

MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE, MADANAPALLE

(UGC-AUTONOMOUS)

**B.Tech IV Year II Semester (R18) Regular & Supplementary End Semester Examinations,
May- 2023****TOTAL QUALITY MANAGEMENT**

(CE, EEE, ECE, CSE, and CST)

Time: 3Hrs

Max Marks: 60

Attempt all the questions. All parts of the question must be answered in one place only.
All parts of Q.no 1 are compulsory. In Q.no 2 to 6 answer either A or B only

Q.No	Question	Marks	CO	BL
Q.1	i. Define TQM and what is the need for quality?	1M	1	1
	ii. Write the benefits of quality.	1M	1	1
	iii. What is strategic quality planning?	1M	2	1
	iv. Define recognition and reward in TQM.	1M	2	1
	v. What is bench marking?	1M	3	1
	vi. Write the significance of FEMA.	1M	3	1
	vii. What are quality circles?	1M	4	1
	viii. Define QFD method.	1M	4	1
	ix. Why six sigma is necessary?	1M	5	1
	x. Explain the importance of quality standards.	1M	5	1
Q.2(A)	Distinguish between quality control, quality management, and quality assurance.	10M	1	3
	OR			
Q.2(B)	Describe the Juran's contributions for the improvement of quality management.	10M	1	2
Q.3(A)	Discuss the importance of "Employee involvement" and "motivation" for enhancing quality.	10M	2	3
	OR			
Q.3(B)	Explain the concept of continuous process improvement in TQM and how it can be achieved.	10M	2	2
Q.4(A)	Discuss the seven traditional tools of quality and their significance in quality management.	10M	3	3
	OR			
Q.4(B)	Explain the benefits of implementing Six Sigma in an organization and how it can lead to improved quality and cost savings.	10M	3	3
Q.5(A)	Distinguish between Total Productive Maintenance (TPM) and traditional maintenance practices and discuss the concept of Cost of Quality (COQ)	10M	4	3
	OR			
Q.5(B)	What is TPM? Explain the pillars of TPM and its benefits.	10M	4	2
Q.6(A)	Explain KAIZEN and JIT in detail.	10M	5	3
	OR			
Q.6(B)	Discuss the ISO 9000 principles of Quality Management.	10M	5	2

*** END***

MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE, MADANAPALLE

(UGC-AUTONOMOUS)

B.Tech IV Year II Semester (R18) Regular & Supplementary End Semester Examinations – May 2023**WIRELESS SENSOR NETWORKS**

(OE-IV: Common to CE, EEE, ME, CSE, CST, CSIT)

Time: 3Hrs

Max Marks: 60

Attempt all the questions. All parts of the question must be answered in one place only.

All parts of Q.no 1 are compulsory. In Q.no 2 to 6 answer either A or B only

Q.No	Question	Marks	CO	BL
Q.1	i. What is MANET?	1M	1	1
	ii. List the wireless sensor network.	1M	1	3
	iii. Write the Basics sensor subsystem components.	1M	2	3
	iv. What is S-MAC protocol?	1M	2	1
	v. List the security protocols.	1M	3	3
	vi. Define reactive protocol.	1M	3	1
	vii. Explain the proactive routing protocol.	1M	4	2
	viii. List the shortcomings of flooding.	1M	4	3
	ix. Define gateway.	1M	5	1
	x. Write importance of TinyOS.	1M	5	4
Q.2(A)	Explain in detail about the issues and challenges in wireless sensor networks	10M	1	4
OR				
Q.2(B)	Define wireless sensor network? Draw and explain sensor network architecture	10M	1	1
Q.3(A)	Explain the B-MAC of WSN in detail	10M	2	2
OR				
Q.3(B)	Write a short note on Zigbee (IEEE 802.15.4) with frame format, advantage, disadvantage and the applications.	10M	2	3
Q.4(A)	Explain the following in detail (i) Data dissemination (ii) Quality of a sensor network. Discuss the shortcomings of flooding in detail.	10M	3	4
OR				
Q.4(B)	Explain the quality of a sensor networks.	10M	3	2
Q.5(A)	Write design principles of WSN.	10M	4	2
OR				
Q.5(B)	What is Cryptography? Discuss in detail about Symmetric Key Cryptography and Public Key Cryptography.	10M	4	3
Q.6(A)	Compare between TinyOS and nesC	10M	5	3
OR				
Q.6(B)	Explain the following design principles in wireless sensor network: (i) Distributed organization (ii) Adaptive fidelity and Accuracy	10M	5	2

*** END***

MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE, MADANAPALLE

(UGC-AUTONOMOUS)

B.Tech IV Year II Semester (R18) Regular & Supplementary End Semester Examinations,**May – 2023****MOBILE APPLICATION DEVELOPMENT**

(Civil, EEE, ME and ECE)

Time: 3Hrs**Max Marks: 60**

Attempt all the questions. All parts of the question must be answered in one place only.

All parts of Q.no 1 are compulsory. In Q.no 2 to 6 answer either A or B only

Q.No	Question	Marks	CO	BL
Q.1	i. What is the importance of XML-based layouts?	1M	1	1
	ii. List out the various applications of Android.	1M	1	1
	iii. Define ViewGroup.	1M	2	2
	iv. Compare Text View and List view.	1M	2	1
	v. Why do use loaders?	1M	3	2
	vi. Define Boot receiver	1M	3	2
	vii. What is the role of content resolver?	1M	4	1
	viii. Identify any three data types used by SQLite.	1M	4	2
	ix. What is a Live Wallpaper?	1M	5	2
	x. What is the usage of orientation sensor?	1M	5	1
Q.2(A)	Draw Android stack and explain the components in it.	10M	1	3
	OR			
Q.2(B)	Explain in detail about Android Building Blocks.	10M	1	2
Q.3(A)	Explain in detail any five input components	10M	2	2
	OR			
Q.3(B)	Develop a Java program to connect to that database and extract data from the tables with various Android Adapters.	10M	2	4
Q.4(A)	Write in detail about Create service, start service and Destroy service from android service life cycle.	10M	3	3
	OR			
Q.4(B)	Briefly explain the concept of Broadcast Receivers with example.	10M	3	2
Q.5(A)	Determine Android File System Hierarchy and mentions its importance.	10M	4	2
	OR			
Q.5(B)	Interpret the importance of Content Providers with examples.	10M	4	3
Q.6(A)	What are the various Sensor API components? Explain	10M	5	2
	OR			
Q.6(B)	Explain the important features of Motion Sensors and Environmental Sensors	10M	5	2

***** END*****

MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE, MADANAPALLE

(UGC-AUTONOMOUS)

B.Tech IV Year II Semester (R18) Regular & Supplementary End Semester Examinations,**May– 2023****SOFTWARE PROJECT MANAGEMENT**

(Civil, EEE, ME and ECE)

Time: 3Hrs**Max Marks: 60**

Attempt all the questions. All parts of the question must be answered in one place only.
All parts of Q.no 1 are compulsory. In Q.no 2 to 6 answer either A or B only

Q.No	Question	Marks	CO	BL
Q.1	i. Why SPM is important?	1M	1	1
	ii. List any two software project management tools.	1M	1	1
	iii. What is NLOC?	1M	2	1
	iv. What are the advantages of function point analysis?	1M	2	1
	v. List any two Software Quality Standards.	1M	3	1
	vi. What is adaptive changes?	1M	3	1
	vii. Compare Risk and Issues.	1M	4	2
	viii. List out any four types of Risks in project management.	1M	4	1
	ix. What are the advantages of Primavera?	1M	5	1
	x. List some Issues in Redmine.	1M	5	1
Q.2(A)	Explain in detail about components of software project management.	10M	1	2
OR				
Q.2(B)	Explain about Software project management tools and techniques.	10M	1	2
Q.3(A)	Construct the COCOMO model for software projects and compare the different types of COCOMO models.	10M	2	3
OR				
Q.3(B)	Explain in detail about project size estimation techniques.	10M	2	2
Q.4(A)	Illustrate the various activities in Software Quality Assurance.	10M	3	2
OR				
Q.4(B)	Discuss in detail about the process to obtain ISO:9000 Standard certification in India.	10M	3	6
Q.5(A)	Explain Documentation Reviews and SWOT Analysis in detail.	10M	4	2
OR				
Q.5(B)	Explain the different types of Risks in project development.	10M	4	2
Q.6(A)	Compare and contrast Primavera and Redmine.	10M	5	2
OR				
Q.6(B)	Explain the roles in Redmine with a suitable example.	10M	5	2

*** END***

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Question Paper Code: 18ME305

MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE, MADANAPALLE

(UGC-AUTONOMOUS)

B.Tech IV Year II Semester (R18) Regular & Supplementary End Semester Examinations,**May– 2023****ENTREPRENEURSHIP**

(Mechanical Engineering)

Time: 3Hrs**Max Marks: 60**

Attempt all the questions. All parts of the question must be answered in one place only.
All parts of Q.no 1 are compulsory. In Q.no 2 to 6 answer either A or B only

Q.No	Question	Marks	CO	BL
Q.1	i. What do you understand ethics in entrepreneurship?	1M	1	1
	ii. What do you mean by social entrepreneur?	1M	1	2
	iii. How can be technical business plans evaluated?	1M	2	2
	iv. How new ideas are generated?	1M	2	2
	v. State venture capital.	1M	3	1
	vi. What do you mean by Sleeping partners?	1M	3	1
	vii. Define product layout	1M	4	1
	viii. List out the various types of plant layout?	1M	4	1
	ix. What is an inventory?	1M	5	1
	x. List various quality control techniques.	1M	5	1
Q.2(A)	Explain the important elements in entrepreneurship.	10M	1	2
OR				
Q.2(B)	In detailed difference between Entrepreneur and Manager in an organization.	10M	1	2
Q.3(A)	Explain the various factors that affecting the marketing system.	10M	2	2
OR				
Q.3(B)	Discuss the process of writing business plan.	10M	2	2
Q.4(A)	List and explain the powerful ways to motivate of your team members	10M	3	2
OR				
Q.4(B)	What are techniques have to be planned for financial, marketing and sales controls in a new venture?	10M	3	3
Q.5(A)	What are various factors to be considered for the selection of suitable plant location	10M	4	3
OR				
Q.5(B)	Explain about the production and process layout.	10M	4	2
Q.6(A)	Explain the importance of ABC analysis of inventory control.	10M	5	2
OR				
Q.6(B)	Describe the channel of management decisions.	10M	5	2

*** END***

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B.Tech IV Year II Semester (R18) Regular & Supplementary End Semester Examinations,
May – 2023

GREEN BUILDINGS & ENERGY CONSERVATION

(Civil Engineering)

Time: 3Hrs

Max Marks: 60

Attempt all the questions. All parts of the question must be answered in one place only.
All parts of Q.no 1 are compulsory. In Q.no 2 to 6 answer either A or B only

Q.No	Question	Marks	CO	BL
Q.1	i. What are the different Types of Buildings?	1M	1	1
	ii. What are the requirements of building planning?	1M	1	1
	iii. What are the basic steps in the design approach?	1M	2	1
	iv. How are you evaluating the P/A ratio?	1M	2	1
	v. Mention one benefit of recycling water.	1M	3	1
	vi. What is Solar Heat Gain Coefficient?	1M	3	1
	vii. What are the methods adopted for green building construction?	1M	4	1
	viii. What is Sustainable Construction technique?	1M	4	1
	ix. What is the specialty of LEED?	1M	5	1
	x. What is LEED certification?	1M	5	1
Q.2(A)	Describe the desired Aspect of the Building components?	10M	1	2
	OR			
Q.2(B)	Enlist the Furniture Requirements of a Building.	10M	1	3
Q.3(A)	Explain the term Bioclimatic design	10M	2	2
	OR			
Q.3(B)	Explain the tromble wall	10M	2	3
Q.4(A)	Illustrate the rain water harvesting in buildings.	10M	3	3
	OR			
Q.4(B)	Illustrate the smart water management system	10M	3	3
Q.5(A)	Illustrate the concept of living wall in green buildings.	10M	4	2
	OR			
Q.5(B)	Illustrate the necessity of anchoring piles for tall buildings	10M	4	3
Q.6(A)	Enumerate the criteria for the rating of green buildings.	10M	5	2
	OR			
Q.6(B)	Explain the criteria for assessment of green buildings in challenging climates	10M	5	3

*** END***

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B.Tech IV Year II Semester (R18) Regular & Supplementary End Semester Examinations – May 2023

ELECTRICAL SAFETY

(OE-IV: Common to CE, ME, ECE, CSE, CST, CSIT)

Time: 3Hrs

Max Marks: 60

Attempt all the questions. All parts of the question must be answered in one place only.

All parts of Q.no 1 are compulsory. In Q.no 2 to 6 answer either A or B only

Q.No	Question	Marks	CO	BL
Q.1	i. Define Electric shock.	1M	1	1
	ii. Mention Primary Electrical injuries.	1M	1	2
	iii. Define electrical Grounding.	1M	2	1
	iv. Why an Earthing is important?	1M	2	1
	v. List out rules for using Locks and Tags.	1M	3	1
	vi. What do you understand by term Hot-work Decision tree	1M	3	1
	vii. What are the Typical Symptoms of Electric Shock?	1M	4	1
	viii. What do you understand the term Safety audit?	1M	4	1
	ix. What is the role of NESC?	1M	5	1
	x. Why we use NFPA Standards?	1M	5	1
Q.2(A)	Explain about usage of Rubber Insulating Equipment against Electric Hazards.	10M	1	2
OR				
Q.2(B)	Explain the purpose of Safety Tags and Locking Devices.	10M	1	2
Q.3(A)	Discuss the Use of Grounded Circuit Conductor for Grounding Equipment	10M	2	2
OR				
Q.3(B)	Explain the Bonding Of Electrically Conductive Materials And Other Equipment.	10M	2	3
Q.4(A)	Explain how " Safe switching of power system" helps to avoid Electrical Hazards	10M	3	2
OR				
Q.4(B)	What are the Procedures involved in Six-Step safety Method? and explain	10M	3	2
Q.5(A)	Write a note on Preliminary First aid techniques to rescue a human being during Severe Electric Shock.	10M	4	2
OR				
Q.5(B)	Explain the Concept of Accident Prevention under the view of Safety environment.	10M	4	2
Q.6(A)	Explain the various Standards used for ensuring electrical safety in the workplace.	10M	5	3
OR				
Q.6(B)	Describe how to use Eight step maintenance programs.	10M	5	2

*** END***