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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 Question paper of Internal Examination
- 4. Sample Notification of 1st Internal Examination
- 5. Sample Notification of 2nd Internal Examination
- 6. Sample Assignment
- 7. Sample Quiz
- 8. Sample Result Sheet

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Principal Siliguri Institute of Technology

SILIGURI INSTITUTE OF TECHNOLOGY Academic/activity Calendar for the year 2020 - 2021

ODD SEMESTER

il. No.	Event	Time / Duration	
	C	Continuing batch	New batch
1.	commencement of Academic Program (AICTE courses)	18.08.2020	16.00.2020
2.	Enrolment of students	1010012020	10.09.2020
	Odd Semester training	27.11.2020	20.02.2021
3.	(In case of any holidays, training may be extended.)	02.11.2020 to 12.11.2020	19.02.2021 - 23.02.2021
4.	Submission of CA 1	21.01.2021 -	
5.	1 st Internal Test	28.01.2021	
	- Internal rest	19.01.2021 - 25.01.2021	
6.	Submission of CA II	08.02.2021 - 13.02.2021	
7.	Submission of CA III & PCA1	22.02.2021 -	24.02.2021 -
8.	2 nd Internal Test	23.02.2021	26.02.2021
9.	Submission of CA IV	02.03.2021 -	05.03.2021
10.	Submission of PCA2	02.03.2021 -	05.03.2021
11.	Pre-examination activities / 6	24.03.21 -	27.03.21
12.	Student's course current	27.02.2	2021
2000	Practical Energy	24.03.21 -	27.03.21
13.	voce Examinations, Sessionals, Viva-	28.03.2021 -	05.04.2021
14.	Theory Examinations	12 02 2021	26.02.000.0
		12.03.2021 -	26.03.2021

Note : The academic Calendar is subject to modification as per the advice from the University and on the advisories of the other statutory bodies in the Covid-19 pandemic situation.





SILIGURI INSTITUTE OF TECHNOLOGY Academic/activity Calendar for the year 2020 - 2021

EVEN SEMESTER

SI No	Front	Time / Duration	
0	Event	Continuing batch	New batch
1.	Commencement of Academic Program (AICTE courses)	12.04.2	021
2.	Enrolment of students for Even Semester	20.04.2021	24.04.2021
3.	Submission of CA I	28.04.2021 -	03.05.2021
4.	1 st Internal Test	01.04.2021 - 0	07.04.2021
5.	Submission of CA II	27.05.2021 - 31.05.2021	
6.	Submission of PCA1	27.05.2021 -	31.05.2021
7.	Submission of CA III	25.06.2021 -	30.06.2021
8.	2 nd Internal Test	25.05.2021 -	31.05.2021
9.	Submission of CA IV	21.07.2021 -	24 07 2021
10.	Submission of PCA2	21.07.2021 - 2	24.07.2021
11.	Pre-examination activities / form fill-up	21.07.2021 - 2	021
12.	Student's course survey	29.00.2	24 07 2021
13.	Practical Examinations, Sessionals, Viva- voce	05.08.2021 - 0	08.08.2021
14.	Theory Examinations	13.07.2021 - 20.07.2 09.08.2021 - 21.08	2021 (Final Year) 3.2021 (Others)

Note : The academic Calendar is subject to modification as per the advice from the University and on the advisories of the other statutory bodies in the Covid-19 pandemic situation.

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Approved Soft Falz

Course Title: ARTIFICIAL INTELLIGENCE

Paper Code: PEC- IT501B

Semester: -1ST Year: 3RD

Name of the Faculty: Prof. Alok Basu

E-mail : basualok11@gmail.com

i) Course Objective:

Students will be able to develop a basic understanding of the building blocks of AI as presented in terms of intelligent agents: Search, Knowledge representation, inference, logic, and learning.

ii) Course Outcomes:

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

a) The Students will be able to:

1	Code	Outcomes	Targets
-	CS703C.1	Explain the various types of AI agent and search algorithm (uninformed,	
		informed, heuristic, constraint satisfaction, genetic algorithms, game	60% marks
		playing.(BT-Level 5)	

CS703C.2	Develop the basic knowledge-based system with the help of knowledge representation.(BT-Level3)	60% marks
CS703C.3	Analyze the working knowledge of reasoning in the presence of probabilistic approaches.(BT-Level 4)	60% marks
CS703C.4	Describe the notion of machine learning techniques.(BT-Level 4)	60% marks

b) Once the student has successfully complete this course, he/she must be demonstrate the following:

SN	QUESTION	
1.	What is an intelligent agent? What are the types of intelligent agent?	
2.	Compare the different types of search techniques and also calculate the time and space complexity.	
3.	Explain alpha –beta cut-off procedure.	5
4.	What is first order predicate logic?	1
5.	Explain the tautology with example	
6.	 Convert the sentence into predicate logic : i) Some people did not come for all meetings. ii) Not everyone loves Ravana. 	3
7.	Explain the probabilistic reasoning.	
8.	When one has cold, one usually has a high temperature (80% of the time). At any time around 1 in every 10000 people has a cold and I in every 1000 people have high temperature. Now suppose you have high temperature. What is the probability that you have cold?	
9.	Write short note on machine learning	3

Artificial Intelligence Code: PEC-IT501B Contacts: 3L

Name of the Course:	Artificial Intelligence
Course Code: PEC-IT501B	Semester: V
Teaching Scheme	Examination Scheme
Theory:3 hrs./week	Mid Semester exam: 15
Tutorial: NIL	Assignment and Quiz: 10 marks
	Attendance : 5 marks
Practical: NIL	End Semester Exam :70 Marks
Credit Points: 3	

Unit	Content	Hrs/Unit

1	Introduction [2]	6
	Overview of Artificial intelligence- Problems of AI, AI technique, Tic-Tac -Toe problem.	
	Intelligent Agents [2]	[PEC
	Agents & environment, nature of environment, structure of agents, goal based agents,	IT501B-
	utility based agents, learning agents.	C011
	Problem Solving [2]	COIJ
	Problems, Problem Space & search: Defining the problem as state space search, production	
	system, problem characteristics, issues in the design of search programs.	
2	Search techniques [5]	13
	Solving problems by searching :problem solving agents, searching for solutions; uniform	
	search strategies: breadth first search, depth first search, depth limited search, bidirectional	
	search, comparing uniform search strategies.	
	Heuristic search strategies [5]	PEC
	Greedy best-first search, A* search, memory bounded heuristic search: local search	IT501B-
	algorithms & optimization problems:	C011
	Hill climbing search, simulated annealing search, local beam search, genetic algorithms;	COIJ
	constraint satisfaction problems, local search for constraint satisfaction problems.	
	Adversarial search [3]	
	Games, optimal decisions & strategies in games, the minimax search procedure, alpha-	
	beta pruning, additional refinements, iterative deepening.	
3	Knowledge & reasoning [3]	3
	Knowledge representation issues, representation & mapping, approaches to knowledge	
	representation, issues in knowledge representation.	PEC
		IT501B-
		C021
]
4	Using predicate logic [2]	6
	Representing simple fact in logic, representing instant & ISA relationship, computable	
	functions & predicates, resolution, natural deduction.	PEC
	Probabilistic reasoning [4]	IT501R-
	Representing knowledge in an uncertain domain, the semantics of Bayesian networks,	C021 8-
	Dempster-Shafer theory, Fuzzy sets & fuzzy logics.	C02] &
		DEC
		PEC
		LL201B-
		C03]
		C03]
5	Natural Language processing [2]	C03]
5	Natural Language processing [2] Introduction, Syntactic processing, semantic analysis, discourse & pragmatic processing.	C03]
5	Natural Language processing [2] Introduction, Syntactic processing, semantic analysis, discourse & pragmatic processing. Learning [2]	C03] 6 PEC
5	Natural Language processing [2] Introduction, Syntactic processing, semantic analysis, discourse & pragmatic processing. Learning [2] Forms of learning, inductive learning, learning decision trees, explanation based learning,	C03] 6 PEC IT501B-
5	Natural Language processing [2] Introduction, Syntactic processing, semantic analysis, discourse & pragmatic processing. Learning [2] Forms of learning, inductive learning, learning decision trees, explanation based learning, learning using relevance information, neural net learning & genetic learning.	C03] 6 PEC IT501B- C041
5	Natural Language processing [2] Introduction, Syntactic processing, semantic analysis, discourse & pragmatic processing. Learning [2] Forms of learning, inductive learning, learning decision trees, explanation based learning, learning using relevance information, neural net learning & genetic learning.	C03] 6 PEC IT501B- C04]
5	Natural Language processing [2] Introduction, Syntactic processing, semantic analysis, discourse & pragmatic processing. Learning [2] Forms of learning, inductive learning, learning decision trees, explanation based learning, learning using relevance information, neural net learning & genetic learning. Expert Systems [2]	C03] 6 PEC IT501B- C04]
5	Natural Language processing [2] Introduction, Syntactic processing, semantic analysis, discourse & pragmatic processing. Learning [2] Forms of learning, inductive learning, learning decision trees, explanation based learning, learning using relevance information, neural net learning & genetic learning. Expert Systems [2] Representing and using domain knowledge, expert system shells, knowledge acquisition.	C03] 6 PEC IT501B- C04]

Topic Layout:

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Topic No	Торіс	Lecture Hours

Topic 1	Introduction	2 HRS
Topic 2	Intelligent Agent	2 HRS
Topic 3	Problem Solving	2 HRS
Topic 4	Search Techniques	5 HRS
Topic 5	Heuristic search	5 HRS
Topic 6	Adversarial search	3 HRS
Topic 7	Knowledge& reasoning	3 HRS
Topic 8	Predicate logic	2 HRS
Topic 9	Knowledge using rules	3 HRS
Topic 10	Probabilistic reasoning	4 HRS
Topic 11	Planning	2 HRS
Topic 12	Learning	2 HRS
Topic 13	Expert Systems	2 HRS
Topic 14	Natural Language processing	2 HRS
Total		45 HRS

c) Textbooks:

- 1. Artificial Intelligence, Ritch& Knight, TMH.
- 2. Artificial Intelligence A Modern Approach, Stuart Russel Peter Norvig Pearson.

d) Reference Books:

- 1. Introduction to Artificial Intelligence & Expert Systems, Patterson, PHI
- 2. Logic & Prolog Programming, Saroj Kaushik, New Age International

V) Evaluation Scheme:

1) THEORY

Evaluation Criteria	Marks
First & Second Internal Exam	15
Quiz/ 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.

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University Grading System:

Grade Marks

0	90% and above
E	80 – 89.9%
A	70 – 79.9%
В	60 – 69.9%
С	50 – 59.9%
D	40 – 49.9%
F	Below 40%

VI) Weekly lesson plan

Week	Lectures	Assignment
	Overview of Artificial intelligence- Problems	
	of AI	
	AI technique, Tic - Tac - Toe problem	
1	Agents & environment, nature of	••••••
	environment, structure of agents	
	Goal based agents, utility based agents,	
	learning agents.	
	Problems, Problem Space & search: Defining	
	the problem as state space search	
	Production system, problem characteristics,	Assignment 1
2	issues in the design of search programs	Assignmenti
	Solving problems by searching: problem	
	solving agents, searching for solutions	
	Uniform search strategies: breadth first search	
	Uniform search strategies:depth first search	
	Depth limited search	
3	Bidirectional search, comparing uniform	Assignment 2
	search strategies	
	Hill climbing search, simulated annealing	
	search	
	A* search, Best First Search	
4	Properties of heuristic function	
	Constraint satisfaction problems, local search	
	for constraint satisfaction problems.	
	Genetic algorithm	
5	Games, optimal decisions & strategies in	Assignment 3
5	games	Assignment 5

	The minimax search procedure		
	Alpha-beta pruning, additional refinements, iterative deepening.		
	Knowledge representation issues, representation & mapping		
	Simple fact in logic, computable functions & predicates and resolution		
	ISA relationship and natural deduction		
6	Representing simple fact in logic, representing instant & ISA relationship		
	Procedural verses declarative knowledge,		
	Forward verses backward reasoning,		
	matching, control knowledge		
	Representing knowledge in an uncertain		
	domain, the semantics of Bayesian network		
7	Fuzzy sets & fuzzy logics, Dempster-Shafer theory		
	Overview, components of a planning system, Goal stack planning		
	Hierarchical planning, other planning		
	techniques		
	Forms of learning, inductive learning, learning decision trees, explanation based learning		
8	Neural net learning		
	Representing and using domain knowledge, expert system shells and knowledge acquisition		
	Introduction, Syntactic processing, semantic analysis		
	Basic knowledge of programming language like Prolog		
9	Basic knowledge of programming language like Prolog		
	Basic knowledge of programming language like Prolog		
	Basic knowledge of programming language like Prolog		
	Revision on Week 2 to 5		
10	Revision on Week 6 to 9		
	Discuss on University QP		



SILIGURI INSTITUTE OF TECHNOLOGY MASTER OF BUSINESS ADMINISTRATION

COURSE DESCRIPTION 2nd SEMESTER, 1ST YEAR

Session: 2020 – 21 (Even Semester 2021)

PAPER NAME: INDIAN ECONOMY & POLICY PAPER CODE: MB 201

(New Syllabus from Odd Semester 2018)

Course File

Course Title: Indian Economy & Policy

Code: MB (N) 201

Semester: 2nd, Year 1st

Name of the Faculty: Mr Shomnath Dutta

E-mail: shomnath76@gmail.com

Class Schedule

	Lecture		Tutorial/Case Study	Practical
Monday			03.50 - 04.40 pm	N.A
Tuesday		12.30 - 01.20 PM		N.A
Wednesday	11.40 - 12.30 PM			N.A
Thursday	10.50 - 11.40 AM			N.A
Friday		12.30 - 01.20 PM		N.A

Hours for meeting students:

Day	Time
Monday	04.40 pm – 05.10 pm
Tuesday	01.30 pm – 02.00 pm
Wednesday	01.30 pm – 02.00 pm
Thursday	04.40 pm – 05.10 pm

Course Objective

Students will acquire basic knowledge on different aspects of Macro Economics, Indian Economy and Policy.

Course Outcomes

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

The student will be able to:

	Description of COs	Target
CO1	Understand the circular flow of income and the uses as well as the limits of Gross Domestic Product(GDP) and real GDP and also understand the concept of national income (BT 5)	75%
CO2	Understand the three main macro economic problems related to recession, unemployment and inflation. (BT 5)	75%
CO3	Analyze the economic implication of alternative policies (BT 4)	70%
CO4	Apply the concept of international trade based on comparative advantage (BT 3)	60%
CO5	Evaluate the consequences of basic macroeconomic policy options under differing economic condition within the business cycle. (BT 2)	60%

ii. 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.	Derive money demand curve with the help of liquidity preference theory	BT 5
2.	If C=40+0.75Y, I=140-10r, G=100, money demand=0.2Y-5r, money supply= 185, to be given i) derive the equation of IS and LM curves ii) find out equilibrium level of national income and interest	BT 5

	iii) If G increase by Rs 75 what will be the extent of crowding out?	
3.	Find out the value of Balanced Budget Multiplier in simple Keynesians' model	BT 4
4.	 Consider a closed economy with govt. Budget expenditure, G and tax T in as simple Keynesian model. a) Explain why govt. Expenditure multiplier is positive and why tax multiplier is negative. b) Show that the balanced budget multiplier is 1. c) In an economy, consumption for C = 50 + 0.80 Yd, Yd is the disposable income. Investment (I) = 200, Govt. Spending (G) = 150, Tax (T) = 50 i) Calculate equilibrium level of savings. ii) Show that MPC + MPS = 1. 	
5.	If from the data given below, calculate (i) GDP as Market Price, (ii) GDP at factor cost and (iii) GNP. (in Rs. Billion)Household consumption expenditure550Govt consumption expenditure250Gross fixed capital formation100Depreciation150Indirect taxes160Subsidies40Exports200Imports250Net income from abroad150	BT 5
6.	Define Philips Curve, Explain why it is downward sloping in the short run but vertical in the long run.	BT 4
7.	"Trade between two countries arises only when comparative cost of producing commodities vary" discuss	
8.	What is meant by monetary policy? Write a note on objectives of monetary policy in India. In this connection evaluate RBIs monetary policy	
9.	What factors forced the government of India in 1991 to introduce structural adjustment programme? In this connection sketch out the major structural reforms and macroeconomic stabilization measures introduced since 1991	
10.	Explain the impact of liquidity trap on the LM Curve.	BT3

Topic/Unit/Chapter Layout

Topic/Unit/Chapter	Lecture Hours	Tutorials
MODULE I	2	2
1. Circular Flow of Income	3	3
2. Theory of Income Determination	6	1
3. Introduction of Money and Asset Market	4	-
4. Inflation and Unemployment	3	
5. Introduction to Foreign Trade & International Linkages	4	
MODULE II 6. Indian Economy - An Overview	4	-
7. New Industrial Policy	4	
8. Banking and Capital Market Reforms	4	
9. Monetary and Fiscal Policy Reforms	4	1
10. Trade Policy Reforms	4	

Textbooks

- 1. Lipsey & Chrystal Economics Oxford University Press 2. Peterson & Lewis Managerial Economics Pearson Education
- 3. H.L. Ahuza- Managerial Economics, S. Chand, 8th Ed
- 5. GEETIKA, Managerial Economics, McGraw-Hill Education 2nd Ed.
- 6. Macroeconomics- Suman Kalyan Chakraborty 7. Indian Economy: Dutt & Sundaram

Reference Books

- 1. D.N. Dwibedi Managerial Economics, Prentice Hall.
- 2. Damodaran, Suma Managerial Economics Oxford University Press
- 3. Macroeconomics Dornbusch, Fischer & Startz

Evaluation Scheme

1) Theory

Evaluation Criteria (MAKAUT Odd Sem' 18 Onwards)		Marks	
Internal Exam*	50	Total 100	
Assignment	40	marks to be	
Attendance	5	converted	
Quiz/Presentation	5	marks	
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.

Course Target Attainment Levels for Internal Assessment:

Target (No. of Students)	Target Level of CO (Marks)	Attainment Level
≤49.9 %	60%	1
50 – 59.9 %	60%	2
60 % and above	60%	3

Overall Course Attainment Target = 70% of the students will get 60% marks.

Target has been set on the basis of last year's performance / result by the students, student quality this year and difficulty level of the course.

University Grading System:

Letter Grade	Point
0	10
Е	9
Α	8
В	7
С	6
D	5
F	Less Than 5

Course target attainment levels for university assessment:

Target (No. of Students)	Target Level of CO (Marks) in point	Attainment Level
≤ 49.9 %	7	1
50-59.9 %	7	2
60% and above	7	3

Overall Course Attainment Target = 60% of the students will get 7 points.

Mapping of Course Outcomes and Program Outcomes:

Course Outcomes	Program Outcomes					PS	SOs	
	1	2	3	4	5	6	1	2
CO. MB201.1	3	1	0	0	0	0	2	0
CO. MB201.2	3	0	0	0	0	0	2	0
CO. MB201.3	0	3	0	0	0	0	2	1
C O.MB201.4	0	2	2	0	0	0	2	1
C 0.MB201.5	0	3	0	0	0	0	2	1

Learning Outcomes of MBA Program as specified by AICTE in 2018 (Considered as PO)

- PO1: Business Environment & Domain Knowledge
- PO2: Critical Thinking, Business Analysis, Problem solving & Innovative Solutions
- PO3: Global Exposure & Cross Cultural Understanding
- PO4: Social Responsibilities & Ethics
- PO5: Effective Communication
- PO6: Leadership & Teamwork
- 1 = courses in which the student will be exposed to a topic (BT level 1& 2)
- 2 = courses in which students will gain competency in that area (BT level 3-4)
- 3= courses in which students will master that skill (BT level 5-6)

CO1 need for the knowledge of the circular flow of income and the uses as well as the limits of Gross Domestic Product (GDP) and real GDP and also understand the concept of national income. Hence it is highly linked with PO1, partially linked with PSO1and thinly linked with PO2.

CO2 require application of the three main macro-economic problems related to recession, unemployment and inflation. Hence it is highly linked with PO1 and partially linked with PSO1.

CO3 requires knowledge & understanding of economic implication of alternative policies. Hence it is highly linked with PO2, partially linked with PSO1 and minimally linked with PSO2.

CO4 requires knowledge about the concept of international trade based on comparative advantage. Hence it is partially linked with PO2, PO3 & PSO1 and minimally linked with PSO2.

CO5 deals with Evaluate the consequences of basic macroeconomic policy options under differing economic condition within the business cycle. Hence it is highly linked with PO2, partially linked with PSO1, and thinly linked with PSO2.

PSO₁: Identify the key issues facing a business or business subdivisions, utilize qualitative and quantitative methods to explore and solve critical business problems,

PSO₂: Incorporate diversity and multicultural perspectives while making business decisions as an entrepreneurs or decision maker.

vii) Denvery Methodology									
Outcome	Method	Supporting Tools	Demonstration						
CMB106.1	Structured, partially supervised	Power point presentation, Numerical example	Assignment, Quiz, Internal						
CMB106.2	Structured, partially supervised	Numerical Class Lectures, Power point presentation	Assignment, Quiz, Internal						
CMB106.3	Structured, partially supervised	Numerical Class Lectures, Power point presentation	Case Study, Assignment, Quiz, Internal						
CMB106.4	Structured, partially supervised	Numerical Class Lectures, Power point presentation	Case Study, Assignment, Quiz, Internal						
CMB106.5	Structured, partially supervised	Numerical Class Lectures, real life example	Case Study, Assignment, Quiz, Internal						

(vii) Delivery Methodology

(viii) Assessment Methodology

Outcome	Assessment Tool	Specific Question/activity aligned to the Outcome
CMB101.1, CMB101.2, CMB101.3.	Internal Test	In an economy, consumption for $C = 50 + 0.80$ Yd, Yd is the disposable income. Investment (I) = 200, Govt. Spending (G) = 150, Tax (T) = 50 i) Calculate equilibrium level of savings. ii) Show that MPC + MPS = 1.
CMB101.3, CMB101.4, CMB101.5.	Assignment	Define Philips Curve, Explain why it is downward sloping in the short run but vertical in the long run.
CMB101.1, CMB101.2, CMB101.3, CMB101.4, CMB101.5.	End Semester (Odd) Examination	If C=40+0.75Y, I=140-10r, G=100, money demand=0.2Y-5r, money supply= 185, to be given i) derive the equation of IS and LM curves ii) find out equilibrium level of national income and interest iii) If G increase by Rs 75 what will be the extent of crowding out?

(ix) A. Weekly Lesson Plan									
Week	Topic of Lectures	Tutorial	Practical	Assignment					
Week 1	Module 1 Circular flow of income: National income accounting- terms and concepts, three methods of measuring GDP/GNP	Methods of measuring GDP/GNP		Numerical on measuring GDP					
Week 2	Theory of Income Determination I : Simple Keynesian model: aggregate demand - aggregate supply method, savings-investment method, Concept of multiplier: autonomous expenditure multiplier, introducing the government, government expenditure multiplier, tax rate multiplier	Numerical on Income Determination		Numerical on Income Determination					
Week 3	Theory of Income Determination II: Balanced budget multiplier, open economy- export and imports multiplier, paradox of thrift, crowding out effect, business cycle- phase and stabilization								
Week 4	Introduction of money and asset market IS-LM Mode l	IS-LM Model							
Week 5	Fiscal and Monetary policy using IS-LM		-						
Week 6	Concepts of inflation - demand pull and cost push, stabilization policies, Introduction to Philips curve as relation between inflation and unemployment		Not Applicable	Philips curve as					
Week 7	Introduction to foreign trade and international linkages Concepts of balance of payments, Alternative exchange rate systems- fixed flexible and managed float, Comparative advantage as basis for trade, Tariff and non- tariff barriers	Philips curve, Concepts of BOP	AS per MAKAUT Syllabus	relation between inflation and unemployment					
Week 8	Module 2: Indian economy – an overview, Evolution of Indian economy since independence, Liberalization of Indian economy since 1991			Concept of					
Week 9	Banking and capital market reforms : Banking structure in India, Composition of Indian capital market, SEBI and capital market reforms			devaluation					
Week 10	Monetary and fiscal policy reforms : Composition of Indian money market, Components and instruments of monetary policy, Concepts and management of deficits	Instruments of monetary policy		Functions of Commercial Banks and Central Banks					
Week 11 & Week 12	Trade policy reforms : Major components of trade policy reforms, Idea of FEMA & NITI AYOG role and function, Current account and capital account convertibility			Instruments of monetary policy					

Siliguri Institute of Technology Department of <u>ECE</u> 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) $\nabla \times E = 0$ 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)
$$\oint B.ds = 0$$
 b) $\int E.dl = 0$ c) $\int H.dl = 0$ d) $\int D.ds = 0$

- 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
 - 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 Q₁ 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.

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5X2=10

Online Notice for 1st Internal (CA 2)_MBA 4th Semester_Even Sem'21

MAKAUT Internal Assessment_MBA (SIT:119) MBA 2nd Year (3rd & 4th Semester)	Stream Classwork People Marks	۵ 🗰 (
<	Shomnath Dutta 17 May (Edited 18 May)	
Fin	d MAKAUT_Even Sem'21_Online 1st Internal (CA 2) Routine for MBA 4th Semester 2021	
Fro	m 24.05.21 to 26.05.21 (In this Class Room)	
For	_1st internal Test (CA 2)_MBA 4th Semester 2021_MAKAUT Even Semester 21	
**(uestions if in Google Form whose link will be given here in G-Class room as per schedule	
**	Only 1 attempt will be allowed per each Examinee i.e. second time you cannot submit	
No	te: email of faculties are given for your knowledge	
Mr	Shomnath Dutta (<u>shomnath76@gmail.com</u>)	
Ms	Santana Guha (<u>santanaguha@gmail.com</u>)	
Dr	Shuvendu Dey (<u>shuvendudey@gmail.com</u>)	
Mr	Debayan Nandi (<u>debaisit@gmail.com</u>)	
Mr	s Swagata Nath (<u>91swagata@gmail.com)</u>	
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M	Rajeeo Dutraj (dutraj <u>rajeevjojgman.com)</u>	
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Online Notice for 1st Internal (CA 2)_MBA 2nd Semester_Even Sem'21

MAKAUT Internal Assessment_MBA: SIT (119) MBA 1st Year (1st & 2nd Semester)	Stream Classwork People Marks		ا الا ھ
(Shomnath Dutta 18 May (Edited 18 May)	1	
Fin	d MAKAUT_Even Sem'21_Online 1st Internal (CA 2) Routine for MBA 2nd Semester 2021		
Fo	m 24.05.21 to 26.05.21 (in this class Room) _ 1st Internal Test (CA 2)_MBA 2nd Semester 2021_MAKAUT Even Semester 21		
**(Questions if in Google Form whose link will be given here in G-Class room as per schedule		
**	Only 1 attempt will be allowed per each Examinee i.e. second time you cannot submit te: email of faculties are given for your knowledge		
Mr	Shomnath Dutta (<u>shomnath76@gmail.com</u>)		
Ms	Santana Guha (<u>santanaguha@gmail.com</u>)		
Dr Mr	Shuvendu Dey (<u>shuvendudey(@gmail.com)</u> Debayan Nandi (<u>debaisit@gmail.com)</u>		
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Siliguri Institute of Technology

Computer Science & Engineering Department Year: 2nd Semester: 2nd Section: A

Marks: 50

Paper Name: Design & Analysis of Algorithm Paper Code: PCC-CS404 Submission Date: 20th May, 2021 Assignment policy:

- Assignments must be submitted **in class** as hardcopy (A4 sheet) on the due date mentioned in the assignment
- Early submissions are allowed.
- All assignments must be done individually. Anyone cheating will receive a zero for that assignment.
- Late submission policy: **No late submissions will be allowed** on any assignment. However, earlier submissions are allowed at any time before due.

<u> Assignment – II</u>

- 1. Find an optimal parenthesization of a matrix-chain product whose sequence of dimensions is **<5**, **10**, **3**, **12**, **5>**.
- 2. For the graph shown below find the following.
 - Adjacency list Representation
 - Adjacency matrix representation.



3. Find out the shortest path from '0' to '7' using Dijkstra's Algorithm



4. Find out the Chromatic Number for the following Graph.



5. Find two solution set for the 4_Queen Problem.



6. Find out the shortest path from 'A' to 'E' (if possible) using Bellman-Ford Algorithm



7. Find out the all pair shortest path using Floyd's Algorithm.



8. Find out the BFS and DFS Tree for the following undirected Graph.



9. Find out the BFS and DFS Tree for the following undirected Graph.



10. Find out the BFS Tree, DFS Tree and also classify all the edges for the following Graph.



- 11. Write the max-flow min-cut Theorem.
- 12. Use the Ford-Fulkerson Algorithm to find the maximum flow.



Questions Responses 🐠 Settings	Total points: 30		*
Section 1 of 3			
QP_CA 4 (2nd Internal Test): MM 403_Sales & Distribution Management_Marketing	X I	⊕ ₽	
Specialisation_Even Semester 2021		Tr	
MBA 4th Semester 2021 Marketing Specialisation (Major + Minor) Full Marks 30 Time 1 hour			
Email*		8	
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Student Name	*		
1. Dante Brahma			
2. Reshav Gurung		0	
38. Subham Subba			
39. Raj Ghosh		(
40 Souray Ghosh		50 T	
41 - Duumler Deler			
41, Suvankar Sarkar			
MAKAUT Roll Number *		8	
1. 11900919001			
2. 11900919002			
3. 11900919003			
4, 11900919004			
Section 2 of 3			•
Group A (MCQ: Attempt all 20 Questions @	X I		
1 Mark each: Total 20 Marks)		(+)	
Description (optional)		Ð	
1 At present. Government has restricted EDI in multi-brond retail to		Тг	
0 51%		8	
48%			
None of the shove			
2. Which of the following Retail Audit is used to improve customer service delivery and to performance	o improve		
Retail Store Audit		0	

20. A Salesman using company provided Cell phone is an example of		
Variable element of his remuneration (PTO)		
Fixed element of his remuneration (CTC)		
Fringe benefit	(
Reimbursement component of selling expenses	5	
er section 2 Continue to next section		
ection 3 of 3		
Group B (MCQ: Attempt all 5 Questions @ 2 🎽 🗄		
Marks each: Total 10 Marks)		
Description (optional)		
21. Let's say that a particular sales job has a target incentive amount of Rs 40,000 and a target		0
Values at Be 2000000. Hence the Commission rate would be 1:2:5 in to ABC categories. (II) Calling Norms: A class would require 1 hour per customer and the call is		
to be made every week/B class would require ½ hour per customer with 54% less calling frequency than A/C class would require 25% time of A with 50% calling frequency of B; (III) Estimated work time		
available task wise: Selling task 50%/Non-selling task 30%/Travelling task 20%; (IV) Management decides 40 browned as basic requirement considering average 4 weeks set apart for sick leaves		
holidays, conferences & trainings etc.	(()	
8 (approx)	5	
0 (approx)	Tr	
7 (approx)		
	8	
24. Batting Average of a Salesman is		
Calls/Days worked		
Sales in Rs/Orders		
Orders/Calls		
24. Batting Average of a Salesman is		
Calls/Days worked		
Sales in Rs/Orders	Ð	
Orders/Calls	Ð	
Rupee Sales/No of Orders	Tr	
111	•	
25. Consider the following Data: Territory Potential: Rs 10,000,000; Number Of Leads Per Proposal: 10; Average Sales Size: Rs 50,000 & Average Closing Ratio: 25%. Now your Territory Manager		
proposes a Target Quota of Rs 350000 & asked you being the Assistant territory Manager to recommend whether the target Quota is achievable or not. What will be your recommended		
decision?		
🔵 a. Yes go ahead with Target Quota based on given data		
b. Feasible but hard to achieve based on given data		
○ c. If the target is 3 lakhs then feasible based on given data		
		0
U lo, target quota not reasible a verter to stasti it down by Friakn based on given data		

		Quiz 1 Marks (Full Marks: 10)						
			PC EE-401	PC EE-402	PC EE-403	HM EE-401	ES EE-401	MC EE-401
	ROLL	NAME	EM-I (IK/CS)	DE (JR)	EEM (MRC/AD)	VEP (SG)	TPE (BDG/PB)	ES (MHR)
1	11901619006	Pradhium Mukhia	AB	10	AB	10	AB	6
2	11901619007	Isha Paswan	10	10	10	9	10	10
3	11901619008	Benedick Minj	AB	10	4	10	AB	6
4	11901619009	Ramji Chettri	AB	10	AB	9	AB	6
5	11901619010	Suraj Singh	10	9	8	10	10	10
6	11901619011	Soumyajyoti kar	AB	10	9	10	10	6
7	11901619012	Subhrajyoti Paul	AB	10	9	8	AB	6
8	11901619013	Bhaskar Barman	9	10	AB	10	8	6
9	11901619014	Toohin Hansda	AB	10	AB	9	AB	6
10	11901619015	Abhisekh poddar	AB	10	AB	AB	AB	8
11	11901619016	Anirban Roy	10	10	10	10	10	10
12	11901619017	Danish Das	10	10	8	10	10	10
13	11901619018	Sayan Roy	AB	10	AB	10	AB	6
14	11901619019	Sayan Malakar	10	10	10	9	10	10
15	11901619020	Sayan Choudhury	8	10	9	AB	10	10
16	11901619021	Sayan kundu	7	10	10	10	10	10
17	11901619022	Sayan Bhowmick	10	10	8	10	10	10
18	11901619023	Divya Bramha	10	10	10	10	10	10
19	11901620013	Debashis Roy	10	10	10	9	10	10
20	11901620014	Anshuman Bay	10	10	8	9	8	10
21	11901620015	Sourav Das	10	10	10	AB	10	10
22	11901620016	Naman Allay	4	10	AB	AB	10	10
23	11901620017	Rakesh Chandra Sutradhar	10	10	10	8	10	7
24	11901620018	Pratik Chakraborty	AB	10	AB	10	AB	7
25	11901620019	Ratna Tshering Lepcha	10	10	9	9	10	10
26	11901620020	Bishnu Roy	10	10	10	9	10	10
27	11901620021	Hrisikesh Roy	AB	10	AB	9	AB	6
28	11901620022	Rakhiparna Roy	10	10	9	8	10	10
29	11901620023	Bornisha Roy	10	10	10	10	6	10
30	11901620024	DEWASIS PRADHAN	10	10	10	9	6	10
31	11901620025	RAHUL BANIK	10	10	9	AB	10	10
32	11901620026	Surajit Mandal	10	8	10	8	10	10
33	11901620027	Mujahid Alam	10	9	9	7	10	10
34	11901620028	Anima Sen	10	10	9	10	10	10
35	11901620029	Utpal Roy	10	9	10	7	8	10
36	11901620030	SRIJON GHOSH	10	10	10	10	10	10
37	11901620031	KOUSHIK SOME	10	9	10	9	10	10
38	11901620032	Samaeeta Bhowmik	10	10	9	10	10	10
39	11901620033	Sagar Roy	8	10	10	9	10	10
40	11901620034	Souvik Sarkar	10	10	10	10	AB	8
41	11901620035	Bappa Saha	10	10	9	AB	10	10
42	11901620036	Deeptansu Ghosh	10	10	10	10	8	6
43	11901620037	Deepshikha Howladar	10	9	10	1	10	6

44	11901620038	Pranav Kumar Sarkar	10	10	10	7	10	10
45	11901620039	Subha Sarkar	10	9	10	10	AB	10
46	11901620040	Abinash Chetteri	10	10	9	3	10	10