Estd : 2008 Appro
Address : Kin

DEPARTMENT (

ELECTRONICS AND COMMU

S No	Course Code	Course Title	CO No.
1	MC111PO	INDIAN CONSTITUTION	CO1
			CO2
			CO3
			CO4
			CO5
			CO6
2	HS101EG	ENGLISH	CO1
			CO2
			CO3
			CO4
			CO5
			CO6
3	BS102MT	MATHEMATICS-I	CO1
			CO2
			CO3
			CO4
			CO5
			CO6
4	BS104PH	PHYSICS	CO1
			CO2
			CO3
			CO4
			CO5
			CO6
		BASIC ELECTRICAL	CO1
			CO2
			CO3
			CO4
			CO5

5	ES106EE	ENGINEERING	CO6
6	BS152PH	PHYSICS LAB	CO1
			CO2
			CO3
			CO4
			CO5
			CO6
7	ES154EE	BASIC ELECTRICAL ENGINEERING LAB	CO1
			CO2
			CO3
			CO4
			CO5
			CO6
8	ES156CE	ENGINEERING GRAPHICS	CO1
			CO2
			CO3
			CO4
			CO5
			CO6

METHODIST
COLLEGE OF ENGINEERING AND TECHNOLOGY
ved by AICTE New Delhi | Affiliated to Osmania University, Hyderabad
g Koti Road, Abids, Hyderabad, Telangana, 500001 | Email : principal@methodist.edu.in

OF H & S

NICATION ENGINEERING **ACEDEMIC YEAR 2019 - 20** **SEMEST**

Course Outcome
Know the background of thr present constitution of India
Understand the working of the union,state and local levels
gain conciousness on the fundamentals rights and duties.
Be able to understand the functioning and distribution of financial resources between the states
Be exposed to the reality of hierarchical Indian social structure and the ways the grievances deprived sectio
Be able to understand the functioning and distribution of financial resources between the centre and state
Read, Explain, interpret and comprehend a variety of written texts and develop positive attitude and commitment towards their (students') social society
Remember and recognize the significance of vocabulary (roots and affixes, homonyms, one- word substitutes, etc.) and use language accurately for effective communication
Apply appropriate grammatical concepts (tenses, articles, prepositions, etc.) to spoken and written English in formal and informal ambiance
Compile information of various aspects of English diction – Develop creativity in writing skills by framing paragraphs, essays, official letters, technical reports, etc.
Analyze different ways of life through reading prose and poetry, each symbolizing a particular virtue and the learners develop the ability to be creative
Apply appropriate grammatical structure and rules to spoken and written English in formal and informal situations
To Test for the convergence and divergence of infinite series using the comparison test, Ratio test, Cauchy's n'th root test, Leibnitz's test, and also analyzing the nature of series.
To Explain the concepts of derivatives using mean value theorems and their generalization (Taylor's and Meclaurin's series.). Concepts of curvature, evolutes, involutes, envolpes of family cf curves.
To Find Partial derivatives of functions of two variables using concept of limits and continuity . Derivatives of
To Examine the behavior of higher order partial derivatives using taylors series and the concepts of maximum and
To Identify the key concepts, theories and mathematical fundamentals to derive mathematical relations involved in evaluation of double integrals and triple integrals and solving Engineering problems.
To Evaluate gradient of a scalar field, divergence, curl of a vector field to find the values of line, surface and volume integrals and establish their relation using Green, Gauss and Stokes theorems.
Explain the basics of crystals, lattice parameters and their defects.
Classify solids into different types by understanding the formation of energy bands in solids. and to Analyze the semiconductor by knowing the hall coefficient hall voltage, hall electric field and charge concentration and study
Apply the knowledge of basic laws of electricity and magnetism to understand the concept of electromagnetic
Classify the properties of materials and Choose the materials for various applications in different disciplines
Recall the basic concepts of optics, study the working of optical fibres and their applications
Define the basic concepts of emission and absorption and study the different types of lasers and their applications.
Elaborate themselves in designing basic electric circuits
Judge suitable test to determine total power in three phase circuits
Apply suitable test to determine the performance of AC machines
Examine the performance characteristics of DC machines
Illustrate the requirements for electric machines for industrial purpose

Find awareness about various electrical installation rules to be followed while working with electrical equipment
Explain the behavior of Semiconductor diode in Forward and Reverse bias conditions
Illustrate the variation of capacitance and resistance with temperature of different materials.
Explain the concepts of Solar cell for generation of power
Develop a conceptual Explaining of the fundamental physical principles involved in the Laser , Optical fibres and other materials described in the theory
Find the Rigidity Modulus of the material of the given wire using Torsional Pendulum
Measure the energy gap of a semiconductor.
Justify the statements of basic electrical circuits
Examine the performance of different electrical machines
Identify the electrical machines requirements
Find the response of different electrical circuits
Determine parameters of electrical machines and equipment
Test for efficiency of electrical machines
Recall terms & conventions of engineering design and justify its place in society
Visualise the aspects of engineering design
Consruct & apply engineering graphics standards
Use computer-aided geometric design to model Projection diagrams
Create working drawings
Support engineering communication in constructive criticism

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ɔn can be addressed to raise human dignity in a democratic way.

S No	Course Code	Course Title	CO No.
1	MC111PO	INDIAN CONSTITUTION	CO1
			CO2
			CO3
			CO4
			CO5
			CO6
2	HS101EG	ENGLISH	CO1
			CO2
			CO3
			CO4
			CO5
			CO6
3	BS102MT	MATHEMATICS-I	CO1
			CO2
			CO3
			CO4
			CO5
			CO6
4	BS104PH	PHYSICS	CO1
			CO2
			CO3
			CO4
			CO5
			CO6
	ES106E	BASIC ELECTRICAL	CO1
			CO2
			CO3
			CO4
			CO5

5	E	ENGINEERING	CO6
6	BS152PH	PHYSICS LAB	CO1
			CO2
			CO3
			CO4
			CO5
			CO6
7	ES154EE	BASIC ELECTRICAL ENGINEERING LAB	CO1
			CO2
			CO3
			CO4
			CO5
			CO6
8	ES156CE	ENGINEERING GRAPHICS	CO1
			CO2
			CO3
			CO4
			CO5
			CO6

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DEPARTMENT OF H&S

MECHANICAL ENGINEERING A.Y 2019-20 SEM

Course Outcome
Know the background of thr present constitution of India
Understand the working of the union,state and local levels
gain conciousness on the fundamentals rights and duties.
Be able to understand the functioning and distribution of financial resources between the states
Be exposed to the reality of hierarchical Indian social structure and the ways the grievances deprived sectio
Be able to understand the functioning and distribution of financial resources between the centre and state
Read, Explain, interpret and comprehend a variety of written texts and develop positive attitude and commitment towards their (students') goal and society
Remember and recognize the significance of vocabulary (roots and affixes, homonyms, one- word substitutes, etc.)
Apply appropriate grammatical concepts (tenses, articles, prepositions, etc.) to spoken and written English in
Compile information of various aspects of English diction – Develop creativity in writing skills by framing paragraphs, essays, official letters, technical reports, etc.
Analyze different ways of life through reading prose and poetry, each symbolizing a particular virtue and the learners develop the ability to be creative
Apply appropriate grammatical structure and rules to spoken and written English in formal and informal situations.
To Test for the convergence and divergence of infinite series using the comparison test, Ratio test, Cauchy's n'th root test, Leibnitz's test, and also analyzing the nature of series.
To Explain the concepts of derivatives using mean value theorems and their generalization (Taylor's and Meclaurin's series.). Concepts of curvature, evolutes, involutes, envolpes of family cf curves.
To Find Partial derivatives of functions of two variables using concept of limits and continuity . Derivatives of
To Examine the behavior of higher order partial derivatives using taylors series and the concepts of maximum
To Identify the key concepts, theories and mathematical fundamentals to derive mathematical relations involved in evaluation of double integrals and triple integrals and solving Engineering problems.
To Evaluate gradient of a scalar field, divergence, curl of a vector field to find the values of line, surface and volume integrals and establish their relation using Green, Gauss and Stokes theorems.
Explain the basics of crystals, lattice parameters and their defects.
Classify solids into different types by understanding the formation of energy bands in solids. and to Analyze the semiconductor by knowing the hall coefficient hall voltage, hall electric field and charge concentration and study
Apply the knowledge of basic laws of electricity and magnetism to understand the concept of electromagnetic
Classify the properties of materials and Choose the materials for various applications in different disciplines
Recall the basic concepts of optics, study the working of optical fibres and their applications
Define the basic concepts of emission and absorption and study the different types of lasers and their
Elaborate themselves in designing basic electric circuits
Judge suitable test to determine total power in three phase circuits
Apply suitable test to determine the performance of AC machines
Examine the performance characteristics of DC machines
Illustrate the requirements for electric machines for industrial purpose

Find awareness about various electrical installation rules to be followed while working with electrical equipment
Explain the behavior of Semiconductor diode in Forward and Reverse bias conditions
Illustrate the variation of capacitance and resistance with temperature of different materials.
Explain the concepts of Solar cell for generation of power
Develop a conceptual Explaining of the fundamental physical principles involved in the Laser , Optical fibres and other materials described in the theory.
Find the Rigidity Modulus of the material of the given wire using Torsional Pendulum
Measure the energy gap of a semiconductor.
Justify the statements of basic electrical circuits
Examine the performance of different electrical machines
Identify the electrical machines requirements
Find the response of different electrical circuits
Determine parameters of electrical machines and equipment
Test for efficiency of electrical machines
Recall terms & conventions of engineering design and justify its place in society
Visualise the aspects of engineering design
Consruct & apply engineering graphics standards
Use computer-aided geometric design to model Projection diagrams
Create working drawings
Support engineering communication in constructive criticism

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1	HS101EG	ENGLISH	CO1
			CO2
			CO3
			CO4
			CO5
			CO6
2	BS102MT	MATHEMATICS-I	CO1
			CO2
			CO3
			CO4
			CO5
			CO6
3	BS105CH	CHEMISTRY	CO1
			CO2
			CO3
			CO4
			CO5
			CO6
4	ES107CS	PROGRAMMING FOR PROBLEM SOLVING	CO1
			CO2
			CO3
			CO4
			CO5
			CO6
5	MC112CE	ENVIRORMENTAL SCIENCE	CO1
			CO2
			CO3
			CO4
			CO5
			CO6
			CO1
			CO2

			CO3
		ESSENCE OF INDIAN	CO4
		TRADITION	CO5
6	MC113PY	KNOWLEDGE	CO6
			CO1
			CO2
			CO3
			CO4
			CO5
7	BS153CH	CHEMISTRY LAB	CO6
			CO1
			CO2
			CO3
		PROGRAMMING FOR	CO4
		PROBLEM SOLVING	CO5
8	ES155CS	LAB	CO6
			CO1
			CO2
			CO3
			CO4
		WORKSHOP/MANUFA	CO5
9	ES157ME	CTURING	CO6

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DEPARTMENT OF H&S

COMPUTER SCEINCE AND ENGINEERING A.Y 2019-20 SEM-I

Course Outcome
Read, Explain, interpret and comprehend a variety of written texts and develop positive attitude and commitment towards their (students') goal and society
Remember and recognize the significance of vocabulary (roots and affixes, homonyms, one- word substitutes, etc.) and use language accurately for effective communication
Apply appropriate grammatical concepts (tenses, articles, prepositions, etc.) to spoken and written English in formal and informal ambiance
Compile information of various aspects of English diction – Develop creativity in writing skills by framing paragraphs, essays, official letters, technical reports, etc.
Analyze different ways of life through reading prose and poetry, each symbolizing a particular virtue and the learners develop the ability to be creative
Apply appropriate grammatical structure and rules to spoken and written English in formal and informal situations
To Test for the convergence and divergence of infinite series using the comparison test, Ratio test, Cauchy's n'th
To Explain the concepts of derivatives using mean value theorems and their generalization (Taylor's and Meclaurin's series.). Concepts of curvature, evolutes, involutes, envolpes of family cf curves.
To Find Partial derivatives of functions of two variables using concept of limits and continuity . Derivatives of
To Examine the behavior of higher order partial derivatives using taylors series and the concepts of maximum and
To Identify the key concepts, theories and mathematical fundamentals to derive mathematical relations involved in evaluation of double integrals and triple integrals and solving Engineering problems.
To Evaluate gradient of a scalar field, divergence, curl of a vector field to find the values of line, surface and volume integrals and establish their relation using Green, Gauss and Stokes theorems.
Apply concept of electrode potential in identifying feasibility of electrochemical reaction; illustrate electro analytical
Identify the mechanism of corrosion of materials on basis of electrochemical approach and devise corrosion
Estimate the physical & chemical parameters of quality of water and explain the process of water treatment.
Explain the influence of chemical structure on properties of materials and their choice in engineering applications.
Classify chemical fuels and grade them through qualitative analysis.
Relate the concept of green chemistry to modify engineering processes and materials.
Choose appropriate data type for implementing programs in C Language
constructs
be reused.
handling
Design and implement programs to store data in structures and files
Create, Read and Write to and from simple text and binary files
Adapt Environmental ethics and verbally discuss environmental issues to attain sustainable development.
suggest sustainable strategies to mitigate these impacts
Identify various levels, values and threats of biodiversity and bio-geographical classification of India.
Elaborate social and environmental issues to prevent future damage of the environment.
Understand the importance of Environmental legislation policies.
diminution of environmental pollutants and contaminants.
To outline the history of civilization in Indian context since pre-Vedic times
To outline the various schools of Indian Philosophy

To demonstrate the diversity in Indian Thought , Languages , regional culture , dress, living style etc.
To Identify the various religious and social reform movements which took place in the past few centuries
of the country
to modern India.
Apply and determine the concentration of liquid samples working as an individual and also as an team member
Identify different parameters of water considering environmental issues
and technical fields.
Explain the synthesis of drug and polymer materials.
Classify experiments applying the fundamentals of chemistry
Explain the estimation of result by using instruments like potentiometry, Ph Metry, Conductometry.
Choose appropriate data type for implementing programs in C Language
constructs
be reused.
handling
Design and implement programs to store data in structures and files
Create, Read and Write to and from simple text and binary files
tolerances
processes those are common in the engineering field.
To gain a good basic working knowledge required for production of various engineering products.
To study different hand operated power tools , uses and their demonstration.
Adopt safety practices while working with various tools .
Have an idea of different computer operations.

S No	Course Code	Course Title	CO No.
1	HS101EG	ENGLISH	CO1
			CO2
			CO3
			CO4
			CO5
			CO6
2	BS102MT	MATHEMATICS-I	CO1
			CO2
			CO3
			CO4
			CO5
			CO6
3	BS105CH	CHEMISTRY	CO1
			CO2
			CO3
			CO4
			CO5
			CO6
4	ES107CS	PROGRAMMING FOR PROBLEM SOLVING	CO1
			CO2
			CO3
			CO4
			CO5
			CO6
		ENVIRORMENT	CO1
			CO2
			CO3
			CO4
			CO5

5	MC112CE	AL SCIENCE	CO6
6	MC113PY	ESSENCE OF INDIAN TRADITION KNOWLEDGE	CO1
			CO2
			CO3
			CO4
			CO5
			CO6
7	BS153CH	CHEMISTRY LAB	CO1
			CO2
			CO3
			CO4
			CO5
			CO6
8	ES155CS	PROGRAMMING FOR PROBLEM SOLVING LAB	CO1
			CO2
			CO3
			CO4
			CO5
			CO6
9	ES157ME	WORKSHOP/MANUFACTURING	CO1
			CO2
			CO3
			CO4
			CO5
			CO6

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DEPARTMENT OF H&S

CIVIL ENGINEERING A.Y 2019-20 SEM-I

Course Outcome
Read, Explain, interpret and comprehend a variety of written texts and develop positive attitude and commitment
Remember, recognize the significance of vocabulary (roots and affixes, homonyms, one- word substitutes, etc.)
Apply appropriate grammatical concepts (tenses, articles, prepositions, etc.) to spoken and written English in
Comprise information of various aspects of English diction – Develop creativity in writing skills by framing
Analyze different ways of life through reading prose and poetry, each symbolizing a particular virtue and the
Apply appropriate grammatical structure and rules to spoken and written English in formal and informal situations.
To Test for the convergence and divergence of infinite series using the comparison test, Ratio test, Cauchy's n'th root test, Leibnitz's test, and also analyzing the nature of series.
To Explain the concepts of derivatives using mean value theorems and their generalization (Taylor's and Meclaurin's series.). Concepts of curvature, evolutes, involutes, envolpes of family cf curves.
To Find Partial derivatives of functions of two variables using concept of limits and continuity . Derivatives of
To Examine the behavior of higher order partial derivatives using taylors series and the concepts of maximum
To Identify the key concepts, theories and mathematical fundamentals to derive mathematical relations involved in evaluation of double integrals and triple integrals and solving Engineering problems.
To Evaluate gradient of a scalar field, divergence, curl of a vector field to find the values of line, surface and volume integrals and establish their relation using Green, Gauss and Stokes theorems.
Apply concept of electrode potential in identifying feasibility of electrochemical reaction; illustrate electro
Identify the mechanism of corrosion of materials on basis of electrochemical approach and devise corrosion
Estimate the physical & chemical parameters of quality of water and explain the process of water treatment.
Explain the influence of chemical structure on properties of materials and their choice in engineering applications.
Classify chemical fuels and grade them through qualitative analysis.
Relate the concept of green chemistry to modify engineering processes and materials.
Choose appropriate data type for implementing programs in C Language
looping constructs
can be reused.
handling
Design and implement programs to store data in structures and files
Create, Read and Write to and from simple text and binary files
Adapt Environmental ethics and verbally discuss environmental issues to attain sustainable development.
suggest sustainable strategies to mitigate these impacts
Identify various levels, values and threats of biodiversity and bio-geographical classification of India.
Elaborate social and environmental issues to prevent future damage of the environment.
Understand the importance of Environmental legislation policies.

of environmental pollutants and contaminants.
To outline the history of civilization in Indian context since pre-Vedic times
To outline the various schools of Indian Philosophy
To demonstrate the diversity in Indian Thought , Languages , regional culture , dress, living style etc.
To Identify the various religious and social reform movements which took place in the past few centuries
of the country
to modern India.
Apply and determine the concentration of liquid samples working as an individual and also as an team member
Identify different parameters of water considering environmental issues
scientific and technical fields.
Explain the synthesis of drug and polymer materials.
Classify experiments applying the fundamentals of chemistry
Explain the estimation of result by using instruments like potentiometry, Ph Metry, Conductometry.
Choose appropriate data type for implementing programs in C Language
looping constructs
can be reused.
handling
Design and implement programs to store data in structures and files
Create, Read and Write to and from simple text and binary files
tolerances
processes those are common in the engineering field.
To gain a good basic working knowledge required for production of various engineering products.
To study different hand operated power tools , uses and their demonstration.
Adopt safety practices while working with various tools .
Have an idea of different computer operations.

S No	Course Code	Course Title	CO No.
1	HS101EG	ENGLISH	CO1
			CO2
			CO3
			CO4
			CO5
			CO6
2	BS102MT	MATHEMATICS-I	CO1
			CO2
			CO3
			CO4
			CO5
			CO6
3	BS105CH	CHEMISTRY	CO1
			CO2
			CO3
			CO4
			CO5
			CO6
4	ES107CS	PROGRAMMING FOR PROBLEM SOLVING	CO1
			CO2
			CO3
			CO4
			CO5
			CO6
5	MC112CE	ENVIRORMENTAL SCIENCE	CO1
			CO2
			CO3
			CO4
			CO5
			CO6
			CO1

			CO2
			CO3
		ESSENCE OF INDIAN	CO4
		TRADITION	CO5
6	MC113PY	KNOWLEDGE	CO6
			CO1
			CO2
			CO3
			CO4
			CO5
7	BS153CH	CHEMISTRY LAB	CO6
			CO1
			CO2
			CO3
		PROGRAMMING	CO4
		FOR PROBLEM	CO5
8	ES155CS	SOLVING LAB	CO6
			CO1
			CO2
			CO3
			CO4
		WORKSHOP/MANU	CO5
9	ES157ME	FACTURING	CO6

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DEPARTMENT OF H&S

ELECTRICAL AND ELECTRONICS ENGINEERING A.Y 2019-20 SEM-I

Read, Explain, interpret and comprehend a variety of written texts and develop positive attitude and commitment
Remember (recognize) and apprehend vocabulary (roots and affixes, homonyms, one- word substitutes, etc.)
Apply appropriate grammatical concepts (tenses, articles, prepositions, etc.) to spoken and written English in
Compile information of various aspects of English diction – Develop creativity in writing skills by framing
Analyze different ways of life through reading prose and poetry, each symbolizing a particular virtue and the
learners develop the ability to be creative
Apply appropriate grammatical structure and rules to spoken and written English in formal and informal situations.
To Test for the convergence and divergence of infinite series using the comparison test, Ratio test, Cauchy's n'th root test, Leibnitz's test, and also analyzing the nature of series.
To Explain the concepts of derivatives using mean value theorems and their generalization (Taylor's and Meclaurin's series.). Concepts of curvature, evolutes, involutes, envolpes of family cf curves.
To Find Partial derivatives of functions of two variables using concept of limits and continuity . Derivatives of
To Examine the behavior of higher order partial derivatives using taylors series and the concepts of maximum
To Identify the key concepts, theories and mathematical fundamentals to derive mathematical relations involved in evaluation of double integrals and triple integrals and solving Engineering problems.
To Evaluate gradient of a scalar field, divergence, curl of a vector field to find the values of line, surface and volume integrals and establish their relation using Green, Gauss and Stokes theorems.
Apply concept of electrode potential in identifying feasibility of electrochemical reaction; illustrate electro
Identify the mechanism of corrosion of materials on basis of electrochemical approach and devise corrosion
Estimate the physical & chemical parameters of quality of water and explain the process of water treatment.
Explain the influence of chemical structure on properties of materials and their choice in engineering applications.
Classify chemical fuels and grade them through qualitative analysis.
Relate the concept of green chemistry to modify engineering processes and materials.
Choose appropriate data type for implementing programs in C Language
constructs
reused.
Apply the concept of pointers for implementing programs on dynamic memory management and string handling
Design and implement programs to store data in structures and files
Create, Read and Write to and from simple text and binary files
Adapt Environmental ethics and verbally discuss environmental issues to attain sustainable development.
suggest sustainable strategies to mitigate these impacts
Identify various levels, values and threats of biodiversity and bio-geographical classification of India.
Elaborate social and environmental issues to prevent future damage of the environment.
Understand the importance of Environmental legislation policies.
of environmental pollutants and contaminants.
To outline the history of civilization in Indian context since pre-Vedic times

To outline the various schools of Indian Philosophy
To demonstrate the diversity in Indian Thought , Languages , regional culture , dress, living style etc.
To Identify the various religious and social reform movements which took place in the past few centuries
of the country
to modern India.
Apply and determine the concentration of liquid samples working as an individual and also as an team member
Identify different parameters of water considering environmental issues
scientific and technical fields.
Explain the synthesis of drug and polymer materials.
Classify experiments applying the fundamentals of chemistry
Explain the estimation of result by using instruments like potentiometry, Ph Metry, Conductometry.
Choose appropriate data type for implementing programs in C Language
constructs
reused.
Apply the concept of pointers for implementing programs on dynamic memory management and string handling
Design and implement programs to store data in structures and files
Create, Read and Write to and from simple text and binary files
Identify and use marking out tools , hand tools ,measuring equipment and to work to prescribed tolerances
those are common in the engineering field.
To gain a good basic working knowledge required for production of various engineering products.
To study different hand operated power tools , uses and their demonstration.
Adopt safety practices while working with various tools .
Have an idea of different computer operations.

S No	Course Code	Course Title	CO No.
1	MC112CE	ENVIRORMENTAL SCIENCE	CO1
			CO2
			CO3
			CO4
			CO5
			CO6
2	MC113PY	ESSENCE OF INDIAN TRADITION KNOWLEDGE	CO1
			CO2
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			CO4
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3	HS101EG	ENGLISH	CO1
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			CO5
			CO6
4	BS102MT	MATHEMATICS-II	CO1
			CO2
			CO3
			CO4
			CO5
			CO6
5	BS105CH	CHEMISTRY	CO1
			CO2
			CO3
			CO4
			CO5
			CO6

			CO1
			CO2
			CO3
		PROGRAMMING	CO4
		FOR PROBLEM	CO5
6	ES107CS	SOLVING	CO6
			CO1
			CO2
			CO3
			CO4
			CO5
7	HS151CS	ENGLISH LAB	CO6
			CO1
			CO2
			CO3
		PROGRAMMING	CO4
		FOR PROBLEM	CO5
8	ES155CS	SOLVING LAB	CO6
			CO1
			CO2
			CO3
			CO4
			CO5
9	BS153CH	CHEMISTRY LAB	CO6
			CO1
			CO2
			CO3
			CO4
		WORKSHOP/MANUF	CO5
10	ES157ME	ACTURING	CO6

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DEPARTMENT OF H&S

ELECTRONIC AND COMMUNICATION ENGINEERING A.Y 2019-20 SEM-II

Adapt Environmental ethics and verbally discuss environmental issues to attain sustainable development.
suggest sustainable strategies to mitigate these impacts
Identify various levels, values and threats of biodiversity and bio-geographical classification of India.
Elaborate social and environmental issues to prevent future damage of the environment.
Understand the importance of Environmental legislation policies.
of environmental pollutants and contaminants.
To outline the history of civilization in Indian context since pre-Vedic times
To outline the various schools of Indian Philosophy
To demonstrate the diversity in Indian Thought , Languages , regional culture , dress, living style etc.
To Identify the various religious and social reform movements which took place in the past few centuries
of the country
to modern India.
Read, Explain, interpret and comprehend a variety of written texts and develop positive attitude and commitment
Remember and recognize the significance of vocabulary (roots and affixes, homonyms, one- word substitutes, etc.)
Apply appropriate grammatical concepts (tenses, articles, prepositions, etc.) to spoken and written English in
formal and informal ambiance.
Compile information of various aspects of English diction – Develop creativity in writing skills by framing
Analyze different ways of life through reading prose and poetry, each symbolizing a particular virtue and the
learners develop the ability to be creative.
Apply appropriate grammatical structure and rules to spoken and written English in formal and informal situations.
To Test for the convergence and divergence of infinite series using the comparison test, Ratio test, Cauchy's n'th
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To Examine the behavior of higher order partial derivatives using taylors series and the concepts of maximum
To Identify the key concepts, theories and mathematical fundamentals to derive mathematical relations involved in evaluation of double integrals and triple integrals and solving Engineering problems.
To Evaluate gradient of a scalar field, divergence, curl of a vector field to find the values of line, surface and volume integrals and establish their relation using Green, Gauss and Stokes theorems.
Apply concept of electrode potential in identifying feasibility of electrochemical reaction; illustrate electro
Identify the mechanism of corrosion of materials on basis of electrochemical approach and devise corrosion
Estimate the physical & chemical parameters of quality of water and explain the process of water treatment.
Explain the influence of chemical structure on properties of materials and their choice in engineering applications.
Classify chemical fuels and grade them through qualitative analysis.
Relate the concept of green chemistry to modify engineering processes and materials.

Choose appropriate data type for implementing programs in C Language
constructs
reused.
Apply the concept of pointers for implementing programs on dynamic memory management and string handling
Design and implement programs to store data in structures and files
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Develop the confidence to present themselves in the competitive platform – JAM, and Public
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Apply the concept of pointers for implementing programs on dynamic memory management and string handling
Design and implement programs to store data in structures and files
Create, Read and Write to and from simple text and binary files
Apply and determine the concentration of liquid samples working as an individual and also as an team member
Identify different parameters of water considering environmental issues
scientific and technical fields.
Explain the synthesis of drug and polymer materials.
Classify experiments applying the fundamentals of chemistry
Explain the estimation of result by using instruments like potentiometry, Ph Metry, Conductometry.
Identify and use marking out tools , hand tools ,measuring equipment and to work to prescribed tolerances
those are common in the engineering field.
To gain a good basic working knowledge required for production of various engineering products.
To study different hand operated power tools , uses and their demonstration.
Adopt safety practices while working with various tools .
Have an idea of different computer operations.

S No	Course Code	Course Title	CO No.
1	MC112CE	ENVIRORMENTAL SCIENCE	CO1
			CO2
			CO3
			CO4
			CO5
			CO6
2	MC113PY	ESSENCE OF INDIAN TRADITION KNOWLEDGE	CO1
			CO2
			CO3
			CO4
			CO5
			CO6
3	HS101EG	ENGLISH	CO1
			CO2
			CO3
			CO4
			CO5
			CO6
4	BS102MT	MATHEMATICS-II	CO1
			CO2
			CO3
			CO4
			CO5
			CO6
5	BS105CH	CHEMISTRY	CO1
			CO2
			CO3
			CO4
			CO5
			CO6

			CO1
			CO2
			CO3
		PROGRAMMING	CO4
		FOR PROBLEM	CO5
6	ES107CS	SOLVING	CO6
			CO1
			CO2
			CO3
			CO4
			CO5
7	HS151CS	ENGLISH LAB	CO6
			CO1
			CO2
			CO3
		PROGRAMMING	CO4
		FOR PROBLEM	CO5
8	ES155CS	SOLVING LAB	CO6
			CO1
			CO2
			CO3
			CO4
			CO5
9	BS153CH	CHEMISTRY LAB	CO6
			CO1
			CO2
			CO3
			CO4
		WORKSHOP/MANU	CO5
10	ES157ME	FACTURING	CO6

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DEPARTMENT OF H&S

MECHANICAL ENGINEERING A.Y 2019-20 SEM-II

Adapt Environmental ethics and verbally discuss environmental issues to attain sustainable development.
suggest sustainable strategies to mitigate these impacts
Identify various levels, values and threats of biodiversity and bio-geographical classification of India.
Elaborate social and environmental issues to prevent future damage of the environment.
Understand the importance of Environmental legislation policies.
of environmental pollutants and contaminants.
To outline the history of civilization in Indian context since pre-Vedic times
To outline the various schools of Indian Philosophy
To demonstrate the diversity in Indian Thought , Languages , regional culture , dress, living style etc.
To Identify the various religious and social reform movements which took place in the past few centuries
of the country
to modern India.
Read, Explain, interpret and comprehend a variety of written texts and develop positive attitude and commitment
Remember and recognize the significance of vocabulary (roots and affixes, homonyms, one- word substitutes, etc.)
Apply appropriate grammatical concepts (tenses, articles, prepositions, etc.) to spoken and written English in
formal and informal ambiance.
Compile information of various aspects of English diction – Develop creativity in writing skills by framing
Analyze different ways of life through reading prose and poetry, each symbolizing a particular virtue and the
learners develop the ability to be creative.
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Explain the estimation of result by using instruments like potentiometry, Ph Metry, Conductometry.
Identify and use marking out tools , hand tools ,measuring equipment and to work to prescribed tolerances
those are common in the engineering field.
To gain a good basic working knowledge required for production of various engineering products.
To study different hand operated power tools , uses and their demonstration.
Adopt safety practices while working with various tools .
Have an idea of different computer operations.

DEPARTMENT
COMPUTER SCIENCE ENG

S No	Course Code	Course Title	CO No.
1	MC111PO	INDIAN CONSTITUTION	CO1
			CO2
			CO3
			CO4
			CO5
			CO6
2	HS101EG	ENGLISH	CO1
			CO2
			CO3
			CO4
			CO5
			CO6
3	BS103MT	MATHEMATICS-II	CO1
			CO2
			CO3
			CO4
			CO5
			CO6
4	BS104PH	PHYSICS	CO1
			CO2
			CO3
			CO4
			CO5
			CO6
5	ES106EE	BASIC ELECTRICAL ENGINEERING	CO1
			CO2
			CO3
			CO4
			CO5
			CO6

			CO1
			CO2
			CO3
			CO4
			CO5
6	HS151CS	ENGLISH LAB	CO6
			CO1
			CO2
			CO3
			CO4
			CO5
7	BS152PH	PHYSICS LAB	CO6
			CO1
			CO2
			CO3
			CO4
			CO5
8	ES154EE	BASIC ELECTRICAL ENGINEERING LAB	CO6
			CO1
			CO2
			CO3
			CO4
			CO5
9	ES156CE	ENGINEERING GRAPHICS	CO6

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OF H&S

INEERING A.Y 2019-20 SEM-II

Course Outcome
Know the background of thr present constitution of India
Understand the working of the union,state and local levels
gain conciousness on the fundamentals rights and duties.
Be able to understand the functioning and distribution of financial resources between the states
Be exposed to the reality of hierarchical Indian social structure and the ways the grievances deprived sectio
Be able to understand the functioning and distribution of financial resources between the centre and state
Read, Explain, interpret and comprehend a variety of written texts and develop positive attitude and commitment
Remember and recognize the significance of vocabulary (roots and affixes, homonyms, one- word substitutes, etc.)
Apply appropriate grammatical concepts (tenses, articles, prepositions, etc.) to spoken and written English in
Compile information of various aspects of English diction – Develop creativity in writing skills by framing
Analyze different ways of life through reading prose and poetry, each symbolizing a particular virtue and the
Apply appropriate grammatical structure and rules to spoken and written English in formal and informal situations.
To Test for the convergence and divergence of infinite series using the comparison test, Ratio test, Cauchy's n'th
To Explain the concepts of derivatives using mean value theorems and their generalization (Taylor's and Meclaurin's series.). Concepts of curvature, evolutes, involutes, envolpes of family cf curves.
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Explain the basics of crystals, lattice parameters and their defects.
Classify solids into different types by understanding the formation of energy bands in solids. and to Analyze the semiconductor by knowing the hall coefficient hall voltage, hall electric field and charge concentration and study
Apply the knowledge of basic laws of electricity and magnetism to understand the concept of electromagnetic
Classify the properties of materials and Choose the materials for various applications in different disciplines
Recall the basic concepts of optics, study the working of optical fibres and their applications
Define the basic concepts of emission and absorption and study the different types of lasers and their
Elaborate themselves in designing basic electric circuits
Judge suitable test to determine total power in three phase circuits
Apply suitable test to determine the performance of AC machines
Examine the performance characteristics of DC machines
Illustrate the requirements for electric machines for industrial purpose
Find awareness about various electrical installation rules to be followed while working with electrical equipment

Acquire a good knowledge of phonetics to pronounce words on the lines of R.P., applying right stress and
Develop the skill of effective listening
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Find the Rigidity Modulus of the material of the given wire using Torsional Pendulum
Measure the energy gap of a semiconductor.
Justify the statements of basic electrical circuits
Examine the performance of different electrical machines
Identify the electrical machines requirements
Find the response of different electrical circuits
Determine parameters of electrical machines and equipment
Test for efficiency of electrical machines
Recall terms & conventions of engineering design and justify its place in society
Visualise the aspects of engineering design
Consruct & apply engineering graphics standards
Use computer-aided geometric design to model Projection diagrams
Create working drawings
Support engineering communication in constructive criticism

n can be addressed to raise human dignity in a democratic way.

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			CO2
			CO3
			CO4
			CO5
			CO6
2	HS101EG	ENGLISH	CO1
			CO2
			CO3
			CO4
			CO5
			CO6
3	BS103MT	MATHEMATICS-II	CO1
			CO2
			CO3
			CO4
			CO5
			CO6
4	BS104PH	PHYSICS	CO1
			CO2
			CO3
			CO4
			CO5
			CO6
5	ES106EE	BASIC ELECTRICAL ENGINEERING	CO1
			CO2
			CO3
			CO4
			CO5
			CO6

			CO1
			CO2
			CO3
			CO4
			CO5
6	HS151CS	ENGLISH LAB	CO6
			CO1
			CO2
			CO3
			CO4
			CO5
7	BS152PH	PHYSICS LAB	CO6
			CO1
			CO2
			CO3
		BASIC ELECTRICAL ENGINEERING	CO4
			CO5
8	ES154EE	LAB	CO6
			CO1
			CO2
			CO3
			CO4
		ENGINEERING	CO5
9	ES156CE	GRAPHICS	CO6

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DEPARTMENT OF H&S

GINEERING A.Y 2019-20 SEM-II

Course Outcome
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Understand the working of the union,state and local levels
gain conciousness on the fundamentals rights and duties.
Be able to understand the functioning and distribution of financial resources between the states
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Classify solids into different types by understanding the formation of energy bands in solids. and to Analyze the semiconductor by knowing the hall coefficient hall voltage, hall electric field and charge concentration and study
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Define the basic concepts of emission and absorption and study the different types of lasers and their
Elaborate themselves in designing basic electric circuits
Judge suitable test to determine total power in three phase circuits
Apply suitable test to determine the performance of AC machines
Examine the performance characteristics of DC machines
Illustrate the requirements for electric machines for industrial purpose
Find awareness about various electrical installation rules to be followed while working with electrical equipment

Acquire a good knowledge of phonetics to pronounce words on the lines of R.P., applying right stress and
Develop the skill of effective listening
Acquire a good sense of both verbal and non-verbal cues to be employed during communication with
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Recall terms & conventions of engineering design and justify its place in society
Visualise the aspects of engineering design
Consruct & apply engineering graphics standards
Use computer-aided geometric design to model Projection diagrams
Create working drawings
Support engineering communication in constructive criticism

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ELECTRI(

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			CO2
			CO3
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			CO2
			CO3
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5	E	ERING	CO6
6	HS151CS	ENGLISH LAB	CO1
			CO2
			CO3
			CO4
			CO5
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7	BS152PH	PHYSICS LAB	CO1
			CO2
			CO3
			CO4
			CO5
			CO6
8	ES154EE	BASIC ELECTRICAL ENGINEERING LAB	CO1
			CO2
			CO3
			CO4
			CO5
			CO6
9	ES156CE	ENGINEERING GRAPHICS	CO1
			CO2
			CO3
			CO4
			CO5
			CO6

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DEPARTMENT OF H&S

CAL AND ELECTRONIC ENGINEERING A.Y 2019-20 SEM-II

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