Hall Ticket No: ☐☐☐☐☐☐☐☐☐☐ 　　Question Paper Code: 14CE410

MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE, MADANAPALLE
(UGC-AUTONOMOUS)

B.Tech IV Year II Semester (R14) Supplementary End Semester Examinations – JULY 2021

ENVIRONMENTAL IMPACT ASSESSMENT
(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			Marks	CO	BL
Q.1	i.	Illustrate the term quality index.	1M	CO1	2
	ii.	Define assessment of a parameter.	1M	CO1	1
	iii.	List the sources of ground water pollution	1M	CO2	1
	iv	Write any two methods for control of air pollution.	1M	CO2	1
	v.	Define deforestation.	1M	CO3	1
	vi	Recall the term wild life.	1M	CO3	1
	vii.	Illustrate the term audit.	1M	CO4	2
	viii.	What do you mean by EBM in EIA project?	1M	CO4	1
	ix.	Define motor act.	1M	CO5	1
	x.	Illustrate the necessity pof water act.	1M	CO5	2
Q.2(A)	Discuss the various criteria for the selection of Environmental Impact Assessment method briefly.		10M	CO1	6
	OR				
Q.2(B)	Describe the environmental impact assessment by Ad-hoc methods in detail.		10M	CO1	2
Q.3(A)	Enumerate the various causes of air pollution and its impacts on human health.		10M	CO2	6
	OR				
Q.3(B)	Summarize the different methodology adopted for Identification and Incorporation of mitigation measures in detail.		10M	CO2	2
Q.4(A)	Discuss in detail the causes and effect of deforestation		10M	CO3	6
	OR				
Q.4(B)	Elaborate in detail about the Impact of deforestation on environment.		10M	CO3	6
Q.5(A)	Describe elaborately about the preparation and evaluation of Environm audit report		10M	CO4	2
	OR				
Q.5(B)	Discuss how the post auditing of a project is carried out and also its outcomes.		10M	CO4	6
Q.6(A)	Summarize elaborately about the wildlife protection act in India.		10M	CO5	2
	OR				
Q.6(B)	Discuss in detail about preparation of Environmental impact assessment for Beverage industry.		10M	CO5	6

END

Hall Ticket No:

Question Paper Code: 14CE412

MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE, MADANAPALLE
(UGC-AUTONOMOUS)

B.Tech IV Year II Semester (R14) Regular & Supplementary End Semester Examinations – JULY 2021

GROUND IMPROVEMENT TECHNIQUES
(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				CO	BL
Q.1	i.	What is the need for engineered ground improvement?	1M	CO1	1
	ii.	Write different methods of Dewatering.	1M	CO1	1
	iii.	What are the objectives of densification of soil?	1M	CO2	1
	iv	State the principle of preloading.	1M	CO2	1
	v.	What do you mean by Soil Stabilization?	1M	CO3	1
	vi	Write the principle involved in bituminous stabilization of soil.	1M	CO3	1
	vii.	What do you mean by reinforced earth?	1M	CO4	1
	viii.	Write various geo synthetic materials.	1M	CO4	1
	ix.	Define Expansive Soil.	1M	CO5	1
	x.	List out the various methods of determination of swelling pressure.	1M	CO5	1
Q.2(A)	Describe the classification of Ground Improvement Techniques.		10M	CO1	2
	OR				
Q.2(B)	What do you mean by Grouting? Explain various methods of Grouting.		10M	CO1	1
Q.3(A)	Write various in situ densification methods of granular soil? Explain densification of soil by Vibro- flotation method.		10M	CO2	1
	OR				
Q.3(B)	What are the In–situ densification methods in cohesive soils? Discuss the objectives and applications of stone Column.		10M	CO2	1
Q.4(A)	Discuss the use of lime stabilization of soils. what are the physical and chemical changes that takes place in lime stabilization.		10M	CO3	6
	OR				
Q.4(B)	What is mechanical stabilization? What are the factors that affect the mechanical stability of a mixed soil.		10M	CO3	1
Q.5(A)	With the help of neat sketch explain the component parts of reinforced ear		10M	CO4	1
	OR				
Q.5(B)	Discuss the functions and applications of Geo-textiles.		10M	CO4	6
Q.6(A)	Explain field and laboratory methods of identification of Expansive soil.		10M	CO5	2
	OR				
Q.6(B)	Explain various foundation techniques used in Expansive soils		10M	CO5	2

END

MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE, MADANAPALLE
(UGC-AUTONOMOUS)

B.Tech IV Year II Semester (R14) Regular & Supplementary End Semester Examinations – July 2021

WIND ELECTRICAL SYSTEMS
(EEE)

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 Part-A or B only**

Q.No			Marks	CO	BL
Q.1	i.	What are the variable speeds of Wind Power Plants? Give two examples.	1M	CO1	1
	ii.	What do you mean by gear train in a Wind Turbine System?	1M	CO1	1
	iii.	What is the function of an anemometer in a Wind Generation System?	1M	CO2	1
	iv	Mention the significance of variable pitch control system over fixed pitch control system in a Wind Power Plant.	1M	CO2	1
	v.	Mention the limitations of SCIG.	1M	CO3	1
	vi	Describe the operating principle of DFIG.	1M	CO3	1
	vii.	Define power quality.	1M	CO4	1
	viii.	Define Unbalance in a power system.	1M	CO4	1
	ix.	What is the Government Act for market development?	1M	CO5	1
	x.	What are the issues related to hybrid power generation?	1M	CO5	1
Q.2(A)	Briefly explain how wind energy is converted to electrical energy using a wind turbine using a neat diagram.		10M	CO1	2
	OR				
Q.2(B)	Derive the expression for power in wind from the fundamentals.		10M	CO1	4
Q.3(A)	Briefly explain the different control strategies available for a WPP based on Pitch Control.		10M	CO2	2
	OR				
Q.3(B)	Suggest a configuration for a fixed speed WECS such that it can operate under variable speeds also. Use relevant diagrams.		10M	CO2	2
Q.4(A)	With a neat block diagram explain the principle of working of a DFIG based wind power plant.		10M	CO3	2
	OR				
Q.4(B)	With a neat block diagram explain the principle of working of a WRSG based wind power plant.		10M	CO3	1
Q.5(A)	Define the terminologies (a) Voltage Sag (b) Voltage Swell (c) Flicker and (d) Harmonics in a power system.		10M	CO4	2
	OR				
Q.5(B)	Discuss the working of IGBT based inverter in WPP.		10M	CO4	6
Q.6(A)	Explain the operation of a generalized wind-solar hybrid system with a neat schematic diagram.		10M	CO5	2
	OR				
Q.6(B)	i) Briefly explain the wind interconnection requirements.		5M	CO5	2
	ii) What is the role of Government in renewable energy market development?		5M	CO5	1

END

MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE, MADANAPALLE
(UGC-AUTONOMOUS)
B.Tech IV Year II Semester (R14) Regular & Supplementary End Semester Examinations – JULY 2021
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			Marks	CO	BL
Q.1	i.	Define Intrapreneur.	1M	CO1	1
	ii.	Name any two women Entrepreneurs in any business.	1M	CO1	1
	iii.	What are the problems encountered in inventory analysis?	1M	CO2	2
	iv	Justify internet advertising will be most effective than other modes.	1M	CO2	1
	v.	What is the purpose of material handling equipment in plants?	1M	CO3	1
	vi	Which are the financing systems will be the sources of funds?	1M	CO3	1
	vii.	How do you select the production techniques?	1M	CO4	1
	viii.	Give an example for fixed position layout.	1M	CO4	1
	ix.	Justify internet advertising will be most effective than other modes.	1M	CO5	2
	x.	State quality control in simple line.	1M	CO5	1
Q.2(A)		Describe important roles of women entrepreneurship and list the women entrepreneurship schemes in India.	10M	CO1	2
		OR			
Q.2(B)		Explain the common traits of successful Entrepreneur and give an example	10M	CO1	2
Q.3(A)		Describe the principle of creative problem-solving process.	10M	CO2	2
		OR			
Q.3(B)		Explain the usage and implementation of business plan.	10M	CO2	2
Q.4(A)		Write briefly about Strategic approaches for various financing categories for starting new venture and its advantages.	10M	CO3	1
		OR			
Q.4(B)		Discuss the processes of motivating and leading teams to better performance on their job.	10M	CO3	6
Q.5(A)		List the factors to be considered for choosing plant location and layout.	10M	CO4	1
		OR			
Q.5(B)		Discuss flexible and cellular manufacturing systems.	10M	CO4	6
Q.6(A)		Explain the effective material handling system and its importance.	10M	CO5	2
		OR			
Q.6(B)		Describe the market research process with example.	10M	CO5	2

END

MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE, MADANAPALLE
(UGC-AUTONOMOUS)
B.Tech IV Year II Semester (R14) Regular & Supplementary End Semester Examinations – JULY 2021
AUTOMOTIVE TECHNOLOGY
(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			Marks	CO	BL
Q.1	i.	List any three parts of IC engine.	1M	CO1	1
	ii.	State any two advantages of using baffle plate in silencer.	1M	CO1	1
	iii.	What is the function of connecting rod in IC engine?	1M	CO2	1
	iv	Why piston of 4 stroke engine is smaller than 2 stroke engine?	1M	CO2	1
	v.	What is ignition delay?	1M	CO3	1
	vi	Give any firing order in IC Engine.	1M	CO3	1
	vii.	Define relative efficiency.	1M	CO4	1
	viii.	What is air – fuel ratio for the chemically correct mixture?	1M	CO4	1
	ix.	Why hydrogen fuel is a clean fuel?	1M	CO5	1
	x.	State detonation of IC engine.	1M	CO5	1
Q.2(A)	i) Differentiate between SI and CI engine.		5M	CO1	3
	ii) Classify the Internal combustion engine.		5M	CO1	4
	OR				
Q.2(B)	Derive the expressions for the thermal efficiency, work output and mean effective pressure of the Carnot cycle.		10M	CO1	2
Q.3(A)	An ideal Otto cycle has a compression ratio of 8. At the beginning of the compression process, air is at 100 kPa and 17°C and 800 kJ/kg of heat is transferred to air during the constant volume heat addition process. Determine: (1) Maximum temperature and pressure that occur during the cycle, (2) the network output, (3) thermal efficiency and (4) Mean effective pressure for the cycle.		10M	CO2	2
	OR				
Q.3(B)	What is meant by knocking? Explain the factors affecting it.		10M	CO2	1
Q.4(A)	Sketch and explain the working of electronic fuel injection system.		10M	CO3	2
	OR				
Q.4(B)	Explain with a neat sketch the S.U carburettor.		10M	CO3	2
Q.5(A)	Describe the various methods of engine cooling? Explain with sketch the thermosyphon system of cooling.		10M	CO4	2
	OR				
Q.5(B)	List the functions of the lubrication system in an automobile. Explain with a neat sketch the pressure lubrication system.		10M	CO4	1
Q.6(A)	Explain the construction and working of single plate clutch with neat sketch.		10M	CO5	2
	OR				
Q.6(B)	Write a short note on propeller shaft and universal joint.		10M	CO5	1

END

MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE, MADANAPALLE
(UGC-AUTONOMOUS)
B.Tech IV Year II Semester (R14) Regular & Supplementary End Semester Examinations – July 2021
SATELLITE COMMUNICATION
(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 Part-A or B only

			Marks	CO	BL
Q.1	i.	What are orbital elements?	1M	CO1	1
	ii.	What is look angle?	1M	CO1	1
	iii.	What is the main advantage of FDMA?	1M	CO2	1
	iv	Draw the TDMA frame structure with two transmitting earth stations.	1M	CO2	2
	v.	What is the relation between elevation angle and cloud attenuation.	1M	CO3	1
	vi	At what frequency, rain is the dominant propagation phenomenon on satellite links.	1M	CO3	1
	vii.	What is the typical slant range to a GEO satellite?	1M	CO4	1
	viii.	Expand DAMA.	1M	CO4	2
	ix.	What is NGSO?	1M	CO5	1
	x.	Which code is used by GPS satellites to transmit?	1M	CO5	1
Q.2(A)	Draw the block diagrammatic representation of satellite communication system and explain each block. Also mention the advantages of satellite communications.		10M	CO1	2
OR					
Q.2(B)	Explain telemetry, tracking, command and monitoring in detail with neat sketch.		10M	CO1	2
Q.3(A)	Distinguish TDMA and FDMA		10M	CO2	4
OR					
Q.3(B)	Explain digital transmission of analog signals.		10M	CO2	2
Q.4(A)	Explain about antenna system and tracking system in an earth station.		10M	CO3	2
OR					
Q.4(B)	Discuss various noises disturbing the received signal from satellite at earth station.		10M	CO3	6
Q.5(A)	Explain various access control protocols of VSAT.		10M	CO4	2
OR					
Q.5(B)	Derive the expression for link margin for VSAT Network.		10M	CO4	3
Q.6(A)	Explain the principle of GPS and discuss GPS C/A accuracy.		10M	CO5	2
OR					
Q.6(B)	With neat functional block diagram explain the GPS receiver operation.		10M	CO5	1
*** END***					

MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE, MADANAPALLE
(UGC-AUTONOMOUS)
B.Tech IV Year II Semester (R14) Regular & Supplementary End Semester Examinations – July 2021
IOT NETWORKS
(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 Part-A or B only

Q.No			Marks	CO	BL
Q.1	i.	Mention the features of E- Health.	1M	CO1	1
	ii.	Sketch the Architecture of IoT.	1M	CO1	2
	iii.	Define FTP.	1M	CO2	1
	iv	Discuss about data accumulation.	1M	CO2	1
	v.	Write about edge computing.	1M	CO3	1
	vi	Expand MQTT.	1M	CO3	2
	vii.	List out the examples of LAN.	1M	CO4	1
	viii.	Define watchdog timer.	1M	CO4	1
	ix.	Define bus topology.	1M	CO5	1
	x.	Expand ETSI.	1M	CO5	2
Q.2(A)	Discuss about E- Health Applications in detail.		10M	CO1	6
	OR				
Q.2(B)	Describe the working scenario of health monitoring system using IoT with relevant diagrams.		10M	CO1	2
Q.3(A)	Write about MQTT with neat sketches.		10M	CO2	1
	OR				
Q.3(B)	Define XML? Explain about local and remote procedure calls.		10M	CO2	2
Q.4(A)	Write about IETF standard architecture with its diagram..		10M	CO3	1
	OR				
Q.4(B)	Explain about IoT architecture with neat sketches.		10M	CO3	2
Q.5(A)	Outline the mesh topology with relevant diagrams and mention their merits and demerits.		10M	CO4	2
	OR				
Q.5(B)	Write about knowledge management with neat diagrams.		10M	CO4	1
Q.6(A)	List out the features of ATmega328 registers in detail.		10M	CO5	1
	OR				
Q.6(B)	Draw and Explain the block diagram of Arduino Uno with an example.		10M	CO5	2
	END				

MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE, MADANAPALLE
(UGC-AUTONOMOUS)
B.Tech IV Year II Semester (R14) Regular & Supplementary End Semester Examinations –July 2021
SOFTWARE PROJECT MANAGEMENT
(CSE)

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 Part-A or B only			

Q.No			Marks	CO	BL
Q.1	i.	What is waterfall model?	1M	CO1	1
	ii.	Define software economics. List out the various parameters.	1M	CO1	1
	iii.	Define artifacts of the process.	1M	CO2	1
	iv	Can you identify the task of engineering artifacts?	1M	CO2	1
	v.	What is Pragmatic planning?	1M	CO3	1
	vi	What is process automation?	1M	CO3	1
	vii.	What are the fundamental sets of management metrics?	1M	CO4	1
	viii.	Can you identify the task of Metrics automation?	1M	CO4	1
	ix.	What is demonstration milestone?	1M	CO5	1
	x.	Define stand-alone test.	1M	CO5	1
Q.2(A)		Discuss the performance of conventional software management.	10M	CO1	6
		OR			
Q.2(B)		How to estimate cost in software economics? Explain the three generation of software economics	10M	CO1	1
Q.3(A)		With a neat table explain in detail the general status of plans, requirements and products across the major milestones.	10M	CO2	1
		OR			
Q.3(B)		Draw and explain the artifact sequences across the software development life cycle.	10M	CO2	2
Q.4(A)		Give an overview of the artifact sets. Discuss in detail about the artifact captured in engineering sets.	10M	CO3	1
		OR			
Q.4(B)		Discuss the iterative breakdown structure issues.	10M	CO3	6
Q.5(A)		Illustrate in detail next generation software economics.	10M	CO4	2
		OR			
Q.5(B)		Discuss in detail seven core metrics in software project management	10M	CO4	6
Q.6(A)		Elaborate in details about common subsystem product overview with suitable examples.	10M	CO5	6
		OR			
Q.6(B)		Construct the CCPDS-R incremental design process with suitable examples.	10M	CO5	6
		END			

MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE, MADANAPALLE
(UGC-AUTONOMOUS)
B.Tech IV Year II Semester (R14) Regular & Supplementary End Semester Examinations – July 2021
CLOUD COMPUTING
(CSE)

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 Part-A or B only

Q.No			Marks	CO	BL
Q.1	i.	Define cloud computing.	1M	CO1	1
	ii.	Mention the goals of distributed computing.	1M	CO1	1
	iii.	What are the properties of Service Oriented Architecture(SOA)?	1M	CO2	1
	iv	What is Cloud data center?	1M	CO2	1
	v.	What is the need for federation in cloud?	1M	CO3	1
	vi	How do you protect privacy information in cloud?	1M	CO3	1
	vii.	What is distributed management task force (DMTF)?	1M	CO4	1
	viii.	Give the list of standards for security service in cloud.	1M	CO4	1
	ix.	What do mean by Virtualization?	1M	CO5	1
	x.	What is the advantage of Amazon DB?	1M	CO5	1
Q.2(A)	Explain in detail about SOA overview with a neat diagram.		10M	CO1	2
OR					
Q.2(B)	What are the possibilities for designing a Grid computing system? Explain in detail.		10M	CO1	1
Q.3(A)	Explain about the implementation issues and maturity models in SAAS in detail.		10M	CO2	2
OR					
Q.3(B)	i) Explain about Cloud Data center in detail. ii) Explain briefly about building of cloud networks.		5M 5M	CO2 CO2	2
Q.4(A)	Investigate the security challenges of federation based cloud.		10M	CO3	2
OR					
Q.4(B)	Explain in detail about Federation identity management in detail.		10M	CO3	2
Q.5(A)	Explain about the Mobile operating systems.		10M	CO4	2
OR					
Q.5(B)	Analyze the Mobile platform virtualization with appropriate case study.		10M	CO4	4
Q.6(A)	i) Explain in detail about Amazon simple DB. ii) Explain in detail on Amazon S3.		5M 5M	CO5 CO5	2
OR					
Q.6(B)	Explain about the Microsoft Azure services in detail.		10M	CO5	2
END					

MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE, MADANAPALLE
(UGC-AUTONOMOUS)

B.Tech IV Year II Semester (R14) Regular & Supplementary End Semester Examinations – July 2021

CLOUD COMPUTING
(CSIT& IT)

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 Part-A or B only**

Q.No			Marks	CO	BL
Q.1	i.	Differentiate between parallel and distributed computing paradigms.	1M	CO1	1
	ii.	List out the key characteristics of cloud computing	1M	CO1	1
	iii.	Write a short note on desired features of a cloud.	1M	CO2	2
	iv	Explain any three services offered by cloud.	1M	CO2	2
	v.	What are the benefits of federation in the cloud?	1M	CO3	1
	vi	List out the challenges of cloud security?	1M	CO3	2
	vii.	What are the standards for messaging in cloud computing?	1M	CO4	1
	viii.	Explain Virtual administration in cloud.	1M	CO4	2
	ix.	What is Server Virtualization?	1M	CO5	1
	x.	What operating systems run on virtual servers?	1M	CO5	1
Q.2(A)	i) Describe the features, challenges and risks in cloud computing		5M	CO1	2
	ii) Explain the functions and types of Hypervisors.		5M	CO1	2
		OR			
Q.2(B)	Explain in detail about the evolution of cloud computing.		10M	CO1	2
Q.3(A)	Describe the steps involved in SOA towards cloud computing.		10M	CO2	2
		OR			
Q.3(B)	Define SOA. Explain the basic approach to a data center based SOA.		10M	CO2	2
Q.4(A)	Explain in detail about the federation in the cloud?		10M	CO3	2
		OR			
Q.4(B)	Write about the techniques proposed to strengthen Security in SaaS.		10M	CO3	1
Q.5(A)	Explain the concept of mobile platform virtualization in cloud computing.		10M	CO4	2
		OR			
Q.5(B)	Describe the concept of end user access to cloud computing for youtube, facebook and Zoho application.		10M	CO4	2
Q.6(A)	Explain in detail about Google App Engine and Google web tool kit.		10M	CO5	2
		OR			
Q.6(B)	i) Write about the about Amazon Simple Storage Service.		5M	CO5	2
	ii) Describe transaction processing and NoSQL databases.		5M	CO5	2
		END			

Hall Ticket No: ☐☐☐☐☐☐☐☐☐☐ Question Paper Code: 14CE410

MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE, MADANAPALLE
(UGC-AUTONOMOUS)
B.Tech IV Year II Semester (R14) Regular & Supplementary End Semester Examinations – JULY 2021
ENVIRONMENTAL IMPACT ASSESSMENT
(Open Elective IV – Common to EEE, ME, ECE, CSE, CSIT & IT)

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			Marks	CO	BL
Q.1	i.	Recall the word Environmental base map.	1M	CO1	1
	ii.	Define pollution.	1M	CO1	1
	iii.	Define land use.	1M	CO2	1
	iv	Illustrate the term delineation.	1M	CO2	2
	v.	What do you mean by vegetation and its uses?	1M	CO3	1
	vi	Write the categories of land use in a map.	1M	CO3	1
	vii.	Define audit protocol.	1M	CO4	1
	viii.	What do you mean by onsite activity?	1M	CO4	1
	ix.	List any two causes of air pollution.	1M	CO5	1
	x.	What is post audit?	1M	CO5	1
Q.2(A)	Briefly discuss in detail about the preparation of environmental base map.		10M	CO1	6
	OR				
Q.2(B)	Explain the environmental impact assessment by using any one method in detail.		10M	CO1	2
Q.3(A)	Describe the methodology adopted for the study of impacts on soil and groundwater.		10M	CO2	2
	OR				
Q.3(B)	Explain the procedure used for the Environmental Impact assessment of Biological environment.		10M	CO2	2
Q.4(A)	Describe the concept of assessing the impact assessment on vegetation and wild Life in detail		10M	CO3	2
	OR				
Q.4(B)	Discuss in detail the various causes and effects of deforestation.		10M	CO3	6
Q.5(A)	Summarize the various objectives of Environmental audit.		10M	CO4	2
	OR				
Q.5(B)	List the types of Environmental audit, explain any one in detail.		10M	CO4	1
Q.6(A)	Summarize in detail the various Environmental Impacts of dairy industry in detail.		10M	CO5	2
	OR				
Q.6(B)	Describe in detail the various Environmental Impacts of paper industry in detail.		10M	CO5	2

END

MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE, MADANAPALLE
(UGC-AUTONOMOUS)
B.Tech IV Year II Semester (R14) Regular & Supplementary End Semester Examinations – JULY 2021
GROUND IMPROVEMENT TECHNIQUES
(Open Elective IV – Common to EEE, ME, ECE, CSE, CSIT & IT)

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				CO	BL
Q.1	i.	List the objectives of Ground improvement Techniques?	1M	CO1	1
	ii.	What are the various methods of Grouting?	1M	CO1	1
	iii.	What are the various methods of in situ densification?	1M	CO2	1
	iv	State the functions of vertical drain used in preloading technique.	1M	CO2	1
	v.	What are the various methods of soil stabilization?	1M	CO3	1
	vi	What are the various processes involved behind lime Stabilization?	1M	CO3	1
	vii.	List the applications of reinforced earth.	1M	CO4	1
	viii.	Write the applications of Geo membrane.	1M	CO4	1
	ix.	List out any two artificial geotextiles.	1M	CO5	1
	x.	Write a short note on expansive soil.	1M	CO5	1
Q.2(A)		Explain in brief the principle, equipment used, installation and operation and precaution adopted in electro-osmotic dewatering.	10M	CO1	2
		OR			
Q.2(B)		What are different grout materials used in Grouting Process? Describe any one method of grouting technique.	10M	CO1	1
Q.3(A)		What are the in – situ densification methods in granular soils? Explain Dynamic compaction method.	10M	CO2	1
		OR			
Q.3(B)		i. What is preloading? Write different methods of Pre loading. ii. Write the advantages and disadvantages of preloading?	5M 5M	CO2	1
Q.4(A)		Describe in brief Cement stabilization. What are the factors that affect the stability of soil Cement	10M	CO3	2
		OR			
Q.4(B)		Write short note on bituminous stabilization. Describe the factors affecting bituminous stabilization.	10M	CO3	1
Q.5(A)		What do you mean by reinforced Earth? What are the benefits and applications of Reinforced Earth?	10M	CO4	1
		OR			
Q.5(B)		Explain .various types of geosynthetics along with their applications and functions.	10M	CO4	2
Q.6(A)		What is swelling pressure? Explain the various methods of determination of swelling Pressure in laboratory.	10M	CO5	1
		OR			
Q.6(B)		What is Under reamed pile? Explain how it counteracts the swelling nature of soil?	10M	CO5	1

END

MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE, MADANAPALLE
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B.Tech IV Year II Semester (R14) Regular & Supplementary End Semester Examinations – JULY 2021

ENTREPRENEURSHIP
(Open Elective IV – Common to CE, EEE, ECE, CSE, CSIT & IT)

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			Marks	CO	BL
Q.1	i.	State Entrepreneur.	1M	CO1	1
	ii.	Enumerate the entrepreneurial decision process.	1M	CO1	2
	iii.	Write two functions manager in organization.	1M	CO2	1
	iv	What are the problems occurred when a plant is breakdown?	1M	CO2	1
	v.	List any three material handling equipments in plants.	1M	CO3	1
	vi	Define the term Quality.	1M	CO3	1
	vii.	Expand SWOT Analysis.	1M	CO4	2
	viii.	State inventory control.	1M	CO4	1
	ix.	Sketch the ABC analysis in an inventory.	1M	CO5	2
	x.	List the scenarios most likely to win business.	1M	CO5	1
Q.2(A)		Differentiate between Entrepreneur and Manager in an organization.	10M	CO1	2
		OR			
Q.2(B)		Write briefly about women entrepreneurship and its emergence for development of nation.	10M	CO1	1
Q.3(A)		Describe the process of writing business plan with example.	10M	CO2	2
		OR			
Q.3(B)		Explain the sources of Idea generation.	10M	CO2	2
Q.4(A)		Discuss briefly about angel investment process.	10M	CO3	4
		OR			
Q.4(B)		Describe various growth strategy of new venture expansion.	10M	CO3	3
Q.5(A)		Explain various production techniques in manufacturing industries.	10M	CO4	2
		OR			
Q.5(B)		Differentiate between product and process layout with example.	10M	CO4	4
Q.6(A)		Discuss about inventory control process with suitable example.	10M	CO5	4
		OR			
Q.6(B)		Describe the channels of distribution.	10M	CO5	2

END

MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE, MADANAPALLE
(UGC-AUTONOMOUS)

B.Tech IV Year II Semester (R14) Regular & Supplementary End Semester Examinations – JULY 2021

TOTAL QUALITY MANAGEMENT
(Open Elective IV - Common to CE, EEE, ECE, CSE, CSIT & IT)

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**

Marks			Marks	CO	BL
Q.1	i.	Explain Quality as expressed by Juran.	1M	CO1	2
	ii.	What is the importance of the subject quality control?	1M	CO1	1
	iii.	What are quality charts?	1M	CO2	1
	iv	What is KAIZEN philosophy?	1M	CO2	1
	v.	What is KANBAN philosophy?	1M	CO3	1
	vi	Why quality circles is popular in many industries.	1M	CO3	1
	vii.	Mention in 2 points how benchmarking helps us to improve?	1M	CO4	2
	viii.	What is supply chain management?	1M	CO4	1
	ix.	What is the importance of quality standards?	1M	CO5	1
	x.	What do you understand by six sigma?	1M	CO5	1
Q.2(A)	Discuss Kaoru Ishikawa diagram in a production system.		10M	CO1	6
	OR				
Q.2(B)	Discuss Juran's philosophies for quality improvement		10M	CO1	6
Q.3(A)	What are Quality tools and explain any three.		10M	CO2	1
	OR				
Q.3(B)	How can employee motivation and empowerment improve the productivity of an organization? Mention 4 points to be kept in mind while selecting a supplier		10M	CO2	1
Q.4(A)	Discuss Poka Yoke principle in details.		10M	CO3	6
	OR				
Q.4(B)	Explain 5 S philosophy.		10M	CO3	2
Q.5(A)	How business process re-engineering works? Why do we need BPR? Explain with a suitable example.		10M	CO4	1
	OR				
Q.5(B)	What are the various costs involved in carrying out quality functions in an Organization? Explain.		10M	CO4	1
Q.6(A)	Discuss DMADV approach of six sigma.		10M	CO5	6
	OR				
Q.6(B)	Explain characteristics of a good auditor? What are the differences between black belt and green belt?		10M	CO5	2

END

MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE, MADANAPALLE
(UGC-AUTONOMOUS)
B.Tech IV Year II Semester (R14) Regular & Supplementary End Semester Examinations – July 2021
CLOUD COMPUTING
(Open Elective – Common to CE, EEE, ME, 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 Part-A or B only

Q.No			Marks	CO	BL
Q.1	i.	What is grid computing?	1M	CO1	1
	ii.	Different between private, public and hybrid cloud.	1M	CO1	1
	iii.	Expand MSP and What is the use of MSP?	1M	CO2	2
	iv	Give an example for Public Cloud.	1M	CO2	1
	v.	What is the need for federation in cloud?	1M	CO3	1
	vi	What is the goal of trusted federation?	1M	CO3	1
	vii.	Is security is needed to provide Software as service?	1M	CO4	1
	viii.	Define Cloud Security.	1M	CO4	1
	ix.	List out the Amazon S3 merits and demerits.	1M	CO5	1
	x.	What is the use of Microsoft sharepoint?	1M	CO5	1
Q.2(A)		Compare and contrast Cloud Computing & Grid Computing.	10M	CO1	4
		OR			
Q.2(B)		What are the possibilities for designing a Grid computing system? Explain in detail.	10M	CO1	1
Q.3(A)		Explain in detail about the major services provided by Cloud Computing.	10M	CO2	2
		OR			
Q.3(B)		Explain about the basic approach to deploy the SOA based Cloud data center.	10M	CO2	2
Q.4(A)		What is Federation? Discuss about four basic types of federation in cloud.	10M	CO3	1
		OR			
Q.4(B)		Discuss few security challenges in cloud.	10M	CO3	6
Q.5(A)		Demonstrate about mobile operating systems for smart phones in detail.	10M	CO4	2
		OR			
Q.5(B)		Discuss in detail about Open Cloud Consortium (OCC).	10M	CO4	6
Q.6(A)		Explain about the advantages of Google web tool kit in detail.	10M	CO5	2
		OR			
Q.6(B)		Differentiate between Amazon EC2 and Amazon DB service.	10M	CO5	4
		*** END***			

Hall Ticket No: ⬚⬚⬚⬚⬚⬚⬚⬚⬚⬚⬚ Question Paper Code: 14CSU412

MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE, MADANAPALLE
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B.Tech IV Year II Semester (R14) Regular & Supplementary End Semester Examinations – July2021

SOFTWARE PROJECT MANAGEMENT
(Open Elective – Common to CE, EEE, ME, 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 Part-A or B only

Q.No			Marks	CO	BL
Q.1	i.	State the purpose of deployment view.	1M	CO1	1
	ii.	How do measure size of software?	1M	CO1	1
	iii.	Define status assessment.	1M	CO2	1
	iv	What is meant by checkpoints?	1M	CO2	1
	v.	Outline the first level WBS elements.	1M	CO3	2
	vi	Define software change orders.	1M	CO3	1
	vii.	List down the perspectives of work and progress.	1M	CO4	1
	viii.	Define Domain experience.	1M	CO4	1
	ix.	Define IPDR demonstration.	1M	CO5	1
	x.	Outline the parameters of project process.	1M	CO5	2
Q.2(A)	List and explain the principles of modern software management.		10M	CO1	2
	OR				
Q.2(B)	Explain the waterfall model with neat diagram.		10M	CO1	2
Q.3(A)	With a neat table explain in detail the general status of plans, requirements, and products across the major milestones.		10M	CO2	1
	OR				
Q.3(B)	What is a workflow? Explain about software process workflows.		10M	CO2	1
Q.4(A)	Explain the responsibilities of the four component teams in a default line-of-business organization.		10M	CO3	2
	OR				
Q.4(B)	Discuss the Line-of-Business Organizations.		10M	CO3	6
Q.5(A)	Explain in detail about quality indicators.		10M	CO4	2
	OR				
Q.5(B)	Elaborate the pragmatic Software Metrics.		10M	CO4	6
Q.6(A)	Explain about software architecture skeleton.		10M	CO5	2
	OR				
Q.6(B)	Describe briefly CCPDS-R designing process..		10M	CO5	2
	END				

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B.Tech IV Year II Semester (R14) Regular& Supplementary End Semester Examinations –July2021

IoT NETWORKS

(Open Elective – Common to CE, EEE, ME, CSE, CSIT, IT)

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 Part-A or B only

Q.No			Marks	CO	
Q.1	i.	Note any three functions of IoT.	1M	CO1	1
	ii.	What smart grid technology?	1M	CO1	1
	iii.	List out the advantages of IoT based home Automation.	1M	CO2	1
	iv	Mention the transport layer protocols.	1M	CO2	2
	v.	Expand SMTP.	1M	CO3	2
	vi	Write the advantages in star topology.	1M	CO3	1
	vii.	Note the applications of Atmega328 microcontrollers.	1M	CO4	1
	viii.	Write the features of Galileo?	1M	CO4	1
	ix.	Mention the purpose of level shifter.	1M	CO5	2
	x.	Discuss about scheduling process.	1M	CO5	2
Q.2(A)	Explain the various components of smart city and mention the role of IoT in making smart city.		10M	CO1	2
OR					
Q.2(B)	Write short notes on 1. Applications of IoT 2. Comparison of IoT and M2M?		10M	CO1	1
Q.3(A)	Outline the SNMP protocol with neat sketches..		10M	CO2	2
OR					
Q.3(B)	Explain about XML-RPC with relevant diagrams.		10M	CO2	2
Q.4(A)	Discuss about the design principles used in IoT architecture		10M	CO3	6
OR					
Q.4(B)	Describe the European Telecommunication Standard Architecture with neat sketches.		10M	CO3	2
Q.5(A)	What is Ring topology? Explain. And also mention their merits and demerits		10M	CO4	1
OR					
Q.5(B)	Demonstrate the mesh topology with neat sketches and also write their merits and demerits.		10M	CO4	2
Q.6(A)	Write about the features of ATmega328.		10M	CO5	1
OR					
Q.6(B)	Summarize any one of the application of Galileo with an example.		10M	CO5	2
*** END***					