Q.P. Code: 1801802

SET - 1

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

B. Tech. VIII Semester (R18UG) Regular & Supple. Examinations of May – 2023

SUB: Repairs & Rehabilitation of Structures (CE)

Time: 3 Hours **Max. Marks: 70**

Answer any FIVE Questions choosing one question from each unit.
All questions carry Equal Marks.

			M	CO	BL
		UNIT - I			
1.	(a)	What is deterioration? Explain its mechanism.	7M	CO1	L2
	(b)	Describe Chemical deterioration due to corrosion of reinforcement.	7M	CO1	L1
		(OR)			
2.		Define Corrosion? Explain in detail about any two methods of corrosion protection in concrete structures?	14M	CO1	L2
		UNIT – II			
3.	(a)	Explain the terms shotcrete and underpinning?	7M	CO2	L1
	(b)	What are Different types of repair materials used? Explain	7M	CO2	L2
		(OR)			
4.	(a)	What is meant by geniting. How does it influence in Repairing Materials	7M	CO2	L3
	(b)	What are the underwater concreting methods? Explain.	7M	CO2	L2
		UNIT – III			
5.		Describe the testing systems involved in damage assessment and explain in detail about any one of the testing systems.	14M	CO3	L3
		(OR)			
6.	(a)	What are the objectives involving in conditional assessment procedure?	7M	CO3	L2
	(b)	Explain penetration resistance test method in concrete structures?	7M	CO3	L2
		UNIT – IV			
7.	(a)	Differentiate Retrofitting and Rehabilitation	7M	CO4	L1
	(b)	Discuss briefly the design philosophy of strengthening structural elements.	7M	CO4	L2
		(OR)			
8.		Explain the need of enhancing the seismic resistance of Concrete structures? Write in detail about elastomeric dampers?	14M	CO4	L2
		UNIT-V			
9.	(a)	Explain the challenges in implementation of structural health monitoring systems	7M	CO5	L2
	(b)	What is structural health monitoring and what are the objectives of monitoring the health of a structure	7M	CO5	L2
		(OR)			
10.		Define maintenance? Discuss about facts and importance of maintenance need for retrofitting	14M	CO5	L3

Q.P. Code: 1801803

SET - 1

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

B. Tech. VIII Semester (R18UG) Regular & Supple. Examinations of May – 2023

SUB: Bridge Engineering (CE)

Time: 3 Hours **Max. Marks: 70**

Answer any FIVE Questions choosing one question from each unit.

All questions carry Equal Marks.

(Use of IS and IRC codes are permitted in the examination hall)

			M	CO	BL
		UNIT - I			
1.	(a)	What are the different types of live loads consider in the design of RCC bridges?	7M	CO1	L1
	(b)	Explain design principles of rocker bearing with example.	7M	CO1	L2
		(OR)			
2.		What are the different loads acting on the Bridge structure? Explain clearly	14M	CO1	L1
		UNIT – II			
3.		Design a box culvert having inside dimensions 3m x 3m. The culvert is subjected to a dead load of 14000 N/m2 and a live load of IRC class AA tracked vehicles. The unit weight of soil to be 18000 N/m3, angle of repose of soil is 300 . use M 25 concrete and Fe 415 steel .The road width is 7.5 m, span is 3.3 m. Dead load and live loads acting from outside ; while no water pressure from inside. Calculate the final moments by MD Method.	14M	CO2	L6
		(OR)			
4.		Explain different loading cases are to be considered in the design of box culvert	14M	CO2	L2
		UNIT – III			
5.		Design a RCC slab culvert for NH two lane with foot path of 1.5 m on either side with a clear span 6.5 m and width of bearings 450 mm. The materials used for deck slab is M25 and Fe500. Design the slab culvert for class AA tracked vehicle	14M	CO3	L6
		(OR)			
6.		A road bridge deck consists of a reinforced concrete slab continuous over tee beams spaced at 2 m centers and cross girders spaced at 5 m centers. Thickness of wearing coat = 100 mm. Type of loading is IRC class AA or A whichever gives the worst effect. Using M20 grade concrete and Fe-415 grade HYSD bars, draw the cross section of the deck slab over two spans showing reinforcement details.	14M	CO3	L6
		UNIT – IV			
7.		Design a RCC T-beam girder bridge for the following data: Clear width of road way = 7.5 m Span (C/C of bearings) = 12 m Live load = IRC class AA tracked vehicle Average thickness of wearing coat = 100 mm M-25 grade concrete and Fe-500 grade steel are used.	14M	CO4	L6
		(OR)			
8.		What are rational methods for calculating live loads among the intermediate and end longitudinal girders of a T- Beam bridge? Explain clearly by neat sketches.	14M	CO4	L2
		UNIT-V			
9.	(a)	Explain different types of foundations are adopted for bridges by using neat sketches	7M	CO5	L2
	(b)	Explain various types of piers with neat diagrams	7M	CO5	L2
		(OR)			
10.	(a)	How to check stability of abutments? Explain.	7M	CO5	L2
	(b)	What are the different types of piers used for bridges and explain them with neat sketches?	7M	CO5	L2

Q.P. Code: 1801806 | SET - 1

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

B. Tech. VIII Semester (R18UG) Regular & Supple. Examinations of May – 2023

SUB: Urban Transportation Planning (CE)

Time: 3 Hours **Max. Marks: 70**

Answer any FIVE Questions choosing one question from each unit.
All questions carry Equal Marks.

			M	CO	BL
		UNIT – I			
1.	(a)	Explain the problems in the urban transportation in the present scenario?	7M	CO1	L2
	(b)	Describe the transportation planning process with the help of a flow chart?	7M	CO1	L2
		(OR)			
2.	(a)	What are the basic elements of transportation planning?	7M	CO1	L1
	(b)	Explain the need for travel demand forecasting?	7M	CO1	L2
		UNIT – II			
3.	(a)	Define zone? Mention the different factors considered in dividing the whole area into zones?	7M	CO2	L1
	(b)	Explain the inventory of transportation facilities?	7M	CO2	L2
		(OR)			
4.		Classify the types of transport surveys? Explain in detail?	14M	CO2	L2
		UNIT – III			
5.	(a)	What is trip generation? What are the factors affecting trip generation?	7M	CO3	L1
	(b)	What is trip distribution? Explain average factor method and its disadvantages?	7M	CO3	L1
		(OR)			
6.		Estimate the future trip distribution by Furness method from the following data:	14M	CO3	L5

O \ D	1	2	3	4	Future Trips
1	10	20	15	18	140
2	21	16	17	14	150
3	30	21	25	27	200
4	10	9	16	13	100
Future Trips	150	120	180	160	

		UNIT – IV			
7.	(a)	Explain the concept of Logit models for mode choice analysis?	7M	CO4	L1
	(b)	Discuss the zonal regression models in choice analysis?	7M	CO4	L2
		(OR)			
8.	(a)	What are the applications of model split model?	7M	CO4	L1
	(b)	Differentiate between trip end modal split model and trip interchange modal split model?	7M	CO4	L4
		UNIT-V			
9.	(a)	Define: (i) Corridor (ii) Segment (iii) Point (iv) Segment Capacity (v) Screen line (vi) Corridor traffic study (vi) Count	7M	CO5	L1
	(b)	Explain the rail based transit systems in detail?	7M	CO5	L2
		(OR)			
10.	(a)	Write a short note on Urban mass rapid transit system?	7M	CO5	L1
	(b)	What are the parameters to be considered in corridor identification?	7M	CO5	L1

Q.P. Code: 1802801

SET - 1

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

B. Tech. VIII Semester (R18UG) Regular & Supple. Examinations of May – 2023

SUB: Electrical Distribution Systems (EEE)

Time: 3 Hours **Max. Marks: 70**

Answer any FIVE Questions choosing one question from each unit.
All questions carry Equal Marks.

			M	CO	BL
		UNIT - I			
1.	(a)	Explain the following terms: (i) Maximum demand. (ii) Coincident demand. (iii) Contribution factor	7M	CO1	L2
	(b)	What is meant by load factor and loss factor? Obtain the relationship between load factor and loss factor.	7M	CO1	L1
		(OR)			
2.		Explain the characteristics of residential, Agricultural, industrial and commercial loads with diagram.	14M	CO1	L2
		UNIT – II			
3.	(a)	Briefly discuss different types of distribution systems.	7M	CO2	L2
	(b)	Explain the requirements and design features of Distribution systems.	7M	CO2	L2
		(OR)			
4.	(a)	Compare the radial and loop type primary feeders	7M	CO2	L3
	(b)	Explain the voltage drop of uniformly loaded distributor fed at both ends with equal voltages.	7M	CO2	L2
		UNIT – III			
5.	(a)	Draw the Substation layout by showing the location of all substation equipment.	7M	CO3	L3
	(b)	Discuss the benefits derived through optimal location of substations.	7M	CO3	L4
		(OR)			
6.	(a)	Explain how to decide the rating of a distribution substation.	7M	CO3	L2
	(b)	Explain the merits and demerits of GIS over AIS.	7M	CO3	L2
		UNIT – IV			
7.	(a)	Derive the expression for Voltage Drop and Power Loss in Radial Lines.	7M	CO4	L4
	(b)	Discuss the causes for low power factor in power system.	7M	CO4	L4
		(OR)			
8.	(a)	Explain the role of shunt and series capacitors in power factor correction.	7M	CO4	L2
	(b)	A 3-phase, 5 kW inductions motor has a power factor of 0.85 lagging. A bank of capacitor is connected in delta across the supply terminal and power factor raised to 0.95 lagging. Determine the kVAR rating of the capacitor in each phase.	7M	CO4	L4
		UNIT-V			
9.	(a)	Explain the different types of Distribution System Planning Models.	7M	CO5	L2
	(b)	Explain about Supervisory Control and Data Acquisition?	7M	CO5	L2
		(OR)			
10.	(a)	Explain about Geographical Information System(GIS).	7M	CO5	L2
	(b)	Explain about Automatic Meter Reading(AMR).	7M	CO5	L2

Q.P. Code: 1803801

SET - 1

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

B. Tech. VIII Semester (R18UG) Regular & Supple. Examinations of May – 2023

SUB: Refrigeration and Air Conditioning (ME)

Time: 3 Hours **Max. Marks: 70**

Answer any FIVE Questions choosing one question from each unit.
All questions carry Equal Marks.

			M	CO	BL
		UNIT - I			
1.	(a)	Discuss various refrigeration systems with neat sketches.	7M	CO1	L1
	(b)	Derive the expression for air refrigeration system working on reversed Carnot cycle.	7M	CO1	L2
		(OR)			
2.	(a)	Differentiate between open and dense air refrigeration system.	7M	CO1	L1
	(b)	Draw the schematic of a boot-strap cycle of air refrigeration system, and show the cycle on T-s diagram.	7M	CO1	L3
		UNIT – II			
3.	(a)	Explain the different methods of improving the COP of simple vapour compression refrigeration cycle with T-s and p-h diagrams.	7M	CO2	L2
	(b)	A vapour compression refrigeration cycle works between temperature limits of 25^0 C and -10^0 C. The vapour at the end of isentropic compression is just dry. Assuming there is no sub-cooling, find the COP of the system. Also find the capacity of refrigerator, if mass flow rate of refrigerant is 5 kg/min. The properties of refrigerant are as follows:	7M	CO2	L3

Temperature (K)	Liquid Enthalpy (kJ/kg) h_f	Vapour Enthalpy (kJ/kg) h_g	Liquid Entropy (kJ/kg K) S_f
298	298.9	1465.8	1.12
263	135.3	1433.1	0.54

		(OR)			
4.	(a)	Explain the working principle of NH_3 -Water absorption refrigeration system with neat sketch.	7M	CO2	L1
	(b)	Describe the Lithium – Bromide absorption refrigeration system with suitable diagram.	7M	CO2	L2
		UNIT – III			
5.	(a)	Explain the merits and demerits of thermo electric refrigeration system and derive an expression of its COP.	7M	CO3	L2
	(b)	Derive an expression for finding out the mass of motive steam required per kg of water vapour produced.	7M	CO3	L3
		(OR)			
6.	(a)	What are the desirable properties of an ideal refrigerant?	7M	CO3	L1
	(b)	Suggest substitutes for CFC Refrigerants from the point of Ozone Depletion and Global Warming.	7M	CO3	L2
		UNIT – IV			
7.	(a)	Explain the procedure to draw a grand sensible heat factor line on a psychrometric chart.	7M	CO4	L2

	(b)	An air conditioning plant handles 4000 m^3/min of dry air which contains 20% fresh air at 39^0C DBT and 20^0C WBT and 80% recirculated air at 24^0C DBT and 50% Relative Humidity. Air leaves the cooling coil at 12 ^{0}C and saturated condition. Find: (i) Total cooling load on the coil and (ii) Room Heat gain.	7M	CO4	L3
		(OR)			
8.	(a)	Explain the following: i) Bypass factor, ii) Effective sensible heat factor. Discuss their importance in designing air conditioning system.	7M	CO4	L2
	(b)	With a neat sketch explain the working of winter air conditioning system.	7M	CO4	L2
		UNIT-V			
9.	(a)	Define the ``human comfort`` and explain the factors which affect human comfort.	7M	CO5	L2
	(b)	What are Psychological hazards applied to human comfort? Discuss.	7M	CO5	L2
		(OR)			
10.	(a)	Explain the concept of effective room sensible heat factor with neat diagram.	7M	CO5	L2
	(b)	A small office hall of 25 persons capacity is provided with summer air conditioning system with the following data: Outside conditions = 34^0C DBT and 28^0C WBT, inside conditions = 24^0C DBT and 50 % RH, volume of air supplied = 0.4 m^3/min/person, sensible heat load in room = 125600 kJ/hr, latent heat load in the room = 42000 kJ/hr. Find the sensible heat factor of the plant.	7M	CO5	L3

Q.P. Code: 1804801

SET - 1

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

B. Tech. VIII Semester (R18UG) Regular & Supple. Examinations of May – 2023

SUB: Wireless Communications (ECE)

Time: 3 Hours | Max. Marks: 70

Answer any FIVE Questions choosing one question from each unit.
All questions carry Equal Marks.

			M	CO	BL
		UNIT - I			
1.	(a)	Explain in detail the BER of wireless communication systems?	7M	CO1	L2
	(b)	Examine diversity Order in Wireless Communication.?	7M	CO1	L4
		(OR)			
2.	(a)	What is fading? Explain small-scale fading and large-scale fading?	7M	CO1	L2
	(b)	Define diversity and explain diversity order?	7M	CO1	L1
		UNIT – II			
3.	(a)	Define UWB and discuss the features and wireless channels of UWB?	7M	CO2	L1
	(b)	Discuss the Bit-Error Rate Performance of UWB?	7M	CO2	L1
		(OR)			
4.	(a)	Explain the Coherence Bandwidth of the Wireless Channel?	7M	CO2	L2
	(b)	Explain UWB Data Modulation?	7M	CO2	L2
		UNIT – III			
5.	(a)	Write short notes on Walsh codes in CDMA.	7M	CO3	L1
	(b)	Sketch the block diagram and clearly explain the RAKE receiver used in CDMA.	7M	CO3	L6
		(OR)			
6.	(a)	What is hand-off, and discuss different types of handover techniques in cellular mobile communications?	7M	CO3	L1
	(b)	Explain CDMA Receiver Synchronization?	7M	CO3	L2
		UNIT – IV			
7.		Derive an expression for optimal power allocation of MIMO SVD and Eigen modes of the channel to achieve maximum capacity?	14M	CO4	L4
		(OR)L			
8.	(a)	Explain Frequency and Timing Offset Issues in OFDM?	7M	CO4	L2
	(b)	Explain MIMO Spatial Multiplexing?	7M	CO4	L2
		UNIT-V			
9.	(a)	Discuss 3G and 4G wireless standards?	7M	CO5	L6
	(b)	Explain WCDMA?	7M	CO5	L2
		(OR)			
10.	(a)	Sketch and explain the architecture of GSM.	7M	CO5	L6
	(b)	List the features, Advantages and Disadvantages of LTE.	7M	CO5	L4

Q.P. Code: 1805802

SET - 1

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

B. Tech. VIII Semester (R18UG) Regular & Supple. Examinations of MAY – 2023

SUB: Object Oriented Analysis & Design (CSE)

Time: 3 Hours **Max. Marks: 70**

Answer any FIVE Questions choosing one question from each unit.
All questions carry Equal Marks.

			M	CO	BL
		UNIT - I			
1.	(a)	What is the importance of modeling in object oriented and explain modeling principles.	7M	CO1	L1
	(b)	Why you need modularity? Explain with an example.	7M	CO1	L2
		(OR)			
2.	(a)	What is a nature of Class and Object? How to identify Classes and Objects with suitable Examples.	7M	CO1	L1
	(b)	Differences between UML and OOAD?	7M	CO1	L3
		UNIT – II			
3.	(a)	Mention different types of class relationships with examples?	7M	CO2	L2
	(b)	How do you identify classes and objects using CRC, behavior and domain analysis?	7M	CO2	L2
		(OR)			
4.	(a)	Briefly discuss about how you model the distribution of responsibilities in a system with examples.	7M	CO2	L2
	(b)	Why do we need package diagram in a project? Explain with an example	7M	CO2	L2
		UNIT – III			
5.		Describe the use case model for online exam	14M	CO3	L2
		(OR)			
6.		Demonstrate the Interaction Diagram notations and explain it?	14M	CO3	L3
		UNIT – IV			
7.		Define Event, State and Transition and discuss preparation of State chart diagram with example?	14M	CO4	L1
		(OR)			
8.		Define following terms: a) Events and signals b) Process and Thread c) Time and space	14M	CO4	L1
		UNIT-V			
9.		Compare sequence versus collaboration diagram with suitable example	14M	CO5	L4
		(OR)			
10.	(a)	Compare component diagram and deployment diagram with an example	7M	CO5	L4
	(b)	Draw the diagrams for banking application	7M	CO5	L4

Q.P. Code: 18OE107 | SET - 1

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

B. Tech. VIII Semester (R18UG) Regular & Supple. Examinations of May – 2023

SUB: Disaster Preparedness (OE)

Time: 3 Hours **Max. Marks: 70**

Answer any FIVE Questions choosing one question from each unit.

All questions carry Equal Marks.

		M	CO	BL
	UNIT - I			
1.	Summarize about the concept of vulnerability and resilience, in detail?	14M	CO1	L2
	(OR)			
2.	Discuss on severity, frequency and preventions of Disaster?	14M	CO1	L6
	UNIT – II			
3.	Elaborately explain on natural disasters?	14M	CO2	L6
	(OR)			
4.	Evaluate your opinion on ecological fragility?	14M	CO2	L5
	UNIT – III			
5.	Demonstrate the environmental and physical impacts of Disaster?	14M	CO3	L2
	(OR)			
6.	Explain the global and national disaster trends, in detail?	14M	CO3	L5
	UNIT – IV			
7.	Analyze the sustainable and environmental friendly recovery, in detail?	14M	CO4	L4
	(OR)			
8.	Summarize the post disaster environmental response especially on water and sanitation?	14M	CO4	L2
	UNIT-V			
9.	What is the role of NGO's and other stakeholders in the event of a disaster?	14M	CO5	L1
	(OR)			
10.	Explain the policies and legislation for disaster risk reduction?	14M	CO5	L5

Q.P. Code: 18OE108

SET - 1

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

B. Tech. VIII Semester (R18UG) Regular & Supple. Examinations of May – 2023

SUB: Rehabilitation of Structures (OE)

Time: 3 Hours | Max. Marks: 70

Answer any FIVE Questions choosing one question from each unit.
All questions carry Equal Marks.

			M	CO	BL
		UNIT - I			
1.	(a)	What are the Factors that affecting the Deterioration.	7M	CO1	L1
	(b)	Differentiate between repair and rehabilitation.	7M	CO1	L2
		(OR)			
2.		Explain in detail about the evaluation of structural damage of concrete elements due to earthquakes	14M	CO1	L2
		UNIT – II			
3.		Explain the steps involved in the assessment procedure for evaluate damages in a structure	14M	CO2	L3
		(OR)			
4.	(a)	Explain the purpose of a rapid assessment.	7M	CO2	L1
	(b)	Explain briefly about non-destructive testing methods	7M	CO2	L2
		UNIT – III			
5.	(a)	Differentiate between corrosion inhibitors and corrosion resistant steel.	7M	CO3	L2
	(b)	Discuss in detail about the effects of cover thickness and cracking.	7M	CO3	L1
		(OR)			
6.	(a)	Explain about the corrosion protection techniques.	7M	CO3	L1
	(b)	Discuss how the temperature influence on serviceability and durability.	7M	CO3	2
		UNIT – IV			
7.	(a)	Write clear note on the following (i) Retrofitting (ii) Maintenance	7M	CO4	L1
	(b)	Discuss briefly regarding the guidelines for seismic rehabilitation of existing building	7M	CO4	L2
		(OR)			
8.		Discuss about externally bonding (ERB) technique and near surface mounted technique (NSM).	14M	CO4	L3
		UNIT-V			
9.	(a)	What is the purpose of using epoxy resin.	7M	CO5	L2
	(b)	What are the advantages of using natural fibers.	7M	CO5	L1
		(OR)			
10.		How to do strengthening of RCC structural member by using artificial and natural fibers.	14M	CO5	L3

Q.P. Code: 18OE207 | SET - 1

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

B. Tech. VIII Semester (R18UG) Regular & Supple. Examinations of May – 2023

SUB: Basics of Power Electronics (OE)

Time: 3 Hours **Max. Marks: 70**

Answer any FIVE Questions choosing one question from each unit.
All questions carry Equal Marks.

			M	CO	BL
		UNIT - I			
1.		Draw and explain the VI characteristics of SCR.	14M	CO1	L2
		(OR)			
2.		Explain the operation of IGBT with the help of neat structural diagram.	14M	CO1	L2
		UNIT – II			
3.	(a)	Analyze the advantages of single phase bridge converter over single phase mid-point converter?	7M	CO2	L3
	(b)	Describe the operation of three phase full converter with R load and also draw the output voltage waveforms	7M	CO2	L1
		(OR)			
4.		Describe the working of three phase half-controlled bridge converter. And derive the expressions for average output voltage	14M	CO2	L1
		UNIT – III			
5.	(a)	List the applications of AC voltage controller.	7M	CO3	L1
	(b)	What is an ac voltage controller? List some of its industrial applications. Enumerate its merits and demerits?	7M	CO3	L1
		(OR)			
6.	(a)	Explain the different control strategies of Chopper.	14M	CO3	L2
		UNIT – IV			
7.	(a)	Define DC Chopper and write down its applications.	7M	CO4	L1
	(b)	Explain the operation of Type-A and Type B chopper?	7M	CO4	
		(OR)			
8.		Explain the operation of step-up chopper and derive an expression for its output voltage.	14M	CO4	L2
		UNIT-V			
9.		Demonstrate the working of a single phase full bridge inverter supplying RL load with relevant circuit and waveforms	14M	CO5	L3
		(OR)			
10.		Briefly Explain the different harmonic reduction Techniques used in Inverters	14M	CO5	L2

Q.P. Code: 18OE307

SET - 1

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

B. Tech. VIII Semester (R18UG) Regular & Supple. Examinations of May – 2023

SUB: Total Quality Management (OE)

Time: 3 Hours **Max. Marks: 70**

Answer any FIVE Questions choosing one question from each unit.
All questions carry Equal Marks.

			M	CO	BL
		UNIT - I			
1.	(a)	What are the determinants of quality?	7M	CO1	L1
	(b)	Discuss the difference between traditional quality management and modern quality management.	7M	CO1	L6
		(OR)			
2.	(a)	What is acceptance sampling? State its advantages and disadvantages.	7M	CO1	L1
	(b)	List the best practices of TQM towards customer satisfaction	7M	CO1	L4
		UNIT – II			
3.	(a)	Explain the process of benchmarking.	7M	CO2	L2
	(b)	What are the parameters of measuring benchmarking? Discuss	7M	CO2	L1
		(OR)			
4.	(a)	Illustrate the various steps involved in the customer satisfaction process.	7M	CO2	L2
	(b)	What is vendor rating?	7M	CO2	L1
		UNIT – III			
5.	(a)	What is fishbone diagram? What purpose does it serve?	7M	CO3	L1
	(b)	Explain the steps involved in the implementation of the Quality System	7M	CO3	L2
		(OR)			
6.	(a)	How does check-sheet serve as TQM tool?	7M	CO3	L1
	(b)	Define pareto diagram. Explain how to construct it? Also, explain the stratification Analysis.	7M	CO3	L1
		UNIT – IV			
7.	(a)	What is the importance of analyzing quality cost information?	7M	CO4	L1
	(b)	What is the need for separate quality accounting system?	7M	CO4	L1
		(OR)			
8.	(a)	What are the problems of measuring quality costs accurately? Explain.	7M	CO4	L1
	(b)	What all costs of quality constitute external failure costs?	7M	CO4	L1
		UNIT-V			
9.	(a)	What are the objectives of ISO 9000?	7M	CO5	L1
	(b)	Briefly explain about the cost of ISO certification.	7M	CO5	L2
		(OR)			
10.	(a)	What are the advantages of ISO 9000 standards to buyer and seller?	7M	CO5	L1
	(b)	What are the objectives of internal audit for ISO 9000 standards?	7M	CO5	L1

Q.P. Code: 18OE507 | SET - 1

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

B. Tech. VIII Semester (R18UG) Regular & Supple. Examinations of May – 2023

SUB: Software Engineering (OE)

Time: 3 Hours **Max. Marks: 70**

Answer any FIVE Questions choosing one question from each unit.
All questions carry Equal Marks.

			M	CO	BL
		UNIT - I			
1.	(a)	Explain briefly the Software Engineering Ethics.	7M	CO1	L2
	(b)	List and explain the different types of Application Software's	7M	CO1	L1
		(OR)			
2.	(a)	Describe software myths? Discuss on various types of software myths and trust aspects of these myths.	7M	CO1	L4
	(b)	What are the advantages and disadvantages of Waterfall Model for software development?	7M	CO1	L1
		UNIT – II			
3.	(a)	What are the fundamental software process activities? With a neat diagram explain requirement engineering process.	7M	CO2	L1
	(b)	Define and differentiate functional and non-functional requirements.	7M	CO2	L1
		(OR)			
4.	(a)	Discover various requirements elicitation methods.	7M	CO2	L3
	(b)	Explain Scenario-based Modeling.	7M	CO2	L2
		UNIT – III			
5.	(a)	Discuss various points that should be considered while designing software.	7M	CO3	L6
	(b)	Define Quality attributes and explain its classification.	7M	CO3	L3
		(OR)			
6.	(a)	Explain Quality scenarios.	7M	CO3	L2
	(b)	Discuss various roles of Software Architect.	7M	CO3	L4
		UNIT – IV			
7.	(a)	How many types of User Interface? Explain User Interface design process.	7M	CO4	L1
	(b)	Explain working process of white-box testing.	7M	CO4	L2
		(OR)			
8.	(a)	Write the Golden Rules that should be followed during the design of the interface.	7M	CO4	L1
	(b)	Explain the different levels of Software Testing.	7M	CO4	L2
		UNIT-V			
9.	(a)	Explain project planning.	7M	CO5	L2
	(b)	Explain COCOMO model.	7M	CO5	L2
		(OR)			
10.	(a)	Explain the metrics for Project size estimation.	7M	CO5	L2
	(b)	Explain risk management steps.	7M	CO5	L2

Q.P. Code: 18OE508 | SET - 1

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

B. Tech. VIII Semester (R18UG) Regular & Supple. Examinations of May – 2023

SUB: Cloud Computing (OE)

Time: 3 Hours **Max. Marks: 70**

Answer any FIVE Questions choosing one question from each unit.
All questions carry Equal Marks.

			M	CO	BL
		UNIT - I			
1.	(a)	Compare and contrast the Nano computing and Network Computing.	7M	CO1	L5
	(b)	Discuss Cloud Ecosystem in detail.	7M	CO1	L6
		(OR)			
2.	(a)	Describe the Motivation for Cloud Computing.	7M	CO1	L4
	(b)	Discuss the Requirements for Cloud Services.	7M	CO1	L6
		UNIT – II			
3.	(a)	Explain the Anatomy of the Cloud.	7M	CO2	L2
	(b)	Explain the Applications on the Cloud.	7M	CO2	L2
		(OR)			
4.	(a)	Describe the Managing the Cloud.	7M	CO2	L4
	(b)	Differences between the Private Cloud and Public Cloud.	7M	CO2	L2
		UNIT – III			
5.	(a)	Explain the Infrastructure as a Service.	7M	CO3	L2
	(b)	Discuss the Approaches to virtualization.	7M	CO3	L6
		(OR)			
6.		Explain the Evolution from the MSP model to cloud computing and software-as-a-service.	14M	CO3	L2
		UNIT – IV			
7.	(a)	Discuss the Microsoft Windows Azure.	7M	CO4	L6
	(b)	Explain the Google App Engine.	7M	CO4	L2
		(OR)			
8.		List and explain the Cloud Application Development Platforms.	14M	CO4	L4
		UNIT-V			
9.		List and explain the Networking Issues in Data Centers.	14M	CO5	L4
		(OR)			
10.	(a)	Give a brief note on Microsoft dynamic CRM and salesforce.com CRM.	7M	CO5	L1
	(b)	Elaborate the Microsoft Azure Services platform	7M	CO5	L6

Q.P. Code: 18OE2618

SET - 1

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

B. Tech. VIII Semester (R18UG) Regular & Supple. Examinations of May – 2023

SUB: Green Chemistry & Technology (OE)

Time: 3 Hours | Max. Marks: 70

Answer any FIVE Questions choosing one question from each unit.
All questions carry Equal Marks.

			M	CO	BL
		UNIT - I			
1.		Define green chemistry. State any ten principles of green chemistry and explain with suitable examples.	14M	CO1	L1
		(OR)			
2.	(a)	Discuss about the various terminologies used in green chemistry and explain their significance.	7M	CO1	L1
	(b)	Discuss about the tools of green chemistry and its fundamental principles.	7M	CO1	L1
		UNIT – II			
3.	(a)	Prevention is better than cure. Justify the statement w.r.t green chemistry principle.	7M	CO2	L2
	(b)	Explain about the selection of appropriate solvents and starting materials in green chemistry.	7M	CO2	L2
		(OR)			
4.	(a)	Explain the key role of green chemistry in designing of safer chemicals in chemical synthesis.	7M	CO2	L2
	(b)	Write a short informative note on green solvents.	7M	CO2	L2
		UNIT – III			
5.	(a)	What is a biocatalyst? State about various biocatalysts employed to catalyze biochemical reactions.	7M	CO3	L3
	(b)	Describe about the applications of transition metal catalysis in green chemistry.	7M	CO3	L3
		(OR)			
6.	(a)	Write a brief note on Biochemical oxidation with representative reactions.	7M	CO3	L3
	(b)	Distinguish between biocatalysts and modified biocatalysts.	7M	CO3	L3
		UNIT – IV			
7.	(a)	Discuss about Solvent free techniques in green chemistry.	7M	CO4	L4
	(b)	Distinguish between green methods and classical methods.	7M	CO4	L4
		(OR)			
8.	(a)	Discuss about the various reactions basing on solid mineral supports.	7M	CO4	L4
	(b)	What is the principle of Phase Transfer Catalysis? Discuss about the types of Phase transfer Catalysts and its advantages.	7M	CO4	L4
		UNIT-V			
9.	(a)	Discuss about the Bouveault reaction in green chemical methods.	7M	CO5	L5
	(b)	Discuss about oxidation reactions in green chemistry.	7M	CO5	L5
		(OR)			
10.	(a)	Write a brief notes on Ultrasound assisted green synthesis.	7M	CO5	L5
	(b)	Describe about hydroboration reaction.	7M	CO5	L5

Q.P. Code: 18OE2619

SET - 1

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

B. Tech. VIII Semester (R18UG) Regular & Supple. Examinations of May – 2023

SUB: Creative Writing (OE)

Time: 3 Hours **Max. Marks: 70**

Answer any FIVE Questions choosing one question from each unit.
All questions carry Equal Marks.

		M	CO	BL
	UNIT - I			
1.	Define what is creative writing and illustrate it's generes.	14M	CO1	L1
	(OR)			
2.	Explain different types of research and how they helpful for creative writing.	14M	CO1	L2
	UNIT – II			
3.	Bring out what are the elements involved in creative writing.	14M	CO2	L2
	(OR)			
4.	List out ten literary devices in literary writing along with an explanation.	14M	CO2	L4
	UNIT – III			
5.	What is short story writing and its elements and write a short story of your own based on the elements.	14M	CO3	L1
	(OR)			
6.	Define note making and note taking along with format.	14M	CO3	L1
	UNIT – IV			
7.	Discuss the differences between web writing and blog writing.	14M	CO4	L6
	(OR)			
8.	Represent the complete picture of graphic novel and its flash action.	14M	CO4	L4
	UNIT-V			
9.	Explain the term publication, its types and purposes.	14M	CO5	L2
	(OR)			
10.	What are the consequences of revising editing and proof reading in publication.	14M	CO5	L1

Q.P. Code: 18OE2620

SET - 1

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

B. Tech. VIII Semester (R18UG) Regular & Supple. Examinations of May – 2023

SUB: Materials Management (OE)

Time: 3 Hours **Max. Marks: 70**

Answer any FIVE Questions choosing one question from each unit.
All questions carry Equal Marks.

			M	CO	BL
		UNIT - I			
1.	(a)	Discuss in detail the objectives and the factors influencing the Buyer-Seller relationship	7M	CO1	L6
	(b)	Define negotiation and explain any two techniques of negotiation	7M	CO1	L1
		(OR)			
2.	(a)	Write a detailed note on ethical concepts in purchase	7M	CO1	L1
	(b)	Write a detailed note on purchase parameters	7M	CO1	L1
		UNIT – II			
3.	(a)	Explain the process of evaluating the vendor	7M	CO2	L2
	(b)	Describe recent trends in vendor management	7M	CO2	L4
		(OR)			
4.	(a)	Describe the factors which influence vendor management	7M	CO2	L4
	(b)	What are the parameters to be considered in vendor management	7M	CO2	L1
		UNIT – III			
5.	(a)	List the guidelines for effective utilization of material handling equipment	7M	CO3	L4
	(b)	Define Material Management. Discuss the objective and importance of material management	7M	CO3	L1
		(OR)			
6.	(a)	Explain material handling principles	7M	CO3	L2
	(b)	Describe various handling costs	7M	CO3	L4
		UNIT – IV			
7.	(a)	With a neat block diagram, describe the system components of MRP	7M	CO4	L4
	(b)	Write the step by step procedure of least square type forecasting method	7M	CO4	L1
		(OR)			
8.	(a)	Write a detailed note on ABC analysis	7M	CO4	L1
	(b)	In an inventory system, the cost of placing an order is Rs 100 per order. The annual demand is 5000 units and the inventory carrying charges are 20%. The Item cost costs Rs 75 each. Find EOQ and total inventory related costs.	7M	CO4	L5
		UNIT-V			
9.	(a)	Write a detailed note on TQM	7M	CO5	L1
	(b)	Explain about JIT	7M	CO5	L2
		(OR)			
10.	(a)	Explain the procedure for awarding the organizations with quality certificates	7M	CO5	L2
	(b)	Write a detailed note on Supply Chain Management	7M	CO5	L1