16-05-2021

Q.P. Code: 1801802 | **SET - 1**

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

B. Tech. VIII Semester (R18) Regular Examinations of May – 2022

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.

UNIT - I

1. (a) What are the causes of cracks in concrete? What are dormant and active cracks? 7M
   (b) Explain in detail various causes of deterioration or distress in concrete structures? 7M

(OR)

2. (a) What is Alkali-aggregate reaction? what are the remedial measures for the deterioration of concrete by AAR? 8M
   (b) Explain the methods of corrosion protection in concrete structures? 6M

UNIT – II

3. (a) Describe various underwater concreting methods? 6M
   (b) Explain rehabilitation technique for slab with a typical example? 8M

(OR)

4. (a) Discuss the method of improving the flexure and load carrying capacity of beam by fibre wrap and steel plates? 8M
   (b) Explain the column jacketing method with the help of sketches? 6M

UNIT – III

5. (a) Explain penetration resistance test method in concrete structures? 8M
   (b) Discuss cell potential and resistivity? 6M

(OR)

6. Describe the steps in the assessment procedure to evaluate damages in a structure and to carry out rehabilitation work? 14M

UNIT – IV

7. Explain the process of rehabilitation of heritage masonry structures? 14M

(OR)

8. Explain the need of enhancing the seismic resistance of Concrete structures? Write in detail about elastomeric dampers? 14M

UNIT-V

9. Write in your own words about the repairs to be carried out for an old a stone masonry temple having an RCC roof (for the entrance hall) laid 50 years back. The temple is situated near a very big cement factory and the waste water of factory is let out in a small canal near to the temple. 14M

(OR)

10. (a) Explain basic components of structural health monitoring and its working mechanism? 8M
    (b) Explain corrosion mitigation techniques to protect the structure from corrosion? 6M

Q.P. Code: 1802801

SET - 1

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

B. Tech. VIII Semester (R18) Regular Examinations of May – 2022

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.

UNIT - I

1.	(a)	Define (i) Coincidence factor (ii) Contribution factor (iii) Loss factor.	7M
	(b)	The annual peak load of the feeder is 3000 kWh. Total copper loss at peak load is 300 kW. If the total annual energy supplied to the sending end of the feeder is 9000 MWh, determine the annual loss factor for an urban area and rural area.	7M
		(OR)	
2.	(a)	Explain the classification of Loads.	7M
	(b)	A 100 MW power station delivers 100 MW for 2 hours, 50 MW for 6 hours and is shut down for the rest of each day. It is also shut down for maintenance for 45 days each year. Calculate its annual load factor.	7M

UNIT – II

3.	(a)	Discuss the relative merits and demerits of underground and overhead systems.	7M
	(b)	Explain the connections schemes of distribution systems of (i) Radial type and (ii) Loop type.	7M
		(OR)	
4.	(a)	Explain the factors that affect the selection of primary feeder rating.	7M
	(b)	What is the importance of percentage voltage drop in feeder lines? What are the factors that affect percentage voltage drop?	7M

UNIT – III

5.	(a)	Explain the factors to be considered for a location of substation.	7M
	(b)	Obtain the percentage voltage drop of substation service area served with 'n' primary feeders and each feeder serves an area of triangular shape.	7M
		(OR)	
6.	(a)	Discuss any two types of busbar arrangements in the substations.	7M
	(b)	What are the advantages of GIS over conventional air substations? Give the limitations for GIS.	7M

UNIT – IV

7.	(a)	Derive the expressions for volt drop and power loss in lines.	7M
	(b)	Give detailed analysis of three phase balanced primary lines.	7M
		(OR)	
8.	(a)	Explain the causes of low power factor of the supply system.	7M
	(b)	An alternator is supplying a load of 300 kW at a p.f. of 0·6 lagging. If the power factor is raised to unity, how many more kW can alternator supply for the same kVA loading ?	7M

UNIT-V

9.	(a)	Discuss objectives and benefits of the distribution automation.	7M
	(b)	Discuss the different sub processes involved in data acquisition.	7M
		(OR)	
10.	(a)	Explain GIS in distribution systems.	7M
	(b)	Discuss about the consumer information service.	7M

Q.P. Code: 1803801 | SET - 1

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

B. Tech. VIII Semester (R18) Regular Examinations of May – 2022

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.

UNIT - I

1. (a) A refrigerating system working on the Bell-Coleman cycle receives air from the cold chamber at -5 ^{0}C and compresses it from 1 bar to 4.5 bar. The compressed air is then cooled to a temperature of 37 ^{0}C before it is expanded in the expander. Calculate the COP of the system when compression and expansion are: (i) isentropic and (ii) follow the law $pv^{1.25}$=constant. **12M**

   (b) Define tonne of refrigeration? **2M**

(OR)

2. (a) Explain Bootstrap aircraft refrigeration system. **8M**

   (b) Give a brief description of an ideal cycle of air refrigeration **6M**

UNIT – II

3. A vapor compression refrigeration system operating between pressure limits of 7.5 bar and 1.5 bar. The vapor enters the compressor at a temperature of – 8 ^{0}C and the liquid leaving the condenser is at 12 ^{0}C. For a refrigerating effect of 2 kW, determine COP. Find the power rating of the compressor motor considering a mechanical efficiency of 85%. The enthalpies at 1.5 bar and 7.5 bar are 1692 kJ/kg and 1919 kJ/kg respectively. Liquid enthalpy is 474 kJ/kg at the end of condensation. **14M**

(OR)

4. (a) Explain, with the help of a neat diagram, the working of the Ammonia-Water absorption system. **7M**

   (b) What is the effect of sub cooling and super heating in vapor compression process and show it in T-S and h-s diagram? **7M**

UNIT – III

5. For a steam jet refrigeration system, the steam enters the nozzle at 8 bar just dry saturated state. The condenser pressure is 0.07 bar and flash chamber is to be maintained at 5 ^{0}C. The make-up water enters the flash chamber at 35 ^{0}C. Taking nozzle,. entrainment and compressor efficiencies are η_n=0.94, η_e=0.75 and η_c=0.65 respectively, compute **14M**
   (i) amount of steam per kg of vapour formed in the flash chamber.
   (ii) COP, and (iii) volume of vapour leaving the flash chamber per ton per hour.

(OR)

6. (a) Discuss the essential properties of a good refrigerant? **6M**

   (b) Differentiate between physical and thermodynamic properties of a refrigerant. Explain what are more important properties in giving specific examples? **8M**

UNIT – IV

7. (a) A room whose size is 4 x 3 x 4 m is at a temperature 298 K. The wet bulb temperature of the room was found to be 293 K. Find the amount of water vapour associated with the air. **8M**

   (b) Differentiate between central and Unitary air condition system. **6M**

(OR)

8. (a) Air at 40 ^{0}C DBT and 15% RH is passed through the adiabatic humidifier at the rate of 200 m^3 / min. The outlet conditions of air are 25 ^{0}C DBT and 20 ^{0}C WBT. Find **8M**
   (i) Dew point temperature (ii) Relative humidity of exit air
   (iii) Amount of water vapor added to the air per minute.

   (b) Write a short note on summer air condition system. **6M**

UNIT-V

9. (a) What is an effective temperature? State and explain the factors which govern optimum effective temperature? 9M

(b) Explain factors affecting human comfort. 5M

(OR)

10. The following conditioning system: 14M

Room sensible heat = 41868 kJ/hr(11.63 kW); room latent heat = 41868 kJ/hr (11.63 kW) ; inside design condition = 25°C, outside design condition = 35°C, 50% RH, DBT, 27.8 WBT. Return air from the room is mixed with the outside air before entering the cooling coil in the ratio of 4:1. Return air from the room is mixed with the cooling air, i.e. after the cooling coil in the ratio of 1:4. Cooling coil by pass factor is 0.1. The air may be reheated if necessary, before supplying to the conditioned space. Assume ADP as 10 °C and determine,

(i) Supply air conditions into the room.

(ii) Refrigeration load due to the reheat.

(iii) Total refrigeration capacity.

(iv) The quantity of fresh air supplied.

Q.P. Code: 1804802

SET - 1

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

B. Tech. VIII Semester (R18) Regular Examinations of May – 2022

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.

UNIT - I

1.	(a)	Explain in detail the BER of wired communication systems	10M
	(b)	Explain about Spatial Diversity	4M
		(OR)	
2.	(a)	Discuss about Multi-antenna Maximal Ratio Combiner	8M
	(b)	What is mean by Diversity and explain bout diversity order	6M
		UNIT – II	
3.		Define UWB and discuss about the Bit-Error Rate Performance of UWB.	14M
		(OR)	
4.	(a)	Explain about ISI and Doppler in Wireless Communications	8M
	(b)	What is Delay Spread and discuss the effect delay spread in Wireless Communication	6M
		UNIT – III	
5.	(a)	Explain frequency reuse technique in cellular Communication	8M
	(b)	Briefly discuss about Telegraphic Theory	6M
		(OR)	
6.	(a)	With a neat block diagram explain the RAKE receiver used in CDMA	10M
	(b)	Write a short notes on PN Sequences	4M
		UNIT – IV	
7.	(a)	Explain in detail about OFDM technique	8M
	(b)	Discuss about the various issues in OFDM	6M
		(OR)	
8.		Derive an expression for optimal power allocation of MIMO Eigen modes of the channel to achieve maximum capacity	14M
		UNIT-V	
9.	(a)	Discuss in detail about GSM	7M
	(b)	Explain about GPRS technology	7M
		(OR)	
10.	(a)	Explain the architecture of LTE with neat diagram	10M
	(b)	Discuss the features of Wi-MAX	4M

Q.P. Code: 1805802

SET - 1

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

B. Tech. VIII Semester (R18) Regular Examinations of May – 2022

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.

UNIT – I

1.	(a)	What is UML? Where can the UML to be used?	4M
	(b)	Illustrate the conceptual model of the UML in detail.	10M
		(OR)	
2.	(a)	Explain about the common division mechanisms of UML in detail.	7M
	(b)	Discuss about modeling a system's architecture.	7M

UNIT – II

3.	(a)	Explain the concept of generalization and association with suitable examples.	7M
	(b)	Describe stereotypes , tagged values and Constrains with examples.	7M
		(OR)	
4.	(a)	Discuss how classes can be used for modeling the non software things and modeling primitive types.	10M
	(b)	Write the different steps for modeling the Object Structures.	4M

UNIT – III

5.	(a)	Discuss clearly about different representations used in interaction diagrams.	7M
	(b)	Explain about forking and joining concepts in activity diagram with an example	7M
		(OR)	
6.	(a)	How do you use interaction diagrams? When you model dynamic aspects of a system? Explain.	7M
	(b)	Draw the use case diagram for online railway reservation system.	7M

UNIT – IV

7.	(a)	Define an event and a signal. Explain briefly about the common modeling techniques of events and signals.	7M
	(b)	Explain the forward engineering tool and reverse engineering tool for a sample code with respect to the state chart diagram.	7M
		(OR)	
8.	(a)	Explain about modeling interprocess communication.	7M
	(b)	Compose the state chart diagram for unified library application	7M

UNIT-V

9.	(a)	What is the purpose of deployment diagrams? Explain the basic elements of deployment diagram with suitable example.	7M
	(b)	What is component diagram? Write the five standard stereotypes that can be applied to components in UML..	7M
		(OR)	
10.	(a)	What are Components? also differentiate between components and classes.	7M
	(b)	Draw a diagram that shows set of nodes and their relations for library management system.	7M

Q.P. Code: 18OE2616

SET - 1

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

B. Tech. VIII Semester (R18) Regular Examinations of May – 2022

SUB: Operations Research (OE)

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

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

UNIT - I

1. (a) Explain the Applications of Operations Research. 7M
   (b) Discuss the Models of Operations Research. 7M

(OR)

2. (a) Explain the Tools and Techniques in Operations Research. 7M
   (b) What are the limitations of Operations Research? 7M

UNIT – II

3. A manufacturer produces two types of models M1 and M2. M1 model requires 4 hours of grinding and 2 hours of polishing. Where as M2 model requires 5 hours of polishing and 2 hours of grinding. The manufacturer has two grinders and 3 polishers, but each grinder works 40 hours a week and each polisher works 60 hours a week. The profit on M1 models is Rs.3 and M2 model is Rs.4. Formulate linear programming problem to maximize the profit by using 2 grinders and 3 polishers. 14M

(OR)

4. Solve the following Linear programming problem by using the Simplex method 14M

$$\text{Maximize } z = 6x_1 + 8x_2$$
$$\text{Subject to } 5x_1 + 10x_2 \le 60$$
$$4x_1 4x_2 \le 40$$
$$\text{and } x_1, x_2 \ge 0$$

UNIT – III

5. Find the initial solution of the given problem of transportation using Least cost method and VAM 14M

	1	2	3	4	Supply
1	10	22	0	22	8
2	15	20	12	8	13
3	20	12	10	15	11
Demand	5	11	8	8	

(OR)

6. Explain the MODI method of Transportation problem. 14M

UNIT – IV

7. (a) Explain Hungarian method. 8M
   (b) Explain the mathematical formulation of Assignment problem. 6M

(OR)

8. A department head has four subordinates and four tasks to be performed. The subordinates differ in efficiency and the tasks differ in their difficulty level. The estimation of time each man would take to perform each task in given in the matrix 14M

Tasks	Man			
	E	F	G	H
A	20	28	19	13
B	15	30	16	28
C	40	21	20	17
D	21	28	26	12

How should the task be allocated one to a man, so as to minimize the total man hours.

UNIT-V

9. (a) What are the elements of decision making? 7M
   (b) Explain Decision tree, advantages and limitations 7M

(OR)

10. Calculate the earliest start time, earliest finish time, latest start time and latest finish time of each activity of the project given below and determine the critical path of the project and duration to complete the project 14M

Activity	1-2	1-3	1-5	2-3	2-4	3-4	3-5	3-6	4-6	5-6
Duration(min)	8	7	12	4	10	3	5	10	7	4

Q.P. Code: 18OE2618

SET - 1

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

B. Tech. VIII Semester (R18) Regular Examinations of May – 2022

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.

UNIT - I

1.		Define green Chemistry. Discuss any three tools of green Chemistry	14M
		(OR)	
2.	(a)	Discuss the current state of Chemistry and the Environment	7M
	(b)	Outline the significance of green Chemistry now a day	7M

UNIT – II

3.		How do you make chemical reactions greener?	14M
		(OR)	
4.		As per the green chemistry principles, the usage of protecting groups and catalysts is to be avoided in organic synthesis. Positively explain this statement.	14M

UNIT – III

5.	(a)	Outline the Biochemical Reduction	7M
	(b)	Summarize the use of biocatlaysts in green reactions	7M
		(OR)	
6.	(a)	Explain the Simmons-Smith reactions under the green pathway	7M
	(b)	Illustrate the modified biocatalysts in chemical synthesis	7M

UNIT – IV

7.		Explain C-alkylation under green conditions	14M
		(OR)	
8.		Discuss two solvent-free techniques used in green synthesis	14M

UNIT-V

9.		What are the fundamental advantages of ultrasound in organic synthesis? Discuss ultrasound-assisted green synthesis with suitable examples	14M
		(OR)	
10.		Explain the following under green conditions i) Reduction reaction ii) Bouveault reaction	14M

Q.P. Code: 18OE2619 | SET - 1

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

B. Tech. VIII Semester (R18) Regular Examinations of May – 2022

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.

UNIT - I

1.	(a)	Elucidate the different forms of creative non-fiction with examples.	7M
	(b)	What are the characteristics of poetry? Explain in detail.	7M
		(OR)	
2.	(a)	What is creative writing? How is it different from general writing?	7M
	(b)	Elaborate on drama as a literary genre in creative writing.	7M

UNIT – II

3.	(a)	What is the significance of literary devices in creative writing?	7M
	(b)	Is figurative language important in writing? Why or why not?	7M
		(OR)	
4.	(a)	How do you use the elements of style?	7M
	(b)	Fill in the blanks as instructed in brackets.	7M

i) _____ Oranges are grown in Nagpur. (article)
ii) New York is _____ large city. (article)
iii) Let us play _____ chess. (article)
iv) He is superior_____ me. (preposition)
v) The Robbers broke _____ the house. (preposition)
vi) The boys were playing games when it _____raining. (start)
vii) My brother_____ a bear an hour ago. (see)

UNIT – III

5.	(a)	What is dialogue writing? Explain with an example.	7M
	(b)	What are the challenges of note taking?	7M
		(OR)	
6.	(a)	Expand the idea 'Cut your coat according to your cloth'.	7M
	(b)	What are the major elements of narrative writing?	7M

UNIT – IV

7.	(a)	What are the main purposes of blog writing?	7M
	(b)	What is web content writing?	7M
		(OR)	
8.	(a)	What are the characteristics of a graphic novel?	7M
	(b)	What is meant by script writing?	7M

UNIT-V

9.	(a)	What are the types of proof reading?	7M
	(b)	What are the differences between editing and proof reading?	7M
		(OR)	
10.	(a)	How is a manuscript evaluated for publication?	7M
	(b)	What is the main purpose of publication?	7M

Q.P. Code: 18OE2620

SET - 1

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

B. Tech. VIII Semester (R18) Regular Examinations of May – 2022

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.

UNIT – I

1. (a) What is the need for International Purchase? And also Discuss the procedure and problems in International Purchase. 7M
   (b) Why is negotiation an important aspect of purchasing? Describe the elements and objectives of negotiation. 7M

(OR)

2. (a) Name the factors that influence vendor rating 7M
   (b) What is the need for evaluation of the "right source" during purchase with an industrial example and also explain weight point method 7M

UNIT – II

3. (a) What is vendor evaluation and rating? explain any one method 7M
   (b) Name the factors that influence vendor rating 7M

(OR)

4. (a) What is meant by Vendor management? And Explain the advantages of Vendor management? 7M
   (b) Briefly explain the process of Vendor management 7M

UNIT – III

5. (a) State any three objectives of materials management 7M
   (b) Explain how a performance appraisal system can be used in the context of materials management. 7M

(OR)

6. (a) What is the scope of materials management? Define the various roles of materials management in the context of internal and external interfaces to a materials management system 7M
   (b) Briefly explain the reason for the evaluation of manufacturing resources planning (MRP II) from material requirements planning (MRP). How does MRP II differ from MRP? 7M

UNIT – IV

7. (a) A factory uses annually 24000 unit of raw material which cost □1.25 per unit. Placing each order cost □25 and carrying cost is 6% per year of the average inventory. Calculate Economic Order Quantity. 7M
   (b) What is Inventory Management? Explain inventory control techniques used in hotel industry. 7M

(OR)

8. (a) Differentiate between MRP and MRP-II 7M
   (b) Write a detailed note on selective inventory control 7M

UNIT-V

9. (a) List the factors that are to be considered while selecting the sources of supply 7M
   (b) Explain the Supply Chain Operations Reference (SCOR) framework for performance appraisal and how it is useful in materials management 7M

(OR)

10. (a) Quality control is an essential tool for long term success. Discuss various techniques that can be used in a bread making unit to control (from raw material to final product stage 7M
    (b) Discuss the packaging and distribution techniques adopted by various food outlets 7M

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

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

B. Tech. VIII Semester (R18) Regular Examinations of May – 2022

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.

UNIT - I

1.	(a)	Compare and contrast the Nano computing and Network Computing.	7M
	(b)	List and explain the Essential Characteristics.	7M
		(OR)	
2.	(a)	Discuss the Requirements for Cloud Services.	7M
	(b)	Describe the Benefits and Drawbacks for Cloud Computing.	7M

UNIT – II

3.	(a)	Explain the Anatomy of the Cloud.	7M
	(b)	Describe the Network Connectivity in Cloud Computing.	7M
		(OR)	
4.	(a)	With the help of neat diagram, explain the Cloud Architecture.	7M
	(b)	Differences between the Private Cloud and Public Cloud.	7M

UNIT – III

5.	(a)	Explain the Infrastructure as a Service.	7M
	(b)	Discuss the Approaches to virtualization.	7M
		(OR)	
6.	(a)	Illustrate the virtualization to cloud computing.	7M
	(b)	With the help of neat diagram, explain the VMware ESX server architecture using para-virtualization	7M

UNIT – IV

7.		Explain the Cloud aware software development using PaaS technology.	14M
		(OR)	
8.		List and explain the Cloud Application Development Platforms.	14M

UNIT-V

9.	(a)	Explain the Amazon Simple Storage Service(S3)	7M
	(b)	Discuss the Data Center Environment,	7M
		(OR)	
10.	(a)	Give a brief note on Microsoft dynamic CRM and salesforce.com CRM.	7M
	(b)	Elaborate the Microsoft Azure Services platform	7M

Q.P. Code: 18OE307 | SET - 1

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

B. Tech. VIII Semester (R18) Regular Examinations of May – 2022

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.

UNIT - I

1.	(a)	Discuss the role of process and product control on quality.	7M
	(b)	List and explain Variable and Attribute control charts.	7M
		(OR)	
2.	(a)	What is acceptance sampling? State its advantages and disadvantages.	7M
	(b)	What is TQM? Discuss the benefits of TQM.	7M

UNIT – II

3.	(a)	Discuss buyer-supplier relationships toward building quality.	7M
	(b)	Discuss the reasons for benchmarking and state the advantages and limitations	7M
		(OR)	
4.	(a)	Explain the common customer feedback collection tools.	7M
	(b)	Illustrate the various steps involved in the customer satisfaction process.	7M

UNIT – III

5.	(a)	Describe the transition from the traditional to TQM approach.	7M
	(b)	Explain the steps involved in the implementation of the Quality System.	7M
		(OR)	
6.	(a)	Explain briefly about the check sheet (or) data collection sheet with an example.	7M
	(b)	Define pareto diagram. Explain how to construct it? Also, explain the stratification Analysis.	7M

UNIT – IV

7.	(a)	List and discuss various costs of quality.	7M
	(b)	To what extent accounting system contribute to building quality? Explain.	7M
		(OR)	
8.	(a)	What are the problems of measuring quality costs accurately? Explain.	7M
	(b)	Discuss the importance of analyzing quality cost information.	7M

UNIT-V

9.	(a)	Discuss in detail the standards of ISO9000 series.	7M
	(b)	Briefly explain about the cost of ISO certification.	7M
		(OR)	
10.	(a)	What is ISO? State the objectives of ISO 9000.	7M
	(b)	Which are the four tiers of documentation in ISO 9000? Explain.	7M

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

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

B. Tech. VIII Semester (R18) Regular Examinations of May – 2022

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.

UNIT - I

1.	(a)	Define (i) Hazard and Disaster (ii) Define disaster and compound disaster	7M
	(b)	Define (i) vulnerability and resilience (ii) disaster prevention and mitigation	7M
		(OR)	
2.	(a)	Describe severity, frequency and preventions of Disaster	7M
	(b)	Describe Disaster Risk Reduction and Pre-Disaster Preparedness	7M

UNIT – II

3.	(a)	Distinguish between Natural hazards and anthropogenic (human induced) hazards with examples	7M
	(b)	. Discuss briefly the hazard and vulnerability profile of India	7M
		(OR)	
4.	(a)	Discuss briefly the land slide disasters and flash floods in north eastern India.	7M
	(b)	What do you understand by Environmental Hazards and Disasters?	7M

UNIT – III

5.	(a)	Discuss briefly the Implications of socio-economic disasters	7M
	(b)	Explain the urban disasters on psycho-social issues	7M
		(OR)	
6.		Discuss briefly the factors changing the demographic and socioeconomic characteristics of population on disaster preparedness.	14M

UNIT – IV

7.	(a)	What is the sustainable and environmental friendly recovery	7M
	(b)	Explain the structural and non-structural measures adopted for DRR	7M
		(OR)	
8.	(a)	Draw the disaster management cycle and explain the each component	7M
	(b)	Discuss the post disaster environmental response especially on water and sanitation	7M

UNIT-V

9.		Discuss the traditional and non-traditional economic development professional role in the event of a disaster	14M
		(OR)	
10.	(a)	Explain the concept of Plan, Action and Accountability for the Prevention and Preparedness of disaster	7M
	(b)	Importance of team building in disaster management	7M

Q.P. Code: 1801806

SET - 1

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

B. Tech. VIII Semester (R18) Regular Examinations of May – 2022

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.

UNIT - I

1. (a) Explain the problems in the urban transportation in the present scenario. 7M
   (b) Describe the transportation planning process with the help of a flow chart 7M

(OR)

2. (a) What is urbanization? State the causes of urbanization. 7M
   (b) Discuss the factors affecting the travel demand in brief. 7M

UNIT – II

3. (a) What is Zoning? Discuss the points to be kept in mind while doing zoning. 7M
   (b) Explain home interview survey method in detail. 7M

(OR)

4. (a) Distinguish between cordon lines and screen lines. 7M
   (b) Mention the different types of sampling techniques. 7M

UNIT – III

5. (a) Explain the various factors affecting the trip generation and trip attraction in detail 7M
   (b) What is trip distribution? Explain average factor method and its disadvantages. 7M

(OR)

6. Using Frator Growth factor, carryout at least two iterations of the given matrix to obtain the future travel demand table. 14M

Zone No.	1	2	3	4	Growth Factor
1	-	75	175	80	1.5
2	80	-	325	160	2.75
3	170	380	-	280	4.3
4	220	180	390	-	2.5

UNIT – IV

7. (a) Explain the concept of logit models for mode choice analysis. 7M
   (b) Discuss the zonal regression models in choice analysis. 7M

(OR)

8. (a) Define model split? Explain the factors affecting the model split 7M
   (b) Explain the process of model split in transportation planning 7M

UNIT-V

9. Write a brief note on corridor traffic study, Count segment, screen line, point and corridor identification? 14M

(OR)

10. (a) Explain the rail based transit systems in detail. 7M
    (b) Write a note on BRTS and commuter bus systems 7M