development	10 th Nove	ember 2021	
22.	Birthday Guru Nanak (For Sikhs only)	19 th Nove	ember 2021	
23.	Last date of submission of MAR (Phase I)	30 th Nove	ember 2021	
24.	Submission of CA III	1 st – 4 th December 2021		
25.	World Energy Conservation Day	14 th December 2021		
26.	2 nd Internal Test	20 th December 2021 – 22 nd December 2021		
27.	Christmas Day	25^{th} December 2021		
28.	Submission of CA IV & PCA II	2.5 December, 2021 2 nd - 5 th January 2022		
29.	Pre-examination activities / form fill-up	$6^{\text{th}} - 14^{\text{th}}$ January 2022		
30.	Student's course survey	$10^{\text{th}} - 15^{\text{th}}$ January, 2022		
31.	Practical Examinations, Sessionals, Viva-voce	15 th – 25 th January 2022		
32.	Theory Examinations	17 th – 29 th J	anuary, 2022	
33.	Last date of submission of MAR (Phase II)	31st Janu	amy 2022	

Forlasonded popporal. to Director, for Wind oppproval. Prodest (All Che) 09

Director

Siliguri Institute of Technology

SILIGURI INSTITUTE OF TECHNOLOGY Revised Academic/activity Calendar for the year 2022

EVEN SEMESTER 2022:

SI. No.	Event	Time / Duration ,
1.	Commencement of Academic Program	Feb 01, 2022
2.	Enrolment of students	Feb 01 – Feb 10, 2022
3.	Saraswati Puja	Feb 05, 2022
4.	Games & Sports: Chess, table tennis, carrom, badminton, volleyball, basketball	Feb 14 – Feb 19, 2022
5.	Even Semester training (In case of any holidays, training may be extended.)	2 nd & 3 rd Week of Feb, 2022
6.	Student's formative feedback and submission of ATR (Department Level)	Feb 22 – Feb 24, 2022
7.	National Science Day (Theme: # Integrated Approach in S&T for Sustainable Future)	Feb 28, 2022
8.	Submission of CA I	Mar 01 – Mar 04, 2022
9.	International Women's Day (Theme: #BreakTheBias)	Mar 08, 2022
10.	Mentor-Mentee Meeting – I	Mar 09, 2022
11.	Games & Sports: Athletics	Mar 11 – Mar 12, 2022
12.	Tech-Management Fest 2022	Mar 15 – Mar 16, 2022
13.	Doljatra	Mar 18, 2022
14.	Holi	Mar 19, 2022
15.	Basanta Utsav	3 rd Week of March
16.	1 st Internal Test	Mar 21 – Mar 25, 2022
17.	Submission of CA II & PCA I	Apr 01 – Apr 04, 2022
18.	Parent-Teacher Meeting	Apr 06 – Apr 11, 2022
19.	Birthday of Dr. B. R. Ambedkar	April 14, 2022
20.	Bengali New Year Day	April 15, 2022
21.	Last date of submission of MAR (Phase I)	Apr 30, 2022
22.	May Day	May 01, 2022
23.	Submission of CA III	May 01 – May 04, 2022
24.	Mentor-Mentee Meeting – II	May 06, 2022
25.	Ed-Ul-Fitr	May 03, 2022
26.	Rabindranath Tagore Birth Anniversary(Kobi Pronam)	May 9, 2022
27.	2 nd Internal Test	May 23 – May 27, 2022
28.	Submission of CA IV & PCA II	June 01 – June 04, 2022
29.	Student's feedback (Course Survey)	June 01 – June 04, 2022
30.	World Environment day (Theme: #Only One Earth)	June 05, 2022
31.	Pre-examination activities / form fill-up	June 05 – June 18, 2022
32.	Practical Examinations, Sessionals, Viva-voce	June 20 – June 30, 2022
33.	Theory Examinations	June 20 – June 30, 2022
34.	International Day of Yoga (Theme: #Yoga For Well-Being)	June 21, 2022
35.	Last date of submission of MAR (Phase II)	June 30, 2022
36.	Publication of Result (Final Semester)	July, 2022

Note :

- Regular Invited lectures/workshop will be conducted by the departments taking prior approval.
- Review Meeting by IQAC on last week of every month.







PAPER NAME : INTERNET TECHNOLOGY

PAPER CODE : PEC-IT701A

Course Description

Course Title/Code: Internet Technology/PEC-IT701A

Stream: IT, Year:- 4th, Semester:- 1st

Name of the Faculty: Debaditya Kundu

E-mail: debaditya.kundu@gmail.com

i) Course Objective:

Students will be able to demonstrate different concepts of computer network and solve various real life problems using web based programming languages.

ii) Course Outcomes:

After completion of this course the students are expected to be able to demonstrate following Knowledge, skills and attitudes

a) Students will be able to:

COs	Outcomes	Targets
PEC-IT701A.1	Summarize concepts of computer network, with various protocols. (B.T. Level 2)	60% marks
PEC-IT701A.2	Design simple web pages using different web tools. Like JavaScript, HTML, XML, CGI script and PERL. (B.T. Level 6)	60% marks
PEC-IT701A.3	Study different aspect of legal, ethical, security and privacy issues related to the use of Internet based computer systems. (B.T. Level 4)	60% marks
PEC-IT701A.4	Describe the importance of real time multimedia applications over IP and the concept of SEO. (B.T. Level 2)	60% marks

b) Once the student has successfully complete this course, he/she must be able to answer the following questions or perform/demonstrate the following:

Sl.	Question	BT Level
1.	Explain Chomp () function?	2
2.	Implement program in java script to validate name, age, email and password fields using regular expression. (BT – level 3)	3
3.	Explain Applet life cycle with suitable diagram. (BT - level 2)	2

2

4.	Describe why VoIP is better than traditional phone service? (BT - level 1)	1
5.	Resolve the broadcast address of the network 172.130.144.160, where the subnet mask is given as 255.255.255.224? (BT - level 4)	4
6.	Given message is $M(X) = x^5 + x^4 + x + 1$ and the generator is $G(X) = x^4 + x^3 + 1$. Compute CRC code. For the bit sequence 10011, construct the hamming code? (BT - level 6)	6

Internet Technology PEC-IT701A Contracts: 3L Credits- 3

UNIT - 1 (6L)

Introduction (1L): Overview, Network of Networks, Intranet, Extranet and Internet.

World Wide Web (1L):

Domain and Sub domain, Address Resolution, DNS, Telnet, FTP, HTTP.

Review of TCP/IP (1L):

Features, Segment, Three-Way Handshaking, Flow Control, Error Control, Congestion control, IP Datagram, IPv4 and IPv6.

IP Subnetting and addressing (1L):

Classful and Classless Addressing, Subnetting. NAT, IP masquerading, IP tables.

Internet Routing Protocol (1L):

Routing -Intra and Inter Domain Routing, Unicast and Multicast Routing, Broadcast.

Electronic Mail (1L):

POP3, SMTP.

UNIT - 2(9L):

HTML (3L):

Introduction, Editors, Elements, Attributes, Heading, Paragraph. Formatting, Link, Head, Table, List, Block, Layout, CSS. Form, Iframe, Colors, Colorname, Colorvalue.

Image Maps (1L):

Map, area, attributes of image area.

Extensible Markup Language (XML) (4L):

Introduction, Tree, Syntax, Elements, Attributes, Validation, Viewing. XHTML in brief.

CGI Scripts (1L):

Introduction, Environment Variable, GET and POST Methods.

UNIT - 3 (10L):

PERL (3L): Introduction, Variable, Condition, Loop, Array, Implementing data structure, Hash, String, Regular Expression, File handling, I/O handling.

JavaScript (4L):

Basics, Statements, comments, variable, comparison, condition, switch, loop, break. Object – string, array, Boolean, reg-ex. Function, Errors, Validation.

Cookies (1L):

Definition of cookies, Create and Store a cookie with example.

Java Applets (2L):

Container Class, Components, Applet Life Cycle, Update method; Parameter passing applet, Applications.

UNIT - 4 (4L):

Client-Server programming In Java (1L):

Java Socket, Java RMI.

Threats (1L):

Malicious code-viruses, Trojan horses, worms; eavesdropping, spoofing, modification, denial of service attacks.

Network security techniques (1L):

Password and Authentication; VPN, IP Security, security in electronic transaction, Secure Socket Layer (SSL), Secure Shell (SSH).

Firewall (1L):

Introduction, Packet filtering, Stateful, Application layer, Proxy.

UNIT - 5(5L):

Internet Telephony (1L): Introduction, VoIP.

Multimedia Applications (2L):

Multimedia over IP: RSVP, RTP, RTCP and RTSP. Streaming media, Codec and Plugins, IPTV.

Search Engine and Web Crawler (2L):

Definition, Meta data, Web Crawler, Indexing, Page rank, overview of SEO.

iii) Unit Layout:

Lecture Hours
5 hrs
8 hrs
8 hrs
4 hrs

UNIT – 5	5 hrs
Total	30 hrs

iv) Text Book & Reference Books:

1. Web Technology: A Developer's Perspective, N.P. Gopalan and J. Akilandeswari, PHI Learning, Delhi, 2013. (Chapters 1-5,7,8,9).

2. Internetworking Technologies, An Engineering Perspective, Rahul Banerjee, PHI Learning, Delhi, 2011. (Chapters 5,6,12)

v) Evaluation Scheme:

Evaluation Criteria	Marks
First & Second Internal Exam*	15
Assignments	10
Attendance	5
University Exam	70
Total	100

* Two internal examinations are conducted; based on those two tests, average of them are considered in a scale of 15.

University Grading System:

Grade	Marks
0	90% and above
Е	80 - 89.9%
А	70 – 79.9%
В	60 - 69.9%
С	50 - 59.9%
D	40 - 49.9%
F	Below 40%

6

NOTICE

FIRST INTERNAL EXAMINATION

As per the given instruction by MAKAUT, all the current semester students of **Computer Science** and Engineering are being informed that your "Internal Examination – I" will be held from 23/03/2022 to 25/03/2022 as per the given schedule. This examination is based on 30 marks exam. It will be conducted through offline mode.

Question Format: (30 Marks)

GROUP	NUMBER OF OUR				
A	5	MARKS	TOTAL		
C	2	1 5	5 10		
		15	15		

Internal Examination - I (Schedule)

DATE	TIME			
	TIME	SEM		
23 rd March, 2022	10.30 AM - 11.30AM	4 th	SUBJECT DISCRETE MATURE	CODE
		6 th	DATABASE MANAGE	PCC-CS 401
	12.00 PM - 1.00 PM 10.30 AM -	4 th	COMPUTER APCILITE	PCC- CS 601
		6 th	COMPUTER NETWORK	PCC-CS 402
		4^{th}	FORMAL LANGUAGE & AUTOMATA	PCC- CS 602
24 th March,		6 th	IMAGE PROCESSING	PCC-CS 403
2022	12.00 PM - 1.00 PM	4th	BIOLOGY	PEC-IT601 D
	2.00 PM	6^{th}	NUMERICAL METHODS	BSC 401
	3.00 PM	8 th	CRYPTOGRAPHY&NETWORK	OEC-IT601A
	10.30 AM - 11.30AM - 11.30AM - 12.00 PM - 1.00 PM - 8	4 th	DESIGN & ANALYSIS OF MIC	PEC-CS801B
5 th March,		6 th	DATA WAREHOUSING AND	PCC CS 404
2022		4th	ENVIRONMENTAL SCIENCE	PEC-IT602B
		8^{th}	CYBERLAW AND ETHLCC	MC-401
	3.00 PM	8 th	E-COMMERCE AND EDD	OEC-CS802A
				OEC-CS802A

Co-ordinator of Internal Examination Committee

(Department of Computer Science and Engineering)

153/22 V - 1

Do Subjec	SILIGURI INSTITUTE OF TECHNOLOGY Department of Electronic and Communication Engineering 1 st Internal Exam – 2022 (Even Semester) Semester : 4 th Subject : Design and Analysis of Algorithm Paper Code : ES CS 401				
Required	GROUP A :	MCQ	1X5 =5		
1. a) T(n) =C+T(n-1) i) O(n ²)	if n>1. Time complexit ii) $O(n^3)$ iii) $O(2^n)$ iv)	y of the relation i None of these	s:	(CO1)	
b) The Asymptot i) Tightly	ic notation omega(Ω) bound ii) Lower bound	denoted as: iii) Upper bound	iv) None of	(CO1) these	
c)T(n)=2T(n/2) + i) O(5. n ²	5n if n>1 . Time compl) ii)O(5. n ⁰) iii)O(5.k	exity of the relations of the relations of the relations of the relationship of the re	on is:)	(CO1)	
d)Time complexi i)O(n ²) i	ty of Binary search is: i) O(n) iii) O (log n) iv) O)(n/2)	(CO2)		
e)Time complexi i)O(n) ii	ty of Brute-Force Appro $O(n^n)$ iii) $O(2^n)$ iv) $O(2^n)$	each of ' n' bit inp (n^2)	ut length.	(CO2)	
GROUP B	: 4	nswer Any Two	Question	2x5 =10	
2. Write an algorithm fo	matrix chain multiplica	ation using Dynan	nic programn	ning(CO3)	

3.Write an algorithm for Merge sort using Divide and conquer Strategy. (CO2)

4. Write an algorithm for Quick sort using Divide and conquer Strategy. (CO2)

5. Find the Optimal solution using Dynamic programming having knapsack capacity 100 for the list of item and weight given bellow:

Item	Value Weight	
1	10	15
2	20	25
3	30	35
4	40	45
5	50	55

GROUP C :

Answer Any Two Question

2x7.5=15

6. Analyse the average and Best case Time complexity of Quick sort. A machinesrequired 100ms to sort 1000 record using merge sort. How much time required to sort 2000 records. (CO2)

7. Find the Optimal cost to multiply a list of matrix . The dimensions of the matrix given bellow :

P[3,2,1,4,2](CO2)

16mm

ther

8. Find the minimum distance and path for Travelling and Salesman Problem using Dynamic Programming . In the following figure The Salesman start from city "a" (CO3)



9. Analyse the time complexity of merge sort.

Siliguri Institute of Technology

Department of Electronics and Communication Engineering

1st Internal Exam - 2022(Even Semester)

semester: 8		Group: A and B	
Paper Code: OE-EC804C	OE-EC804C Paper Name: Organizational Behavior		tional Behavior
Full Marks: 30 Time: thour			
<i>.</i>	Group	о – А	
Multiple choice que	stions		
Aligned to CO1)	= Proveds	i more option	<pre>/1*E-E}</pre>
. The organizational beh	avior consists of		(1 3-3)
a)organization theory	(b) proping the density	and (a) and and an area	and (d) All of the above
The fundamental of ora	(0)organization developm	ient (c)personal resour	rces (u)All of the above
a bindividual difference	anizational benavior is		10.18.04
which violat utilerences	(b)a whole person	(c)caused behaviour	(d)All of these
which is the element of	bureaucracy?		
(a)Rules and regulations (b)Hierarchy of authority		(c) Departmentation	(d)All of these
Components of organiz	ation theory are		
a)goals	(b)work	(c)adaptation	(d)All of these
Which of the following	is not the modern theory of	forganization behavior	r?
a) Fusion process theory	(b)Piological theory (c) P	i organization ocharion	n: (d) Comparative theory
, i usion process meory	(U)Biological theory (c) Be	enaviour approach theo	ny (u) comparative meory

Group-B

Attempt any two questions.

(Aligned to CO2)

6. What do you mean by perceptual selectivity?(5)

7. Analyse the relevance of Alderfers ERG theory of motivation.(5)

8. Group Decison Making has its own merits and demerits. Elucidate.(5)

Attempt any one question

(Aligned to CO2)

Showled Stouted Iron no

Shello be Shello 1,2 from 1,2

(15*1=15)

(5*2=10)

9. Suppose that you are a manager and find yourself with one group of subordinates who apparently seek higher order need satisfactions at work and another group seek lower order need satisfaction at work. What would you do to motivate them?(15)

Group-C

10. You have been hired as a Senior HR manager in a leading MNC based in Bangalore. What types of applied motivational strategies would you adopt in order to engage and retain your employees ? Suggest a road map to your organization's Vice-President HR. (15)

Siliguri Institute of Technology

Department of Electronics & Communication Engineering 1st Internal Exam - 2022 (Even Semester) March - 2022

Semester: 6th	Group: B
Paper Code: EC 601	Paper Name: Computer Network
Full Marks: 30	Time: 1hour 30 minutes

Answer all questions:

Q1.(Aligned to CO1)

options should be given

- a. What is the number of layers in the OSI model? i) 2 ii) 4 iii) 7 iv)9
- b. Identify the layer which provides service to the user
- i) Session layer ii) Application Layer iii) Presentation Layer iv) Physical Layer
- c. What does a set of rules define?
- i) SMTP ii) FTP iii) IMAP iv) Protocol
- d. Identify the protocol primarily used for browsing data
- i) FTP ii) TCP iii) TFTP iv) HTTP
- e. Identify the incorrect network topology
- i) bus ii) star iii) p2p iv) mesh

Q2.(Aligned to CO1)

2 questions in this each with proport from of 5 options). sat diagram Compare mesh and star topology with neat diagram. OR

needs

What do you mean by line coding? For a signal represented by 01001110 draw patterns using the schemes Polar one, 10 mores Gr. 3. wilt NRZ and Bipolar NRZ. question should

teons

Q3. (Aligned to CO2)

A (7,4) Hamming code 1000110 was received by a receiver. Detect and correct the error if possible.

Given the data word 1010011010 and the divisor 10111. Show the generation of the code word at the sender side and checking of the same at the receiver side(assuming no error).

Q4.(Aligned to CO2)

Explain the Go-Back_N ARQ protocol with neat diagram. OR Explain slotted ALOHA protocol with neat diagram.

10

10

5X1=5

Paper code SILIGURI INSTITUTE OF TECHNOLOGY BACHELOR IN TECHNOLOGY(ECE) CA4 INTERNAL EXAM -> 2nd **BIOLOGY FOR ENGINEERS** MAXIMUM MARKS: 25 MAXIMUM TIME: 60 MINS Group: A Answer any five of the following: 1. [5X1 =5] a)Amino acids are linked together by:(CO 2) a) peptide bonds b) hydrogen bonds c) glycosidic linkages d) hydrophobic interactions b) Which of the following amino acids has to be supplemented in the diet?(CO2) (a) phenylalanine (b) cysteine (c) glutamine (d) asparagine c) This is an example of derived lipids (CO2) (a) Terpenes (b) Steroids (c) Carotenoids (d) All of the above d)This enzyme catalyzes the transfer of a phosphoryl group from ATP to glucose(CO3) (a) Hexokinase (b) Phosphoglucose isomerase (c) Aldolase (d) Phosphoglucose mutase e)FAD is reduced in which of the reaction of the Kreb's cycle?(CO3) (a) Isocitrate to oxaloacetate (b) Succinyl CoA to Succinate (c) Fumarate to malate (d) Succinate to fumarate f)Non-cyclic photophosphorylation results in the production of-(CO3) NADH ь NADPH ATP с đ ATP and NADPH g) C₄ pathway takes place in(CO3) (a) Xylem (b) Bundle sheath cells (c) Phloem (d) Mesophyll cells Group B 2. Answer any four of the following: [5X4 =20] 11 With a suitable diagram represent the TCA Cycle? (CO3) 2) Write about the difference between light reaction and dark reaction of photosynthesis? (CO3) 31 Write about the Classification system in Amino acids?(CO2) 4) Write a short note on ETC (Electron transport

chain)? (CO3)5) With a suitable diagram represent the Glycosis

2.

- cycle? (CO3)
- Write a short note on structure of t-RNA with suitable diagram(CO2)

Siliguri Institute of Technology **Department of Electronics & Communication Engineering** 2ndInternal Exam – 2022(Even Semester)

March - 2022

Mar	y
Semester: 6th	Group: B
Paper Code: EC 602	Paper Name: Computer Network
Full Marks: 25	Time: 1hour
Q1. Answer any five (CO2, CO3) $5X1=5 \longrightarrow S_1$ a. Flow control is the responsibility of?	pecify co for individual question

a. Flow control is the responsibility of?

i)Physical layer ii) Data link layer iii) transport layer iv)application layer

b. Identify the layer which provides service to the user

i) Session layer ii) Application Layer iii) Presentation Layer iv) Physical Layer

c. In selective repeat sliding window protocol, the window size is

- i) one ii) two iii) greater than oneiv) none of these
- d. Identify the protocol primarily used for browsing data

i) FTP ii) TCP iii) TFTP iv) HTTP

e. Hamming code is used for

- i) error detection ii) error correction iii) error encapsulation iv) both (i) and (ii)
- f. port addressing is the function of

i) Physicallayer ii) Network layer iii) Data link Layer iv) transport layer

g. Which of the following is a valid host for network 192.168.10.32/28

i) 192.168.10.39 ii) 192.168.10.47 iii) 192.168.10.14 iv) 192.168.10.54

Answer any 4

(4X5=20)

Q2.Explain the CSMA/CA protocol with flowchart (CO2)

- Q3. Explain the operation of CDMA technology (CO2)
- Q4. Explain link state routing.(CO3)
- Q5. State the difference between bit rate and baud rate. State Nyquist theorem. (CO1)

Q6. Draw the IPV4 datagram header format and explain each field. (CO3)

for the

Siliguri Institute of Technology Department of Electronics and Communication Engineering B. Tech. 3rd Year 1st Semester 1st Internal Examination, 2022

Paper Name: Control & Instrumentation Full Marks: 30 Paper Code: EC601 Times: 1h 00m

Question1. (EC601.1)

5X1=5

1. **ANSWER ANY 5 QUESTIONS**

a. The inverse Laplace Transform of 1/(s+3) is

a. e^{-3t} c. $-3\rho^{-3t}$ d. ρ^{3t} b. $3e^{-3t}$

- ii. In an open loop system the control action is depends ona. input signal b. system variables c. Size of the system d. none of above.
- iii. The system response can be tested better with... a. sinusoidal input signal b. unit impulse input signal c. ramp input signal d. exponentially decaying signal.
- iv. The position and velocity errors of a type-2 system are
 - a. constant, infinity, b. infinity, constant c. zero, zero, d. zero, constant
- v. Mass, in force voltage analogy, is analogous to
 - a. Inductance b. capacitance c. resistance d. none of the above
- vi. The characteristic equation of a system is $S^2 + 3S + 2 = 0$ The system is. ...a. critically damped, b. under damped, constant c. zero, zero, d. zero, constant

Question 2. (EC601.1)

(5X2=10)

- 1. Calculate Transfer function, characteristic equation, poles and zeros from the given differential equation $\frac{d^2y(t)}{dt^2} + \frac{dy(t)}{dt} + 100y(t) = \frac{dx(t)}{dt} + 15x(t)$
- 2. Calculate the overall transfer function using Block Diagram Reduction Technique or Signal flow graph method from the given figure



3. Determine the transfer function of the network shown in the figure.



4. Draw the analogous electrical network of the given system use F-V analogy.





1. The open loop transfer function of a unity negative feedback system is given by $G(s) = \frac{4}{s(s+5)}$ (a) Calculate transient response of a unit step input. (b) Rise time & Peak time. (EC601.1)

2. Calculate Static, velocity and acceleration Error coefficient and steady state error from given transfer function $G(s) = \frac{(s+1)}{s(s+2)}$ H(s)=1. (EC601.1)

3. Construct Routh array table and determine the stability of the system represented by the characteristics equation $S^5+S^4+2S^3+2S^2+3S+5=0$. Comment on the location of the roots of characteristic equation. (EC601.2)

Siliguri Institute of Technology **Department of Electronics and Communication Engineering** 2nd Internal Exam – 2022(Even Semester)

May	-2022
-----	-------

Semester: 4 th	Group: A and B
Paper Code: EC 401	Paper Name: Analog Communication
Full Marks: 25	Time: 1hour

Q1. Answer any five questions

i.	Which of the	e following an	alog modulation scheme rea	quires the minimun	n transmitted power and
	minimum ch	annel bandwi	dth		[CO2]
	a)	VSB	b) DSB-SC	c) SSB	d) AM
ii.	In a super he	eterodyne rece	iver, the IF is 455 kHz. If it	is tuned to 1200 kl	Hz, the image frequency
	will be				[CO4]
	a)	1655 kHz	b) 2110 kHz	c) 745 kHz	d) 910 kHz
iii.	The selectiv	ity of most rec	eivers is determined largely	y by	[CO4]
	a	Sensitivity)	b) characteristics of	TIF section c)	antenna direction
	d)) all of the abo	ve		
iv.	FM signal is	better than A	M signal because		[CO3]
	a)]	Less immune t	to noise b) Less adjacen	t channel interferen	ce c) Amplitude
		limiters are us	ed to avoid amplitude varia	tions d).	All of the above
v.	A 100MHz	carrier is frequ	ency modulated by 10 KHz	wave. For a freque	ency deviation of 50
	KHz, calcul	ate the modula	tion index of the FM signal		[CO3]
	a)	100	b) 50	c) 70	d) 90
vi.	What is the	maximum moo	dulating frequency allowed	in commercial FM	broadcastings? [CO3]
	a)	40 KHz	b) 75 KHz	c) 15 KH	z d) 120 KHz
vii.	What is the	maximum freq	juency deviation allowed in	commercial FM bi	coadcasting? [CO3]
	a)	100 KHz	b) 75 KHz	c) 15 KHz	d) 120 KHz

Q2. Answer any four of the following

- i. What is Super Heterodyne receiver? What is IF and what is the IF value used for AM receive? What do you mean by image frequency? [CO4]
- With proper justification discuss the conversion of FM from PM. ii.
- iii. Derive the expression for single tone FM and identify the parameters of FM (modulation index, frequency deviation). [CO3]
- Write down Carson's rule. An angle modulated signal with carrier frequency $\omega_c = 2\pi \times$ iv. 10^5 is described by the following equation [CO3]

$$\varphi_{FM}(t) = 10 \cos(\omega_c t + 5 \sin 3000t + 10 \sin 2000\pi t)$$

Find out: a) power of the modulated signal b) frequency deviation c) Deviation ratio β d) bandwidth of the modulated signal.

- The maximum deviation allowed in an FM broadcast system is 75 KHz. If the v. modulating signal is a single tone sinusoid of 10KHz. Find the BW of the FM signal. What will be the change in BW, if the modulating frequency is doubled? [CO3] [CO3]
- vi. Explain FM generation using Armstrong method.

1*5=5

4*5=20

SILIGURI INSTITUTE OF TECHNOLOGY

DEPARTMENT OF ECE

2nd Internal Examination (CA4) – May 2022

PAPER NAME: CMOS VLSI DESIGN

FULL MARKS: 25

TIME: 1Hour

PAPER CODE: PE-EC603C

Gr. A: ANSWER ANY FIV	E MCQ TYPE QUESTIONS	(5 X 1 = 5)
(1) The ON resistance of a MOSFET		[CO3]
i) Linearly increases with Vgs	ii) Linearly decreases with Vgs	
iii) Exponentially increases with Vgs	iv) Non-linearly decreases with Vgs	
(2) The body effect occur due to potential difference	between	[CO3]
i) Source and Body	ii) Body and drain	
iii) Gate and Body	iv) None	
(3) Minimum number of transistors required to d	lesign an X-OR gate is	[CO3]
i) Six	ii) Eight	
iii) Twelve	iv) Ten	
(4) Which one effect does not cause any deviation	on of a current mirror circuit from the ideal situation	? [CO4]
i) Channel Length Modulation	ii) Threshold offset between two transistors	
iii) Imperfect geometry matching	iv) DIBL effect	
(5) A MOS device can be used as a Resistor in		
i) Linear region	ii) Saturation region	
iii) Sub-threshold condition	iv) None	
(6) In VHDL, which architectural style represent	ts the lowest level of abstraction?	[CO5]
i) Behavioural Modelling	ii) Structural Modelling	
iii) Dataflow Modelling	iv) Mixed Modelling.	
(7) In VHDL sequential statements are defined in		[CO5]
i) Architecture	ii) Process	
iii) Package	iv) None	

Group B: ANSWER ANY FOUR $(4 \times 5 = 20)$

Q1. Realize a 2:1 Mux using CMOS Transmission Gate.	[CO3]
Q2. Explain the operation of CMOS Inverter with the help of VTC curve.	[CO3]
Q3. Explain the operation of a Current Mirror and highlight the causes of deviation from Ideal situation.	[CO4]
Q4. Realize Resistor using Switched Capacitor.	[CO4]
Q5. Objective and Goals of Partitioning, Floor Planning, Placement and Routing	[CO5]
Q6. In VHDL what are the different modeling styles of the architecture body of an entity?	[CO5]
Discuss them in brief.	

ECE-5th Sem 2nd Internal Exam for CA4 (2021)

Duration 1 hour

*Required

1. Email *

2. Name *

3. Roll No. *

Questions

Answer all the questions

4. In a multiphase chopper, the different choppers operate in [CO2] * 1 point

Mark only one oval.

- series and all simultaneously
- parallel and one at a time
- parallel and simultaneously
- either (b) or (c)

5. Transformer utilization factor is a measure of the merit of a rectifier circuit. 1 point It is the ratio of [CO2] *

Mark only one oval.

- AC input power to the transformer volt amp rating required by secondary
- AC input power to the transformer volt amp rating required by primary
- DC output power to the transformer volt amp rating required by secondary
- DC output power to the transformer volt amp rating required by primary
- 6. UJT has negative resistance region [CO1] *

Mark only one oval.

- a)between peak and valley points
- b)before the peak point
- c)after the valley point
-) d) both a) and b)
- 7. The typical dv/dt rating of thyristor is [CO1] *

Mark only one oval.

- 0.1 microamp. to 1 microamp.
- 0.5 microamp. to 5 microamp.
- 20 microamp. to 500 microamp.
- 1000 microamp.
- 8. Snubber circuit is used for protection of thyristor [CO1] * 1 point

Mark only one oval.

- _____ di/dt
- ____ dv/dt
- over current
- ____ gate

1 point

1 point

1 point

1 point

9. The MOSFET combines the areas of _____ & ____ [CO1] *

Mark only one oval.

semiconductor & TTL

- mos technology & CMOS technology
- field effect & MOS technology
- none of the mentioned
- 10. When latch-up occurs in an IGBT [CO1] *

Mark only one oval.

📃 lg is no longer controllable

lc is no longer controllable

the device turns off

- Ic increases to a very high value
- 11. In discontinuous conduction of single phase semiconverter and extinction 1 point angle $\beta < \pi$, each thyristor conducts for [CO2] *

Mark only one oval.



12. In a single phase semiconverter, if output voltage has peak and average 2 points values of 325 V and 133 V respectively, then the firing angle is [CO2] *

Mark only one oval.

40 degree
140 degree
50 degree
130 degree

13. In the below shown semi-converter circuit T1 & T2 are fired at an angle a, 2 points the output voltage is zero when [CO2] *

ۍ z			R
₩vs			Zieo Zieo
	Z pz	D1	

Mark only one oval.

π<ωt<a
 0<ωt<a+π
 π<ωt<π+a
 π<ωt<2π

14. A semi-converter circuit gives the following voltage waveform on R load. Find 2 points the expression for the average output current with Vs = Vm sinωt and firing angle a [CO2] *



Mark only one oval.



15. SMPS stands for [CO4] *

Mark only one oval.

Single Mode Power Supply

Store Mode Power Supply

- Start Mode Power Supply
- Switched Mode Power Supply
- 16. SMPS is used for [CO4] *

Mark only one oval.

obtaining controlled ac power supply

obtaining controlled dc power supply

- storage of dc power
- switch from one source to another

1 point

- ECE-5th Sem 2nd Internal Exam for CA4 (2021) 17. SMPS are based on the _____ principle. [CO4] * 1 point Mark only one oval. Phase control Integral control Chopper MOSFET 18. Choose the incorrect statement. [CO4] * 1 point Mark only one oval. SMPS is less sensitive to input voltage variations
 - SMPS is smaller as compared to rectifiers
 - SMPS has low input ripple
 - SMPS is a source of radio interference
- 19. A thyristor can be bought from the forward conduction mode to forward 1 point blocking mode by [CO1] *

Mark only one oval.

- the dv/dt triggering method
- applying a negative gate signal
- applying a positive gate signal
- applying a reverse voltage across anode-cathode terminals

20. The value of anode current required to maintain the conduction of an SCR 1 point even though the gate signal is removed is called as the [CO1] *

Mark only one oval.

holding current

- Latching Current
- switching current
- peak anode current
- 21. From the two transistor (T1 & T2) analogy of SCR, the total anode current ^{2 points} of SCR is ______ in the equivalent circuit. [CO1] *

Mark only one oval.

- the sum of both the base currents
- _____ the sum of both the collector current
- the sum of base current of T1 & collector current of T2
- the sum of base current of T2 & collector current of T1
- 22. In VSI (voltage source inverters) [CO2] *

Mark only one oval.

- both voltage and current depend on the load impedance
- only voltage depends on the load impedance
- only current depends on the load impedance
- none of the mentioned

2 points

23. The harmonic factor of nth harmonic is given by [CO2] *

Mark only one oval.



24. Which of the following mentioned control strategy/strategies would 2 points require a feedback loop? [CO2] *

Mark only one oval.

🔵 pwm

- constant frequency system
- current limit control
- none of the mentioned
- 25. In case of a constant frequency system, Ton = (1/4)T. If the chopping 2 points frequency 2 kHz, find the value of Toff.[CO2] *

Mark only one oval.

(1/8) ms

- (3/8) ms
- (1/8) μs
- 🔵 (3/8) µs

This content is neither created nor endorsed by Google.

Google Forms

Siliguri Institute of Technology

Department of Electronics & Communication Engineering 1st Internal Exam – 2021 (Odd Sem)

Paper Code: EC-704B Full Marks: 30 Paper Name: Embedded Systems Time: 1hour

GROUP-A (Covered CO1)

	(Multiple Choice Type Questions	- answer any 5 questions)	5x1=5
1. Choose the	e correct alternatives of the following quest	ions -	
I.	A Microcontroller normally has which o	f the following devices on-ch	ip?
	a) RAM	b) ROM	
	c) I/O Ports	d) all of the above.	
II.	If Manchester Coding is used in serial co	ommunication then bit rate i	s
	a) Half BAUD rate	b) Twice BAUD rat	e
	c) Thrice Baud rate	d) None of these	
III.	The RISC Processors normally have a _	number of general pu	rpose registers.
	a) Undefined	b) small	
	c) Large	d) none of these	
IV.	A CAN device using CAN controller reco	eives or sends a bit at any ins	stance by
	operating at the maximum rate of	_•	
	a) 256 Kbps	b) 2.4 Mbps	
	c) 1 Mbps	d) none of the above	2
v.	Data Transfer using Serial Peripheral Ir	nterface (SPI) is a	wire operation.
	a) 1	b) 2	
	c) 3	d) None of these	
VI.	Data Transfer using I ² C bus is a	wire operation.	
	a) 1	b) 2	
	c) 3	d) None of these	
	GROUP-B (Cove	red CO1)	
	(Short Answer type	Questions)	2x5=10

2. (a) What is the difference between an Embedded System & General purpose computing system.

(b) Briefly describe the hardware architecture of a generalised 'Embedded System'.

GROUP-C (Covered CO2)

(Long Answer	type Question)	1x15=15
(Long Answer	type Question)	1712-12

3. Write short note on:

a) Serial Peripheral Interface (SPI) Port	b) Asynchronous Serial UART	
c) Synchronous Serial Output		5+5+5

OR

Describe the operation of an alphanumeric LCD interfacing using parallel port communication.

Siliguri Institute of Technology Department of ____ECE____ 1st Internal Exam – 2021 (Odd Semester) February– 2021

Semester: 5 th	Group: A & B
Paper Code: EC 501	Paper Name: Electromagnetic Waves
Full Marks: 30	Time: 1hour
Answer all questions:	

Q1.(Aligned to CO1)

- i) $\overline{\nabla} \times \overline{E} = 0$ means the electric field **E** is produced by the
 - a) Static Charge b) Moving Charge C) E.M induction d) Varying magnetic field
- ii) For Conservative field which of the following equations holds good?

a)
$$\oint \vec{B}.ds = 0$$
 b) $\iint \vec{E}.dl = 0$ c) $\iint \vec{H}.dl = 0$ d) $\iint \vec{D}.ds =$

iii) Point Charges $Q_1=1nC$ and $Q_2=2nC$ are at a distance apart. Which of the following statements are incorrect a) The force on Q_1 is repulsive

0

- b) The force on Q_2 is the same in magnitude as that on Q_1
- c) As the distance between them decreases, the force on Q_1 increases linearly
- d) The force on Q_2 is along the line joining them
- iv) Displacement current can flow through
 - a) Capacitor b) Inductor. C) resistor d) None of these
- v) Divergence of which quantity will be zero a) **E** b) **D** c) **H** d) **B**

Q2.(Aligned to CO2)

i) What is loss tangent? Derive the expression for intrinsic impedance when the wave is propagating through lossy dielectric.

OR

ii) Prove that the electromagnetic power passing through free space is given by the expression $E \times H W / m^2$

Q3. (Aligned to CO3)

i) Derive the expression for: **a**) input impedance of a lossless transmission line. **b**) input impedance of a $\frac{\lambda}{4}$ transmission line.

OR

ii) a) Derive the voltage and current equation of two wire transmission line. obtain the expression for Z_0 , α and β of a distortion less transmission line.

10

10

5X2=10

Siliguri Institute of Technology

Department of Electronics & Communication Engineering

1st INTERNAL EXAMINATION, ODD SEM 2021

SUBJECT: Mathematics IIIB (BS-M301)

SEMESTER:	3 rd	MARKS:	30		TIME: 1hr.
1. Choose	the correct alter	natives of the follo	owing:		5x1=5
i. A single that it w	e letter is selecte vill be a vowel is	d at random from	the word 'STAT	ISTICS'. The pr [BS]	obability M 301 CO1]
a.	$\frac{1}{2}$ b. $\frac{7}{10}$	C. $\frac{3}{10}$	d. $\frac{2}{5}$		
ii. If $P(A)$	$=\frac{1}{3}$, $P(B)=\frac{1}{4}$, $P(B)=\frac{1}{4}$	$P(A \cup B) = \frac{1}{2}$, then	P(B/A) is	[BS]	M 301 CO1]
a. 🤇	3/4	b. 4/3	c. 1/4	d. 1/3	
iii. The pro [BSM 3	bability <i>P(a < X</i> 01 CO2]	$X \leq b$), where $F(x)$	is the distribution	on function, is c	lefined as
a	F(b) - F(a)	b. $F(b) + F(a)$	c. $F(a) - F(b)$) d. $F(a)F$	(<i>b</i>)
iv. If X and	l Y are independ	ent random varial	ples, then	[BS]	M 301 CO2]
a	E(XY) = E(X) +	E(Y)	b. $E(XY) = $	E(X) - E(Y)	
с.	E(XY) = E(X)E((Y)	$\mathrm{d.}E(XY)=$	E(X)/E(Y)	
v. The arit	hmetic mean of	2, 4, 6, , 2 <i>n</i> is		[BS]	M 301 CO3]
a. 7	n + 1	b. <i>n</i> (<i>n</i> + 1)	c. (<i>n</i> + 1)/2	d. <i>n</i> (<i>n</i>	+ 1)/2
2. Answer	any <u>two</u> of the	following:			5×2=10
i. i	Three machines number of items item is selected a the item was pro	<i>X</i> , <i>Y</i> , <i>Z</i> produce rest of a factory. Of that random and is f oduced by machin	spectively 60%, 3 his output 2%, 3% ound defective. 1 e Z.	0% and 10% of 6 and 4% are de Find the probab [BSN	the total fective. An bility that 1 301 CO1]

In a town it has been known from census report that 40% of the total ii. population is matriculate. 8 persons are selected at random. Find the probability that (i) exactly two of them are matriculate, (ii) at least two of them are matriculate. [BSM 301 CO2]



iii. A random variable *X* has a density function f(x) given by

$$f(x) = e^{-x}, \quad x \ge 0$$

= 0, elsewhere.

Show that Tchebycheff's inequality gives $P(|X - 1| \ge 2) \le \frac{1}{4}$ and show that actual probability is e^{-3} . [BSM 301 CO2]

15×1=15 (8+7)

3. Answer any **one** of the following:

i. (a) Out of two regression lines given by x + 2y = 5 and 2x + 3y = 8 which one is the regression line of x on y? Find also the values of mean of x and y, correlation coefficient and σ_y given $\sigma_x = 12$. [BSM 301 C03]

(b) By least square method fit a second degree parabola $y = a + bx + cx^2$ to the following bivariate data [BSM 301 CO3]

x	-1	0	1	2	3	4
У	4	2	6	16	32	54

ii. (a) The weight of a student in a college is normally distributed with $\mu = 40 \text{ kg}$ and $\sigma = 5 \text{ kg}$. Find the percentage of the students that have weight i) greater than 40 kg ii) greater than 50 kg iii) between 38 kg and 52 kg. Given that $\Phi(2) = 0.9772$, $\Phi(0.4) = 0.6554$, $\Phi(2.4) = 0.9918$ where $\Phi(x) = P(Z \le x)$. [BSM 301 CO2]

(b) Show that

$$f(x) = x, \quad 0 \le x < 1$$
$$= k - x, \quad 1 \le x \le 2$$
$$= 0, \quad \text{elsewhere.}$$

is a pdf of a random variable *X* for a suitable value of *k* which you have to determine. Then find the distribution function of the random variable *X*. Calculate the probability that the random variable lie between 1/2 and 3/2. **[BSM 301 CO2]**

Department: ECE Paper Code: BSM 301 Question vs. CO mapping:

Course Outcome	Question Number	Marks allotted	
CO1	Q. 1. (i), (ii)	1, 1	
	Q. 2 (i)	5	
	Q. 1. (iii), (iv)	1, 1	
CO2	Q. 2. (ii), (iii)	5, 5	
	Q. 3. (ii)	15	
<u> </u>	Q. 1. (v)	1	
03	Q. 3. (i)	15	

All questions are mandatory

IMPORTANT: All must write the assignment in A4 size paper in their own handwriting and also mention your name and roll number. Scan the answer sheets and then upload in Google classroom within 17.02.2022, Thursday.

MB101

1. (a) What is 'Market failure'? State the major causes of Market Failure.

(b) Write short note on Returns to Scale & Relationship between AC and MC in short run.

2. Demand curve of a monopolist is p=20-q and the cost function is

 $C = q^2 + 8q + 2$.

Determine the equilibrium price and quantity.

3. (a) Consider the production function of a firm is Q = LK and per unit costs of labour and capital are Rs 30 & Rs 10 respectively. If the firm wants to produce 300 units of output, what should be the minimum cost?

(b) Consider the following total cost function of a firm

$$= 200 + 25Q - 2.8Q^2 + 0.12Q^3$$

Determine the AC, AFC and MC functions. Find the value of Q at which MC = AVC

MB102

- 1. Differentiate between type A & B personality.
- 2. What are the stages of group development?

TC :

3. What are the Characteristics of ideal org. structure?

MB103

1. Discuss the importance of Business Communication in Management studies Or

Discuss the meaning of Business Communication and its nature and scope

2. Discuss the role of Meta communication in professional life Or

Discuss the role of KINESICS in professional life

3. XYZ corporate, Prafulla Chandra Sarkar Street, Kolkata 700001 is interested to recruit

candidates in the post of Business executives who have qualified MBA with finance /HR /

Marketing with effective communication skills ,leadership skills ,sound computer knowledge and acquainted with the knowledge of multimedia apply with their resume and cover letter to "The HR.XYZ corporate ,Prafulla Chandra Sarkar Street ,Kolkata 700001.

MB104

- 1. What are the essentials for trade mark under the Trade Marks act 1999?
- 2. Explain the contents of Memorandum of association and article of association.
- 3. What is the difference between Memorandum of association and Article of association?

MB105

- 1. What is Business Ethics? What role does it play in organizational effectiveness? Give examples.
- 2. Explain how has Indian society changed with industrialization? Discuss is pros and cons
- 3. Define Ethics and Values. State the role of ethics in achieving Corporate Excellence.

MB 106

	J1	J2	J3	J4	J5
M1	9	11	15	10	11
M2	12	9	10	10	9
M3	11	11	14	11	7
M4	14	8	12	7	8

1. Find the Optimal Assignment schedule of following machine & job allocation problem

2. Find the Dual of the following LPP:

Maximize $Z = 4x_1 + x_2 + 7x_3$ Subject to Constraints: $x_1 + 7x_2 - 3x_3 \le 4$; $5x_1 - x_2 + x_3 \ge 12$;

$$x_1 + x_2 + x_3 = 10$$

Where all the
$$x_1, x_2, x_3 \ge 0$$

3. Apply the Principal of Dominance to solve the following game whose pay-offs are given below:-

$$\begin{pmatrix} 4 & 7 & 1 \\ 3 & 6 & -4 \\ -2 & -1 & 2 \end{pmatrix}$$

4. Find the Initial Basic Feasible Solution by VAM of the following Transportation Problem. (CO3) (6)

	W1	W2	W3	W4	W4	Supply
F1	55	30	40	50	50	40
F2	35	30	100	45	60	20
F3	40	60	95	35	30	40
Demand	25	10	20	30	15	

5. The following table gives the ages and blood pressure of 10 women

Age(X)	56	42	36	47	49	42	60	72	63	55
Blood Pressure(Y)	147	125	118	128	145	140	155	160	149	150

Determine

(a) Regression line of Y on X

(b) Regression line of X on Y

(c) Correlation coefficient between X and Y

(d) Estimate the blood pressure of a women whose age is 45 years

Quiz: Digital & Social Media Marketing (Module I: MM302) Continuous Assessment 3 MBA (New) 3rd Semester (Marketing Specialization)

Name:

Score:

Put a tick ($\sqrt{}$) to the appropriate options given below for each question (Attempt any 10):-

1. Which of the following would be leveraging both social network and traditional marketing?

- a. Handing out print advertisements with a coupon for a store
- b. A print advertisement in a magazine which drives people to a website where there is a free trial offer
- c. Posting an advertisement on a message board
- d. Hosting a video ad on YouTube not otherwise seen elsewhere
- 2. Social networks are organized primarily around ______. a. brands b. people c. discussions d. interests
- 3. Social networks have an enormous information sharing capacity. As such, they are a great distribution channel for

a. customer feedback b. viral content c. exclusive coupons d. marketing messages

- 4. Which social network is considered the most popular for business to business marketing? a. Facebook b. Orkut c. Ryze d. LinkedIn
- 5. One advantage a non-profit has when opening a private social network is.
 - a. its tax exempt status makes the start up cost of a private social network more affordable.
 - b. its supporters tend to spend more time using social networks.
 - c. that it has an immediate user base of people interested in the cause.
 - d. its supporters have a higher tolerance for marketing messages.
- 6. Larger social networking sites
 - a. will force niche social networks out of business.
 - b. set social media trends.
 - c. are expected to see declining growth rates.
 - d. are a better fit for most nonprofit organizations.
- 7. What methods of social network marketing should a company always use?
 - a. Blogging only
 - b. Twitter, Blogs, Facebook
 - c. YouTube
 - d. Depends on the company, their product, their audience
- 8. What is the term adopted for updates by Twitter users? | Social Media Marketing mcqs a. Tweets b. Twoots c. Twinks d. Posts
- 9. What is "social media optimization"?
 - a. Creating content which easily creates publicity via social networks
 - b. Writing clear content
 - c. Creating short content which is easily indexed
 - d. Hiring people to create content for social networks
- 10. Which of the following is valuable in increasing a page rank?
 - a. Paying for placement
 - b. Static content
 - c. Quantity of links from other highly ranked pages to your site
 - d. No contact information

Rubric to evaluate Answer script

Short Answer type Questions										
Elements	4	3	2	1	0					
Content	Answers are comprehensive, accurate and complete.	Answers are accurate and complete	Answers are not comprehensive or completely stated	Answers are partial or incomplete	Did not answer question					
Use of terms	answer included all the terms from the lesson that applied to the question asked. All terms are fully defined and used in the proper context.	answer included several terms from the lesson, demonstrating adequate understanding of the material.	Only few term from the lesson is used in the answer.	No terms from the lesson are used.	Did not answer question					
Grammar	Punctuation, grammar, usage, and spelling are effectively used throughout.	Minor errors in punctuation, grammar, usage, and spelling are evident,.	Occasional errors in punctuation, grammar, usage, and spelling are evident.	Contains significant errors in punctuation, grammar, usage, and spelling.	Did not answer question					

Long Answer type Questions											
Elements	4	3	2	1	0						
Completeness	response precisely answer each part of the question	response almost answer each part of the question	response misses answer for some part of the question	Answers are partial or incomplete	Did not answer question						
Knowledge	response shows excellent understanding of the lesson content by correctly defining key definitions, terms and summarizing concepts.	response shows very good understanding of the lesson content by correctly defining key definitions, terms and concepts.	response shows good understanding of the lesson content.	response shows need of understanding of the lesson content.	Did not answer question						
Grammar	Punctuation, grammar, usage, and spelling are effectively used throughout.	Minor errors in punctuation, grammar, usage, and spelling are evident,.	Occasional errors in punctuation, grammar, usage, and spelling are evident.	Contains significant errors in punctuation, grammar, usage, and spelling.	Did not answer question						

Numerical type Questions											
Elements	4	3	2	1	0						
Understanding	Complete understanding of the problem-identifies all elements of the problem and gives correct answer.	Basic understanding of the problem-identifies most elements of the problem and may or may not give the correct answer.	Limited understanding of the problem-identifies a few elements of the problem and may give the incorrect answer.	No understanding of the problem	Did not answer question						
Computation	All computation is complete & correct	Computation is generally correct with minor flaws	Computation is incomplete	Computation is incorrect	Did not answer question						

INTERNAL EXAMINATION RESULT INFROMATION TECHNOLOGY , 4th sem AY:2021-2022

PAPER NAME		DISCRETE MATHEMATIC S	COMPUTER ARCHITECTU RE	FOORMAL LANGUAGE & AUTOMATA THEORY	BIOLOGY	DESIGN & ANALYSIS OF ALGORITHM	ENVIRONME NTAL SCIENCES	
SL	ROLL	NAME	PCC-CS 401	PCC-CS 402	PCC-CS 403	BSC 401	PCC CS 404	MC-401
1	11900220001	SIRSHENDU GHOSH	28	17	14	16	18	28
2	11900220002	RISHIKA SHARMA	28	28	22	22	22	29
3	11900220003	PRASHANT JHA	22	27	19	22	20	13
4	11900220008	SHUBHAM DIVYANSHU	23	26	16	19	19	24
5	11900220009	HARSH SHARMA	14	25	15	17	20	18
6	11900220010	HARSH KUMAR JHA	26	28	13	12	20	15
7	11900220011	BISHAL DAS	29	27	16	17	22	25
8	11900220012	DIPESH DAS	29	29	23	22	25	25
9	11900220013	PIYA ROY	27	26	20	18	24	24
10	11900220014	TRISHA DUTTA	23	14	13	19	23	22
11	11900220015	RUPANTAR CHAKRABORTY	21	29	15	19	17	15
12	11900220017	AYUSH	26	20	13	12	22	17
13	11900220018	AKASH KUMAR	23	25	10	7	17	12
14	11900220019	ATUL KRISHNA GUPTA	23	19	18	16	18	21
15	11900220020	RAJEN GUPTA	17	24	16	14	23	20
16	11900220021	PRIYATOSH NANDI	24	29	19	22	22	23
17	11900220022	PRATHAM RAI	22	4	9	22	18	17
18	11900220023	SOUPTIK ACHARYA	23	8	9	15	20	15
19	11900220024	SUSANTA DEY	26	25	23	21	24	25
20	11900220025	PRIYAJIT CHOUDHURY	22	12	10	16	22	22
21	11900220026	ABINASH CHHETRI	18	26	17	18	25	27
22	11900220027	PIYUSH RANJAN	29	24	9	18	25	16
23	11900220028	RAHUL GORAI	25	30	14	24	25	26
24	11900220029	SAYANTANI CHAKRABORTY	19	14	15	18	22	24
25	11900220030	SANDEEP BHOWMIK	23	26	19	9	20	26
26	11900220031	ANKUSH DHAR	30	30	18	20	20	19
27	11900220032	MOHD. KAUNAIN AKHTAR	25	28	18	19	23	21
28	11900220033	TAMOSA MONDAL	29	27	19	23	25	26
29	11900220034	SOUMILI ROOJ	26	30	12	26	22	27
30	11900220035	SUBHADIP PAUL	30	28	17	21	20	27
31	11900220036	ANSHIKA SAHAI	23	27	20	17	20	25
32	11900220037	ROHAN BARICK	21	25	21	20	24	19
33	11900220038	MUSTAFIJUR RAHAMAN	22	13	13	20	21	22
34	11900220039	ANIRBAN MAZUMDER	28	28	17	20	20	20