K.S.R.M COLLEGE OF ENGINEERING, KADAPA (AUTONOMOUS) B. Tech Mid Term Examinations June/July 2024					Dept.: H&S; Academic Year 2023 – 2024
Subject Code	:	**2025401**	**Subject Name: Business Economics and Accounting for Engineers**		
Mid Term	:	**II**	**Marks: 30**	**Regulation: R20UG**	**Duration: 90 Min**
Semester:		**IV**		**Branch: CE, ME, ECE, AI&ML**	**Date: 26-06-2024**

Answer **Three Questions** choosing One Question from each Part

All Questions carry equal marks

Q. No.	Questions	Marks	BL	Cos
1	What is Market and Explain Features of Perfect and Imperfect Markets?	10	L2	CO3
	OR			
2	Explain any six pricing methods?	10	L2	CO3
3	Define Accounting? Explain advantages and limitations of double entry accounting?	10	L2	CO4
	OR			
4	Journalise the following transactions in books of Mr. Kalyan 1.12.2020 Kalyan commenced business with cash Rs.40,000 1.12.2020 Purchased Furniture and fixers Rs.25,000 3.12.2020 Purchase of goods Rs. 6,000 4.12.2020 Cash sales Rs.15,000 7.12.2020 Commission received Rs.400 11.12.2020 Deposited into bank Rs.15,000 15.12.2020 Sold to Simhadri Rs.8,000 22.12.2020 Purchased Machinery Rs.2,000 24.12.2020 Received from Simhadri Rs.1,500 25.12.2020 Paid salaries Rs.4,000 28.12.2020 Electricity charges Rs.1,000 31.12.2020 Office rent paid Rs.2,000	10	L2&L3	CO4
5	What is ratio analysis and explain its advantages and limitations?	10	L2	CO5
	OR			
6	From the given balance sheet of X Company Ltd, Calculate the following ratios: a) Current Ratio b) Quick Ratio c) Debt-Equity Ratio Balance sheet of X Company Ltd. as on 31-03-2022	10	L4&L5	CO5

Liabilities	Amount Rs.	Assets	Amount Rs.
Equity Share Capital	15,00,000	Plant, Machinery	8,75,000
Debentures	4,00,000	Stock	5,50,000
Creditors	2,00,000	Debtors	5,50,000
Outstanding Expenses	1,00,000	Cash in Hand	3,75,000
Bank Loan	2,00,000	Prepaid Expenses	50,000
Total	24,00,000	Total	24,00,000

BL – Bloom's Taxonomy Levels

1- Remembering, 2- Understanding, 3 – Applying, 4 -- Analysing, 5 – Evaluating, 6 - Creating

K.S.R.M. College of Engineering, Kadapa (Autonomous) B. Tech Mid Term Examinations June –2024							Dept.: CIVIL; Academic Year 2023 – 2024
Subject Code	:	2001402	Subject:	Hydraulics & Hydraullic Machinary			
Mid Term	:	II	Marks:	30M	Regulation:	R20UG	Duration: 90 Min
Semester	:	IV	Section:	A and B			Date: 27-6-2024

Q. No	Question (s)	Marks	BL	CO
1.	A jet of water of diameter 50 mm having a velocity of 20 m/s strikes a curved vane which is moving with a velocity of 10 m/s in the direction of jet. The jet leaves the vane at an angle of 60^0 to the direction of motion of vane at outlet. Determine (i) The force exerted by the jet on the vane in the direction of motion (ii) Work done/sec by the jet	10M	L5	CO3
	(OR)			
2.	Derive an expression for force exerted by the curved plate is moving in the direction of jet.	10M	L5	CO3
3.	Explain the general layout of hydroelectric power plant with neat sketches ?	10M	L2	CO4
	(OR)			
4.	A Pelton turbine has a mean bucket speed of 10 m/s with a jet of water flowing at the rate of 700 li/s under a head of 30 m. the buckets deflect the jet through an angle of 160^0. Calculate the power given by water to the runner and the hydraulic efficiency of the turbine. Assume C_V= 0.98	10M	L5	CO4
5.	The internal and external diameters of the impeller of a centrifugal pump are 200 mm and 400 mm respectively. The pump is running at 1200 rpm. The vane angles of the impeller at inlet and outlet are 20^0 and 30^0 respectively. The water enters the impeller radially and velocity of flow is constant. Determine the work done by the impeller per unit weight of water.	10M	L5	CO5
	(OR)			
6.	Explain the principle and working of a reciprocating pump by neat sketch.	10M	L2	CO5

K.S.R.M COLLEGE OF ENGINEERING, KADAPA (AUTONOMOUS) B. Tech Mid Term Examinations, June / July, 2024					Dept.: Civil Engineering Academic Year 2023 – 2024
Subject Code	:	2001403	Subject Name: Soil Mechanics		
Mid Term	:	II	Marks : 30	Regulation : R20 UG	Duration : 90 Min
Year	:	II	Semester : IV	Sections : A, & B	Date : 28.06.2024 AN

Q. No		Question (s)	Marks	Blooms Level	CO
1	a.	Develop an expression for vertical stress due to line load?	5	L3	CO3
	b.	A load 1000 kN acts as a point load at the surface of a soil mass. Estimate the stress at a point 3 m below and 4 m away from the point of the load by Boussinesq's theory. Compare the value with the result from Westergaard's theory.	5	L3	CO3
		OR			
2	a.	Explain about the Newmark's influence chart? Mention their uses.	5	L2	CO3
	b.	A long strip footing of width 2 m carries a load of 400 kN/m. Determine the maximum stress at a depth of 5 m below the center line of the footing	5	L5	CO3
3	a.	What is the effect of compaction on the engineering properties of the soil?	5	L1	CO4
	b.	Describe the difference between standard and modified proctor compaction test.	5	L4	CO4
		OR			
4	a.	The time to reach 60% consolidation is 30 sec for a sample of 1 cm thick tested in the laboratory under condition of double drainage. How many years will the corresponding layer in nature require to reach the same degree of saturation if it is 10 m thick and drainage on one side only?	5	L4	CO4
	b.	In a consolidation test, the void ratio of the specimen which has 1.068 under the effective pressure of 214 kN/m^2, changed to 0.994 when the pressure was increased to 429 kN/m^2. Calculate the coefficient of compressibility, coefficient of volume change and compression index.	5	L4	CO4
5	a.	Discuss about the advantages of triaxial shear test over direct shear test.	5	L4	CO5
	b.	A cylindrical specimen of saturated clay, 4.5 cm in diameter, and 9 cm long, is tested in an unconfined compression apparatus. Determine the cohesion if the specimen fails at an axial load of 450 N. The change in length of the specimen at failure is 9 mm.	5	L5	CO5
		OR			
6		The following table gives data obtained from triaxial compression test conducted under undrained conditions on two specimens of same soil sample. The diameter and height are 40 mm and 80 mm respectively for both samples.	10	L5	CO5

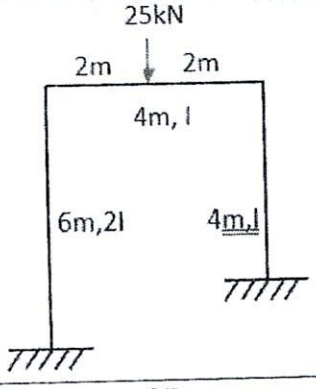
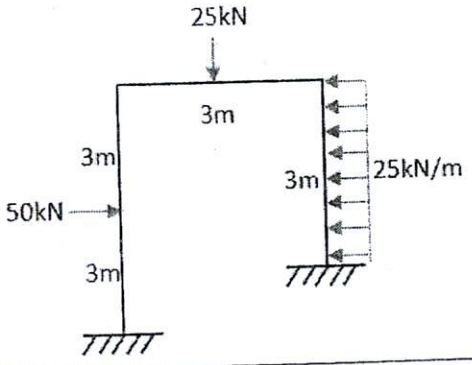
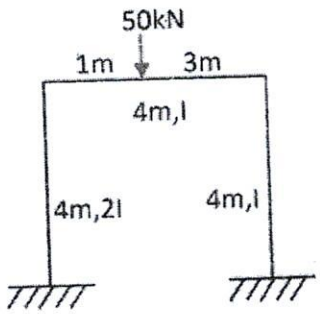
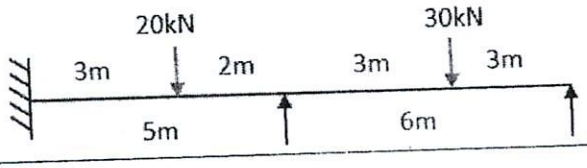
Sample No	1	2
Cell pressure σ_3 (kN/m^2)	100	200
Deviator load at failure (N)	637	881
Increase in volume at failure (ml)	1.10	1.50
Axial compression (mm)	5	7

Find c_u and φ_u by (i) analytical method and (ii) graphical method.

- L1 – Remembering
- L2 – Understanding
- L3 – Applying
- L4 – Analyzing
- L5 – Evaluating
- L6 – Creating

K.S.R.M COLLEGE OF ENGINEERING, KADAPA (AUTONOMOUS) B. Tech Mid Term Examinations, June-2024					Dept.: Civil Engineering; Academic Year 2023 – 2024
Subject Code	:	2001404	Subject Name: Structural Analysis		
Mid Term	:	II	Marks : 30	Regulation : R20 UG	Duration : 90 Minutes
Year	:	II	Semester : IV	Sections : A,B	Date : 29.06.2024

Answer any Three Questions & One Question from each section is mandatory

Q. No	Question (s)	Marks	Skills	CO
1.	Analyze the frame given below using Slope deflection method and draw BMD 	10	L4	CO 3
	OR			
2.	Analyze the frame given below using Slope deflection method and draw BMD 	10	L4	CO 3
3.	Analyze the frame shown in figure using moment distribution method. 	10	L5	CO 4
	OR			
4.	Analyze the continuous beam using Moment distribution method and draw BMD 	10	L4	CO 4

5.	A three hinged parabolic arch of span 40m and central rise 8m carries an UDL of 30kN/m over the left half span. Calculate the reactions at the supports and also calculate bending moment, radial shear and normal thrust at a distance of 10m from left support.	10	L5	CO 5
	OR			
6.	A two hinged parabolic arch of spam 60m and central rise 12m subjected to a concentrated load of 80kN at a distance of 15m from left support. Calculate the horizontal thrust, reactions and bending moment at a distance of 10m from left support.	10	L3	CO 5

L1-Remembering; L2-Understanding; L3-Applying; L4- Analyzing; L6-Evaluating; L6 Creating

K.S.R.M COLLEGE OF ENGINEERING, KADAPA (AUTONOMOUS) B. Tech II Mid Term Examinations, June-2024					Dept.: Civil Engineering; Academic Year 2023 – 2024
Subject Code	:	2001405	Subject Name: Transportation Engineering		
Mid Term	:	II	Marks : 30	Regulation : R20 UG	Duration : 90 Min
Year	:	II	Semester : IV	Sections : A & B	Date : 01-07-2024

Answer any three questions and one question from each section is mandatory

Q. No	Question (s)	Marks	Skills	CO
1	Write in detail about Traffic Signals and its advantages and disadvantages	10	L1	CO3
	OR			
2	The average normal flow of traffic on cross roads A and B during design period are 400 and 250 pcu per hour. The saturation flow values on these roads are estimated as 1250 and 1000 pcu per hour respectively. The all red time required for pedestrain crossing is 12 sec. Design two phase traffic signal by websters method.	10	L5	CO3
3	a.)What are the components of flexible pavement ? explain their functions.	4	L1	CO4
	b.) Explain about modulus of subgrade reaction,Relative stiffness of slab, critical load positions	6	L1	CO4
	OR			
4	Calculate the stresses at interior , edge and corner regions of a cement concrete pavement using westergaards stress equations. Using the following data. Wheel load=5100 kg, $E=3*10^5$ kg/cm^2, pavement thickness=18 cm, poisons ratio of concrete=0.15, k=6 kg/cm^3, radius of contact area=15 cm	10	L5	CO4
5	a).Explain Experimental Procedure about conducting aggregate impact test	5	L2	CO5
	b).Write Experimental Procedure for ductility test of bitumen.	5	L2	CO5
	OR			
6	a).Write about the construction procedure of WBM road.	5	L2	CO5
	b)Describe Significance of highway drainage and what are the remedial measures	5	L2	CO5

K.S.R.M COLLEGE OF ENGINEERING, KADAPA (AUTONOMOUS) Mid Term Examinations June/July-2024					Dept.: H&S Academic Year 2024
Subject Code	:	2024410	Subject : Universal Human Values		
Mid Term	:	II	Marks : 30	Regulation : R-20	Duration : 90 Min
Year	:	II	Semester : IV	Branch: CE/ME & CSE	Date :02/07/2024 A.N

Answer the following questions. Each question carries Equal marks.

Q. No.	QUESTIONS	Marks	Blooms Level	CO
1	(a)Analyze about uncertainties in risk assessment. (b)List out a few factors to reduce risks.	5 5	L4 L1	CO3 CO3
	OR			
2	(a) Define 'Safety and risk'. (b) What lessons can be learned from Chernobyl nuclear disaster?	5 5	L3 L1	CO3 CO3
3	(a) Illustrate the content of value education. (b) Explain briefly 'the process of self-exploration'.	5 5	L1 L2	CO4 CO4
	OR			
4	(a)How can we verify proposals on the basis of our natural acceptance? Explain with example. (b) What is your present vision of a happy and prosperous life?	5 5	L4 L1	CO4 CO4
5	Elaborate the terms (a) Harmony in society (b) Co-existence with nature	5 5	L6	CO5
	OR			
6	(a) What is justice and how does it leads to mutual happiness. (b) "Trust is the base of values"- Give answer in detail.	5 5	L6 L1	CO5 CO5

- L1 - Remembering
- L2 - Understanding
- L3 - Applying
- L4 – Analyzing
- L5 – Evaluating
- L6 – Creating

K.S.R.M. College of Engineering, Kadapa (Autonomous) B. Tech Mid Term Examinations June – 2024							Dept.: EEE; Academic Year 2023 – 2024
Course Code	:	2021401	Course:	Special functions and Complex Analysis			
Mid Term	:	II	Marks:	30M	Regulation:	R20UG	Duration: 90 Min
Semester	:	IV	Section:				Date: 26th June 2024

Q. No	Question (s)	Marks	BL	CO
1.	Discuss the transformation $w = sinz$.	10M	L6	CO3
	(OR)			
2.	Verify Cauchy's theorem by integrating e^{iz} along the boundary of the tringle with the vertices at the points 1+i, -1+i, and -1-i.	10M	L3	CO4
3.	Evaluate, using Cauchy's Integral Formula $\oint_c \frac{\sin\pi z^2+\cos\pi z^2}{(z-1)(z-2)}\,dz$ where c is the circle $\|z\| = 3$.	10M	L5	CO4
	(OR)			
4.	$If\ F(\xi) = \oint_C \frac{4z^2+z+5}{z-\xi}\,dz$, *where c is the ellipse* $(\frac{x}{2})^2 + (\frac{y}{3})^2 = 1$, *find the value of* i) $F(3.5)$ ii) $F(i), F'(-1), F''(-i)$.	10M	L1	CO4
5.	Evaluate $\int_c \frac{z^3 dz}{(z-1)^2(z-3)}$ where C is $\|z\| = 2$ by Residue theorem.	10M	L5	CO5
	(OR)			
6.	Prove that $\int_0^{2\pi} \frac{d\theta}{a+b\sin\theta} = \frac{2\pi}{\sqrt{a^2-b^2}}$ $(a > b > 0)$.	10M	L5	CO5

K.S.R.M COLLEGE OF ENGINEERING, KADAPA (AUTONOMOUS) B. Tech Mid Term Examinations June/July 2024					Dept.: H&S; Academic Year 2023 – 2024
Subject Code	:	2025402	Subject Name: Fundamentals of Management for Engineers		
Mid Term	:	II	Marks: 30	Regulation: R20UG	Duration: 90 Min
Semester: IV				Branch: EEE	Date: 27-06-2024

Answer **Three Questions** choosing One Question from each Part
All Questions carry equal marks

Q. No.	Questions	Marks	BL	COs
1	What HRP and Explain Human Resource Planning Process?	10	L2	CO3
	OR			
2	Explain the following: a) Organizational Culture b) Organizational Climate	 05 05	 L2 L2	 CO3 CO3
3	Define Leadership? Explain Behavioural Leadership and Situational Leadership?	10	L2	CO4
	OR			
4	What is Motivation? Explain any two Content Motivational Theories?	10	L2	CO4
5	Define Control and Elaborate Steps in Controlling Process?	10	L2	CO5
	OR			
6	Briefly explain Budgetary and Non- Budgetary Controlling techniques?	10	L2	CO5

BL – Bloom's Taxonomy Levels
1- Remembering, 2- Understanding, 3 – Applying, 4 – Analysing, 5 – Evaluating, 6 - Creating

K.S.R.M COLLEGE OF ENGINEERING, KADAPA (AUTONOMOUS) B.TechMid Term Examinations JUNE 2024					Dept.: EEE Academic Year 2023– 2024
Subject Code	:	2002403	Subject:Induction Motors & Synchronous Machines		
Mid Term	:	II	Marks: 30	Regulation: R20 UG	Duration: 90 Min
Year	:	II	Semester:IV	Section:A	Date: 28/06/2024

Q. No	Question (s)	Marks	Skills	CO
1	Define voltage regulation. Explain how regulation can be determined by Ampere Turn Method.	10	Az	CO3
	OR			
2	A 15kVA, 400V, 50Hz, 3-Ø alternator (Y connected) in Open Circuit test gave the following data: I_f: 2, 2.5, 3, 3.5, 4, 4.5, 5 E_{oc}: 266, 334, 377, 422, 450, 484, 508 An excitation of 2A gave full-load current on short-circuit. Armature resistance per phase is 1.2Ω. Calculate full-load regulation using Synchronous Impedance method at (i) 0.8 lagging and (ii) 0.8 leading power factor.	10	E	CO4
3	What are the conditions to be satisfied for proper synchronization? Explain the way of synchronization of alternators to the infinite busbar.	10	Az	CO3
	OR			
4	Derive the expression of synchronous power delivered by synchronous machine and hence, draw the power angle characteristics.	10	Az	CO1
5	Why Synchronous motor is not self-starting? Briefly discuss the starting methods used for Synchronous motor.	10	Az	CO2
	OR			
6	A Synchronous Motor absorbing 50kW is connected in parallel with a factory load of 250kW having a lagging power factor of 0.8. If the combination has a power factor of 0.9 lag, how many leading kVAR are to be supplied by the motor? At what power factor it should work?	10	E	CO4

K.S.R.M. College of Engineering, Kadapa (Autonomous) B. Tech Mid Term Examinations June – 2024							Dept.:	EEE
							Academic Year	2023 – 2024
Subject Code	:	2002404	Subject:	LINEAR CONTROL SYSTEMS				
Mid Term	:	II	Marks:	30M	Regulation:	R20UG	Duration: 90 Min	
Semester	:	IV	Section:				Date: 29h June 2024	

Q. No	Question (s)	Marks	BL	CO
1	Examine the characteristic equation $s^4 + 2s^3 + s^2 + 4s + 2 = 0$ for stability	10M	L4	CO2
	(OR)			
2.	A unity feedback control system has an open loop transfer function $G(s) = \frac{K}{S(S+4)}$. Draw the Root Locus and determine the value of K, if the damping ratio ξ is to be 0.707?	10M	L4	CO2
3.	The open loop transfer function of a system is given by $G(s) = \frac{20}{S(S+1)(1+0.01S)}$. Sketch the Bode plot and determine the gain Margin and Phase Margin	10M	L3	CO2
	(OR)			
4.	The open loop transfer function of a system is given by: $G(s) = \frac{40}{(S+4)(S^2+2S+1)}$. Sketch the Polar plot and comment on the stability of the system.	10M	L4	CO1
5.	Explain Design of lag Compensator in frequency domain	10M	L2	CO4
	(OR)			
6.	Explain Design of lead Compensator in frequency domain	10M	L2	CO4

K.S.R.M COLLEGE OF ENGINEERING, KADAPA (AUTONOMOUS) B.Tech Mid Term Examinations June/July 2024	Dept.: EEE Academic Year 2023 – 2024

Subject Code	:	2002405	Subject: Power Systems-I		
Mid Term	:	II	Marks : 30	Regulation : R20 UG	Duration : 90 Min
Year	:	II	Semester : IV	Section : -----	Date : 01/07/2024

Q. No	Question (s)	Marks	BL	CO
1	Explain the Methods of Improving String Efficiency.	10	L2	CO2
	OR			
2	An overhead line conductor having a parabolic configuration weighs 1.925 Kg per mt of length. The area of cross section of the conductor is 2.2 cm^2 and the ultimate strength is 8000 Kg/cm^2.The supports are 600 mts apart having 15 mts difference of levels Calculate the sag from the tailor of the two supports which must be allowed so that the safety factor shall be 5.Assume that ice load is 1 kg per mt run.	10	L3	CO3
3	Derive the expression for inductor for three phase transposed overhead line.	10	L2,L3	CO4
	OR			
4	A three phase 50Hz,66KV overhead line conductors are placed in horizontal plane. The conductor diameter is 1.25 cm. If the line length is 100 km, calculate the charging current per phase.	10	L2	CO3
5	What is Corona? Explain the factors effecting Corona.	10	L2	CO3
	OR			
6	Write about different types of Underground Cables.	10	L2	CO2

K.S.R.M COLLEGE OF ENGINEERING, KADAPA (AUTONOMOUS)

Dept.: ME

Academic Year 2023– 2024

B.Tech Mid Term Examinations -June, 2024

Subject Code	**: 2021401**	**Subject: Probability, Statistics And Numerical Methods**		
Mid Term	**: II**	**Marks : 30**	**Regulation : R20 UG**	**Duration : 90 Min**
Year	**: II**	**Semester : IV**	**Section : A&B**	**Date : 27-06-2024(AN)**

Answer all questions: 3 X 10 = 30 Marks

Q. No	Question (s)	Marks	Skills	CO
1	(a)Two samples of sizes 9 and 8 give the sum of squares of deviations from their respective means equal to 160 inches square and 91 inches square respectively. Can these be regarded as drawn from the same normal population?	5	L4	CO3
	(b)The means of two random samples of sizes 9 and 7 are 196.42 and 198.82 respectively. The sums of the squares of the deviations from the mean are 26.94 and 18.73 respectively. Can the samples be considered to have been drawn from the same normal population?	5		
	OR			
2	The following table is given Eye colour in fathers / Eye colour in sons: Not light, light; Total Not light: 230, 148, 378 light: 251, 471, 622 Total: 381, 619, 1000 Test whether the colour of the son's eye is associated with that of the fathers.	10	L4	CO3
3	Determine a real root of the equation $x^3 - 2x - 5 = 0$ by regula-falsi method correct to four decimal places.	10	L5	CO4
	OR			
4	Solve 20x + y -2x = 17; 2x – 3y + 20z = 25; 3x + 20y –z = -18 by Gauss Seidel iteration method.	10	L3	CO4
5	The table gives the distances(y) in nautical miles of the visible horizon for the given heights(x) in feet above the earth's surface: x: 100, 150, 200, 250, 300, 350, 400 y: 10.63, 13.03, 15.04, 16.81, 18.42, 19.90, 21.27 Evaluate the value of y when (i) x = 160ft (ii) x =410ft.	10	L5	CO5
	OR			
6	Evaluate the polynomial f(x) by using Lagrange's formula and hence find f(3) for x: 0, 1, 2, 5 f(x): 2, 3, 12, 147	10	L5	CO5

Faculty In-charge

K.S.R.M COLLEGE OF ENGINEERING, KADAPA
(AUTONOMOUS)
B.Tech II Mid Term Examinations, June/July- 2024

Dept.: Mechanical Engineering
Academic Year 2023 – 2024

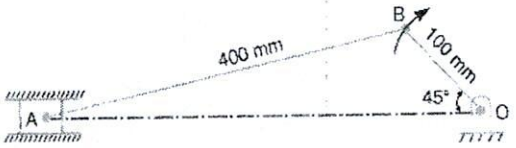
Subject Code	:	**2003403**	**Subject: APPLIED THERMODYNAMICS**		
Mid Term	:	**II**	**Marks : 30**	**Regulation : R20UG**	**Duration : 90 Min**
Year	:	**II**	**Semester : IV**	**Section : A & B**	**Date : 28-06-2024 AN**

NOTE: Answer All Questions

Q. No.		Question	Marks	BLs	CO
1.		Analyze the stages of combustion in SI engines.	10M	L4	CO2
		(OR)			
2.	(a)	What is delay period and explain the factors that affect the delay period in SI engines	5M	L2	CO2
	(b)	Explain the phenomenon of detonation in CI engines	5M		CO2
3.	(a)	Derive the expression for Rankine cycle efficiency	5M	L5	CO4
	(b)	A simple Rankine cycle works between pressure of 30 bar and 0.04 bar, the initial condition of steam being dry saturated, estimate the cycle efficiency	5M	L5	CO4
		(OR)			
4.		Explain the methods of increasing the thermal efficiency of a Rankine cycle.	5M	L2	CO4
5.	(a)	Define the term 'steam nozzle'. Explain various types of nozzles	5M	L2	CO5
	(b)	Explain briefly simple Vapour Compression Refrigeration system	5M	L2	CO5
		(OR)			
6.	(a)	What do you mean by multi-stage compression? List its advantages.	5M	L4	CO5
	(b)	Obtain analytically the critical pressure ratio in terms of the index of the expansion	5M	L5	CO5

L1 – Remembering
L2 – Understanding
L3 – Applying
L4 - Analyzing
L5 – Evaluating
L6 - Evaluating

K.S.R.M. College of Engineering, Kadapa (Autonomous) B. Tech Mid Term Examinations June– 2024							Dept.: MECH; Academic Year 2023 – 2024
Subject Code	:	2003403	Subject:	KINEMATICS OF MACHINES			
Mid Term	:	II	Marks:	30M	Regulation:	R20UG	Duration: 90 Min
Semester	:	IV	Section:	A and B			Date: 29th June 2024

Q.No	Question (s)	Marks	BL	CO
1.	Locate all the instantaneous centres of the slider crank mechanism as shown in Fig. The lengths of crank OB and connecting rod AB are 100 mm and 400 mm respectively. If the crank rotates clockwise with an angular velocity of 10 rad/s, Determine: **1.** Velocity of the slider A, and **2.** Angular velocity of the connecting rod AB. 	10	L5	CO3
	(OR)			
2.	Give a neat sketch of the straight line motion Hart mechanism. Prove that it produces an exact straight line motion.	10	L5	CO3
3.	A cam operating a knife-edged follower has the following data : (*a*) Follower moves outwards through 40 mm during 60° of cam rotation. (*b*) Follower dwells for the next 45°. (*c*) Follower returns to its original position during next 90°. (*d*) Follower dwells for the rest of the rotation. The displacement of the follower is to take place with simple harmonic motion during the outward and with Uniform velocity during return stroke. The least radius of the cam is 50 mm. Draw the profile of the cam when the axis of the follower is offset 20mm towards right from the cam axis. If the cam rotates at 300 r.p.m., determine maximum velocity and acceleration of the follower during the outward stroke and the return stroke.	10	L1	CO4
	(OR)			
4.	A cam rotating clockwise with a uniform speed is to give the roller follower of 20 mm diameter with the following motion : (*a*) Follower to move outwards through a distance of 30 mm during 120° of cam rotation ; (*b*) Follower to dwell for 60° of cam rotation ; (*c*) Follower to return to its initial position during 90° of cam rotation; and (*d*) Follower to dwell for the remaining 90° of cam rotation. The minimum radius of the cam is 45 mm and the line of stroke of the follower is offset 15 mm from the axis of the cam and the displacement of the follower is to take place with simple harmonic motion on both the outward and return strokes. Draw the cam profile.	10	L4	CO4
5.(a)	State and prove the law of gearing. Show that the involute profile satisfies the conditions for correct gearing.	8	L2	CO5
(b)	Define the following (a)Module (b) Addendum	2	L2	CO5
	(OR)			
6.	A pinion having 30 teeth drives a gear having 80 teeth. The profile of the gears is involute with 20° pressure angle, 12 mm module and 10 mm addendum. Find the length of path of contact, arc of contact and the contact ratio.	10	L4	CO2

K.S.R.M COLLEGE OF ENGINEERING, KADAPA

(AUTONOMOUS)

B.Tech. II Mid Term Examinations, June- 2024

Dept.:	**Mechanical Engineering**
Academic Year	**2023 – 2024**

Subject Code	:	**2003405**	**Subject: MACHINE TOOLS**		
Mid Term	:	**II**	**Marks: 30**	**Regulation: R20UG**	**Duration: 90 Min**
Year	:	**II**	**Semester: IV**	**Section: A & B**	**Date: 01-07-2024**

NOTE: Answer All Questions

		Marks	BL	CO
1.	Outline the operations performed on a drilling machine and explain any five operations with a neat sketch?	10M	L2	CO3
	(OR)			
2.	Explain the parts of a horizontal boring machine with a neat sketch?	10M	L2	CO3
3.	Analyze the working mechanism of universal dividing head with a neat sketch?	10M	L4	CO4
	(OR)			
4.	How are milling machines classified? Explain the parts of horizontal milling with a neat sketch?	10 M	L2	CO4
5.	Explain the wheel marking system of a grinding wheel as per indian standards?	10M	L2	CO5
	(OR)			
6.	Illustrate about centreless grinders and the feeds that are involved in centreless grinders with a neat sketch?	10M	L2	CO5

K.S.R.M COLLEGE OF ENGINEERING, KADAPA (AUTONOMOUS) B. Tech Mid Term Examinations April 2024				Dept.: ECE; Academic Year 2023 – 2024
Subject Code : 2021403	Subject Name: PROBABILITY THEORY AND STOCHASTIC PROCESSES			
Mid Term : II	Marks: 30	Regulation: R20UG	Duration: 90 Min	
Semester: IV		Section: A,B&C	Date:-27-06-2024	

Answer any **Three Questions** choosing One Question from each Unit.

All Questions carries equal marks

Q. No	Question (s)	Marks	BL	CO
	UNIT-I			
1	a) State & prove central limit theorem for equal distribution?	5	L2	CO212.3
	b) Let $f_{XY}(x,y) = x+y, for\ 0 \le x \le 1, 0 \le y \le 1$ $= 0, otherwise$ Find the conditional density of the following: (i) X given Y. (ii) Y given X.	5	L3	CO212.3
	OR			
2	a) Briefly explain about jointly Gaussian random variables.	5	L1	CO212.3
	b) Random variables X and Y have the joint density: $f_{XY}(x,y) = \frac{1}{24}$; for $0 < x < 6$ and $0 < y < 4$ $= 0$; elsewhere What is the expected value of the function $g(X,Y) = (X,Y)^2$?	5	L3	CO212.3
	UNIT-II			
3	a) Define ACF? State and prove the properties of ACF?	5	L2	CO212.4
	b) Consider random processes, $X(t) = A\cos(w_1 t + \theta)$ and $Y(t) = B\cos(w_2 t + \emptyset)$, where A, B, w_1, w_2 are constants, while θ & $\emptyset$ are statistically independent random variables uniformly distributed on $(0, 2\pi)$. Show that x(t) and y(t) are jointly WSS.	5	L4	CO212.4
	OR			
4	a) Define Random process? Explain the classification of Random Process?	5	L2	CO212.4
	b) Define Psd? State and prove the properties of Psd?	5	L2	CO212.4
	UNIT-III			
5	a) The ACF of a WSS random process X(t) is given by $R_{XX}(\tau) = A\cos(w_{0\tau})$ where A and Wo are constants. Find psd.	5	L2	CO2 12.4
	b) Define Stationary Process? Explain the classification of it?	5	L4	CO2 12.4
	OR			

6	a) Explain about white noise and coloured noise	5	L2	CO212.5
	b) Discuss about bandpass, narrow band, band limited random processes and list out the properties of it?	5	L2	CO212.5

BL – Bloom's Taxonomy Levels (1- Remember, 2- Understand, 3 – Apply, 4 – Analyze, 5 – Evaluate, 6 - Create)

K.S.R.M. College of Engineering, Kadapa (Autonomous) B. Tech Mid Term Examinations JUNE – 2024							Dept.: ECE Academic Year 2023– 2024
Subject Code	:	2004403	Subject:	Microprocessors and Microcontrollers			
Mid Term	:	II	Marks:	30M	Regulation:	R20UG	Duration: 90 Min
Semester	:	IV	Section:	A, B and C			Date: 28-06-2024(AN)

Q. No	Question (s)	Marks	BL	CO
1.	a) Explain the programmable peripheral interface 8255.	5M	L2	CO2
	b) List out the features of 8259.	5M	L2	CO1
	(OR)			
2.	a) Explain the programmable communication interface 8251.	5M	L2	CO2
	b) Write an ALP to generate triangular waveform using DAC?	5M	L2	CO1
3.	a) Explain the architecture of 8051 microcontroller with a neat block diagram	5M	L2	CO2
	b) Design an interface 32Kbytes of ROM and 16Kbytes of RAM to the 8051 microcontroller.	5M	L3	CO5
	(OR)			
4.	a) List out the features of the 8051 microcontroller.	5M	L2	CO1
	b) Write a program to generate a delay of 1ms using Timer0. Assume that the oscillator frequency is 12 MHZ.	5M	L3	CO4
5.	a) What are the various registers in ARM? Explain?	5M	L2	CO1
	b) Explain Single register load-store instructions of ARM?	5M	L3	CO2
	(OR)			
6.	a) Explain ARM design philosophy.	05M	L2	CO1
	b) Compare the differences between RISC and CISC.	05M	L2	CO1

K.S.R.M COLLEGE OF ENGINEERING, KADAPA (AUTONOMOUS) Mid-Term Examinations June/July- 2024					Dept.: ECE Academic Year 2023 – 2024
Subject Code	:	2004404	Subject: EM WAVES AND TRANSMISSION LINES		
Mid Term	:	II	Marks: 30	Regulation: R20	Duration: 90 Min
Year	:	II	Semester: IV	Sections: A, B&C	Date: 29.06.2024 AN

Note:Answer all questions choosing ***one***from each unit

Q. No	Question (s)	Marks	BL	CO
1	Derive the boundary conditions for (i) Dielectric – Dielectric interface (ii) Conductor-Dielectric Interface	5 5	L3 L3	CO 3
	OR			
2	a). Derive all the relations between E & H b).Derive the wave equations for Dielectric medium.	5 5	L3	CO 4
3	a) Define Poynting vector. State and prove Poynting Theorem b) Evaluate the velocity of propagation, attenuation constant, phaseconstant and intrinsic impedance for a forward-traveling wave in a large block of copper. (σ =5.8X10^7 S/m,ε_r=μ_r=1).	5 5	L3 L5	CO 4
	OR			
4	a). Explain the Oblique Incidences on a perfect conductor b) Demonstrate about critical angle.	6 4	L3	CO 4
5	a) Derive the transmission line equations for voltage and currents. b) Define Single stub matching.	7 3	L3	CO5
	OR			
6	a). Demonstrate the construction of Smith-Chart. b).Describe the lossless and distortion-less transmission lines.	5 5	L2 L2	CO 5

Note:
L1-Remembering

L2-Understanding

L3-Applying

L4- Analyzing

L5-Evaluating

L6-creating

K.S.R.M COLLEGE OF ENGINEERING, KADAPA (AUTONOMOUS) Mid Term Examinations JUNE-2024					Dept. ECE Academic Year 2023 – 2024
Subject Code	:	2004405	Subject: Linear and Digital IC Applications		
Mid Term	:	II	Marks : 30	Regulation : R20	Duration : 90 Min
Year	:	II	Semester : IV	Sections : A,B&C	Date : 01.07.2024 AN

Note:Answer all questions choosing *one* from each unit

Q. No	Question (s)	Marks	CO	Blooms Level
1	a) Derive the expression for the time interval of output pulse of a 555 based monostable multivibrator. **(5M)** b) Derive the expression for count N and explain the operation of Dual slope integration type ADC. **(5M)**	10	CO5 CO3	L4 L4
	OR			
2	a) What is PLL, explain its principle of operation and description of individual blocks. **(5M)** b) Define DAC and write about the design of Weighted resistor DAC. **(5M)**	10	CO3 CO3	L1 L1
3	Explain in detail CMOS steady state electrical behavior. **(10M)**	10	CO5	L5
	OR			
4	a) Explain the operation of a CMOS inverter circuit with the help of truth table. **(5M)** b) What is the importance of CMOS logic families; explain about 74HC and 74HCT logic families? **(5M)**	10	CO5 CO5	L5 L2
5	a) List the operators used in the verilog programming. **(5M)** b) With the help of verilog code, design D Flip/flop and verify using its truth table. **(5M)**	10	CO4	L1 L4
	OR			
6	Develop a Verilog code for a Decade UP/DOWN counter. **(10M)**	10	CO4	L3

K.S.R.M. College of Engineering, Kadapa (Autonomous) B. Tech Mid Term Examinations June – 2024							Dept.:	CSE
							Academic Year	2023 – 2024
Subject Code	:	2005403	Subject:	PRINCIPLES OF OPERATING SYSTEMS				
Mid Term	:	II	Marks:	30M	Regulation:	R20UG	Duration: 90 Min	
Semester	:	IV	Section:	All			Date: 26th June 2024	

Q. No	Question (s)	Marks	BL	CO
1.	Explain paging model of Logical memory and Physical memory with an example.	10M	L3	CO3
	(OR)			
2.	Differentiate Sequential Access and Direct Access of a file with an example.	10M	L2	CO4
3.	Explain Access matrix with copyrights	10M	L1	CO5
	(OR)			
4.	Consider a system with a page frame capacity of 3 and the following page reference string: 3 2 1 3 4 1 6 2 4 3 4 2 1 4 5 2 1 3 4 Apply the LRU (Least Recently Used) page replacement algorithm and determine the number of page faults.	10M	L5	CO3
5.	Explain User Authentication.	10M	L1	CO5
	(OR)			
6.	Consider a system with four resource types (A, B, C, D) and five processes (P0, P1, P2, P3, P4). The Allocated, maximum and available resource process are as follows:	10M	L4	CO4

Process	Allocation				Max				Available			
	A	B	C	D	A	B	C	D	A	B	C	D
P0	0	0	1	2	0	0	1	2	1	5	2	0
P1	1	0	0	0	1	7	5	0				
P2	1	3	5	4	2	3	5	6				
P3	0	6	3	2	0	6	5	2				
P4	0	0	1	4	0	6	5	6				

Check whether the above processes are in safe state. If yes write down the safe sequence. Write down how many instances of each resource is available in the system.

K.S.R.M COLLEGE OF ENGINEERING, KADAPA (AUTONOMOUS) B.Tech Mid Term Examinations June 2024				Dept.: CSE Academic Year 2023– 2024
Subject Code : 2005402	Subject Name: COMPUTER ORGANIZATION			
Mid Term : II	Marks: 30	Regulation: R20 UG	Duration: 90 Min	
Year : II	Semester: IV	Section: A, B & C	Date: 27-06-2024	

Answer any **Three Questions** choosing one Question from each Unit.

All Questions carries equal marks

Q. No	Question (s)	Marks	BL	CO
	UNIT-III			
1	Discuss in detail about Memory Reference Instructions (MRI).	10	2	3
	OR			
2	Define addressing mode and discuss various addressing modes in detail.	10	1	3
	UNIT-IV			
3	Explain about the following a. Microprogram Sequencer b. Microprogrammed Control Unit	10	2	3
	OR			
4	Discuss about the following a. Instruction Pipeline b. Virtual Memory	10	2	4
	UNIT-V			
5	What is Cache Memory? Discuss various mapping procedures.	10	4	4
	OR			
6	Explain about the following a. Handshaking b. DMA Transfer	10	2	5

BL – Bloom's Taxonomy Levels (1- Remembering, 2- Understanding, 3 – Applying, 4 – Analyzing, 5 – Evaluating, 6 - Creating)

CO – Course Outcomes

Note: - Please mention only Number in **BL and CO**

K.S.R.M. College of Engineering, Kadapa (Autonomous) B. Tech Mid Term Examinations JUNE – 2024							Dept.: CSE; Academic Year 2023– 2024
Subject Code	:	2004403	Subject:	Microprocessors and Microcontrollers			
Mid Term	:	II	Marks:	30M	Regulation:	R20UG	Duration: 90 Min
Semester	:	IV	Section:	A, B and C			Date: 28-06-2024

Q. No	Question (s)	Marks	BL	CO
1.	a) Explain the programmable peripheral interface 8255.	7M	L2	CO2
	b) List out the features of 8259.	3M	L2	CO1
	(OR)			
2.	a) Explain the programmable communication interface 8251.	5M	L2	CO2
	b) Briefly explain about DMA controller.	5M	L2	CO1
3.	a) Explain the architecture of 8051 microcontroller with a neat block diagram	7M	L2	CO2
	b) List out the addressing modes of 8051 microcontroller & explain any two.	3M	L3	CO5
	(OR)			
4.	a) List out the features of the 8051 microcontrollers.	5M	L2	CO1
	b) Explain the interrupt structure of 8051 microcontroller.	5M	L3	CO4
5.	a) What are the various registers in ARM? Explain?	5M	L2	CO1
	b) Explain Single register load-store instructions of ARM?	5M	L3	CO2
	(OR)			
6.	a) Explain ARM design philosophy.	5M	L2	CO1
	b) Compare the differences between RISC and CISC.	5M	L2	CO1

K.S.R.M COLLEGE OF ENGINEERING, KADAPA

(AUTONOMOUS)

B.Tech Mid Term Examinations June 2024

Dept.: CSE

Academic Year 2023– 2024

Subject Code	**: 2005404**	**Subject: Digital Logic Circuits & Design**		
Mid Term	**: II**	**Marks: 30**	**Regulation: R20 UG**	**Duration: 90 Min**
Year	**: II**	**Semester: IV**	**Section: A, B & C**	**Date: 29/06/2024**

Q. No		Question (s)	Marks	BL	CO
1	a.	With a neat diagram explain operation of 4-bit magnitude comparator.	5	L2,L3	CO3
	b.	Implement full adder circuit with one 3x8 decoder and two OR gates.	5	L4	
		OR			
2	a.	Explain the significance of Multiplexer. Construct the following Boolean function by using 8X1 multiplexer. $F(A,B,C,D) = \sum m(0,1,2,4,6,9,12,14)$	5	L4	CO3
	b.	Explain Priority Encoder.	5		
3		What is sequential circuit? Construct the characteristic table, excitation table, and characteristic equation for SR, D, JK and T flip flops.	10	L4	CO4
		OR			
4	a.	Draw and explain Mealy state machine with an example.	5	L4	CO4
	b.	Design a synchronous sequential circuit that detects a sequence of three or more consecutive 1's in a string of bits coming through an input line.	5	L6	
5	a.	Define register? Explain about bidirectional shift registers?	5	L1,L2	CO5
	b.	Draw and explain the working of 3-bit synchronous up/down counter.	5	L4	
		OR			
6		Explain about PLA? Construct the PLA for the following Boolean functions: $F1(A,B,C) = \sum m(0,1,2,4)$ $F2(A,B,C) = \sum m(0,5,6,7)$	10	L6	CO5

L1-Remembering L2-Uerstanding L3-Applying
L4- Analyzing L5-Evaluating L6-Creating

K.S.R.M COLLEGE OF ENGINEERING, KADAPA (AUTONOMOUS) B.Tech., Mid Term Examinations June/July -2024					Dept.: CSE
					Academic Year 2023 – 2024
Course Code	:	2021405	Subject: PROBABILITY THEORY AND STATISTICAL METHODS		
Mid Term	:	II	Marks : 30	Regulation : R20 UG	Duration : 90 Minutes
Year	:	II	Semester : IV	Section : A,B & C	Date : 01-07-2024

Answer ALL the questions.
All Questions carry Equal Marks **3 X 10 = 30 Marks**

Q. No	Question (s)	Marks	BL	CO
1	Explain: (i) Null Hypothesis (ii) Alternative Hypothesis (iii) Critical region (iv) Level of Significance (v) Types of Error.	10M	L2	CO3
	OR			
2	In a city A, 20% of a random sample of 900 school boys had a certain slight physical defect. In another city B, 18.5% of a random sample of 1600 school boys had the same defect. Is the difference between the proportions significant at 0.05 level of significance.	10M	L4	CO3
3	The nicotine contents in milligrams in two samples of tobacco were found to be as follows: SampleA: 24, 27, 26, 21, 25, -- SampleB: 27, 30, 28, 31, 22, 36 Can it be said that the two samples have come from the same normal Population.	10M	L4	CO4
	OR			
4	A pair of dice are thrown 360 times and the frequency of each sum is indicated below: Sum: 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 Frequency: 8, 24, 35, 37, 44, 65, 51, 42, 26, 14, 14 Would you say that the dice are fair on the basis of the Chi-Square test at 0.05 level of significance?	10M	L4	CO4
5	Each telephone call is considering a product and the time to answer the call indicates the quality of service. Five calls chosen at random and times recorded at a busy hour. Results for the last 10 hours shown below (in seconds). Sample no.: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 Mean: 20, 34, 45, 39, 26, 29, 13, 34, 37, 23 Range: 13, 9, 15, 5, 20, 17, 21, 11, 10, 10 Construct $\bar{X}$ and R charts and determine whether the product is under control.	10M	L3	CO5
	OR			

6	An inspection of 10 samples of size 400 each from 10 lots revealed the following defectives units Calculate the control limits for the number of defective units. Plot the control limits and the observations and state whether the process is under control or not.	10M	L3	CO5

Sample No.	1	2	3	4	5	6	7	8	9	10
No. of defectives units	17	15	14	26	9	4	19	12	9	15

K.S.R.M COLLEGE OF ENGINEERING, KADAPA

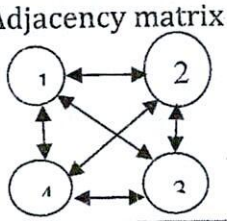
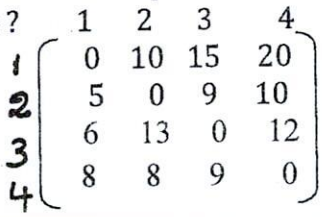
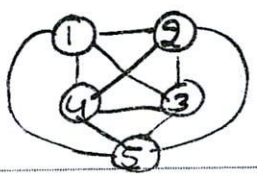
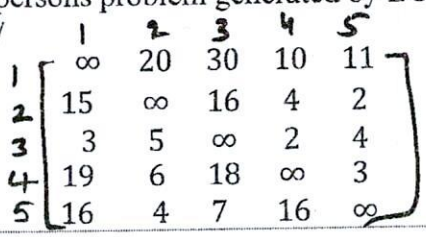
(AUTONOMOUS)

B.Tech Mid Term Examinations JULY 2024

Dept.: AIML

Academic Year 2023– 2024

Subject Code	**: 2039402**	**Subject: Design and Analysis of Algorithms**		
Mid Term	**: II**	**Marks : 30**	**Regulation : R20 UG**	**Duration : 90 Min**
Year	**: II**	**Semester : IV**	**Section : A**	**Date :27/6/24**

Q. No	Question (s)	Marks	BL	CO
1	Construct OBST using the following instance n=4 and keys=(10,20,30,40) ,p[1:4]=(3,3,1,1)and q(0:3)=(2,3,1,1,1)?	10	A	CO3
	OR			
2	Calculate the minimum cost path of the Travelling Sales person problem with the help of following Graph & Adjacency matrix ?  	10	U	CO3
3	Write the algorithm for Bi-connected components with the help of an example?	10	Az	CO4
	OR			
4	Write the algorithm for Backtracking general method?Draw the state space of Sum of Subsets with an instance w={5,10,12,13,15,18} ,m=30 ,n=6using Backtrack approach?	10	A	CO4
5	Solve the Travelling sales persons problem generated by LC branch and bound solution/  	10	A	CO5
	OR			
6	a)Explain NP-Complete and NP-Hard class problems with examples?	5	U	CO5
	b)Write the COOK'S theorem with an example?	5		

Faculty In-charge

- -Remembering
- U-Understanding
- A-Applying
- Az- Analyzing
- E-Evaluating

K.S.R.M. College of Engineering, Kadapa (Autonomous) B.Tech. Mid Term Examinations June/July – 2024							Dept.: AI&ML Academic Year 2023 – 2024
Subject Code	:	2039403	Subject:	OPERATING SYSTEMS			
Mid Term	:	II	Marks:	30M	Regulation:	R20UG	Duration: 90 Min
Semester	:	IV	Section:	---			Date: 28th June 2024

Q. No	Question (s)	Marks	BL	CO
1.	A) Explain demand paging in detail.	5M	L2	CO3
	B) Explain FIFO, Optimal and LRU page replacement algorithms. Consider page reference string 7, 0, 1, 2, 0, 3, 0, 4, 2, 3, 0, 3, 2, 1, 2, 0, 1, 7, 0, 1 and 3 frames in main memory. Find the number of page faults for the page replacement algorithms FIFO, Optimal and LRU.	5M	L3	CO3
	(OR)			
2.	A) Explain about demand paging	5M	L2	CO3
	B) Write short notes on – first fit, best fit, worst fit with suitable examples.	5M	L2	CO3
3.	A) What is a deadlock? What are the necessary and sufficient conditions for the dead lock?	5M	L2	CO4
	B) Explain different file accessing methods.	5M	L2	CO4
	(OR)			
4.	Explain about Banker's algorithm with suitable example.	10M	L3	CO4
5.	A) Explain about directory structure	5M	L2	CO4
	B) Write short notes on swapping.	5M	L1	CO3
	(OR)			
6.	What is access matrix. Explain about implementation of access matrix.	10M	L2	CO5

DAC

HOD

K.S.R.M. College of Engineering, Kadapa (Autonomous) B. Tech Mid Term Examinations June – 2024							Dept: AIML; Academic Year: 2023 – 2024
Subject Code	:	2039404	Subject:	DATA SCIENCE			
Mid Term	:	II	Marks:	30 M	Regulation:	R20UG	Duration: 90 Min
Semester	:	IV	Section:	-			Date:29.06.2024

Q. No	Question (s)	Marks	BL	CO
1.	A) Briefly explain about following terms. a) Data Frame b) Matrix	5M	L2	CO4
	B) Write installation steps of R-software	5M	L1	CO4
	(OR)			
2.	Describe about command packages in R	10M	L2	CO4
3.	Explain about following terms. a) Vector b) List	10M	L1	CO4
	(OR)			
4.	Explain different terminology from Social Networks.	10M	L1	CO5
5.	A) How to write a technical journalism and explain history on Data Journalism	5M	L2	CO5
	B) Explain the background on Social Network Analysis from a Statistical point of view	5M	L3	CO5
	(OR)			
6.	How Social Network Analysis was implemented at Morning Analystics explain in detail.	10M	L2	CO5

K.S.R.M COLLEGE OF ENGINEERING, KADAPA (AUTONOMOUS) B. Tech Mid Term Examinations June/July 2024					Dept.: H&S; Academic Year 2023 – 2024
Subject Code	:	20MC409	Subject Name: Constitution of India		
Mid Term	:	II	Marks: 30	Regulation: R20UG	Duration: 90 Min
Semester: IV				Branch: AI & ML	Date: 02-07-2024

Answer **Three Questions** choosing One Question from each Part
All Questions carry equal marks

Q. No.	Questions	Marks	BL	Cos
1	Explain the Powers and Functions of Chief Minister?	10	L2	CO3
	OR			
2	Explain the following: A) Functions of State Council of Ministers B) Role of Governor in the State	 05 05	 L2 L2	 CO3 CO3
3	Discuss the functions & powers of municipal corporation?	10	L2	CO4
	OR			
4	Explain Role and Responsibilities of District Collector?	10	L2	CO4
5	Describe the features and Functions of the Election Commission of India?	10	L2	CO5
	OR			
6	Write about the following: A) Role of National Commission for OBC B) National Commission for Women Welfare	 05 05	 L2 L2	 CO5 CO5

BL – Bloom's Taxonomy Levels
1- Remembering, 2- Understanding, 3 – Applying, 4 – Analysing, 5 – Evaluating, 6 - Creating

K.S.R.M. College of Engineering, Kadapa (Autonomous) B.Tech. Mid Term Examinations May-2024							Dept.: AI&ML Academic Year 2023 – 2024
Subject Code	:	2039405	Subject:	Business Intelligence			
Mid Term	:	II	Marks:	30M	Regulation:	R20UG	Duration: 90 Min
Semester	:	IV	Section:	---			Date: 06-05-2024

Q. No	Question (s)	Marks	BL	CO
1.	Define IBM Cognos and explain its key features?	10	L2	CO3
	(OR)			
2.	Explain IBM Cognos Workspace and its features?	10	L2	CO3
3.	What is Dashboard in IBM Cognos and how it helps in Business operations?	10	L3	CO4
	(OR)			
4.	Explain the steps involved in creating IBM Cognos report right from the start?	10	L2	CO4
5.	List out the Popular Data Visualization tools that you know and explain some of the stand out features of IBM Cognos?	10	L3	CO5
	(OR)			
6.	Explain Reports and Dashboard in IBM Cognos, when to choose and why?	10	L3	CO5

Website