Shri Vaishnav Vidyapeeth Vishwavidyalaya, Indore

B.Tech. (Electronics and Instrumentation)

SUBJECT CODE	Category	SUBJECT NAME	TEACHING & EVALUATION SCHEME								
			THEORY			PRACTICAL		Th	T	P	CREDITS
			END SEM University Exam	Two Term Exam	Teachers Assessment*	END SEM University Exam	Teachers Assessment*				
BTEI301		Digital Electronics	60	20	20	30	20	3	1	2	5

Legends: **L** - Lecture; **T** - Tutorial/Teacher Guided Student Activity; **P** – Practical; **C** - Credit;
***Teacher Assessment** shall be based following components: Quiz/Assignment/ Project/Participation in Class, given that no component shall exceed more than 10 marks.

Course Educational Objectives (CEOs):

Students Will Be Able to

1. To explain and illustrate the concepts of digital
2. To have problem solving techniques for various Digital circuits.
3. To develop the skill of design and simulation using modern tools.

Course Outcomes (COs):

After completion of this course the students are expected to be able to demonstrate following knowledge, skills and attitudes

Students will be able to

1. develop the understanding of the Digital systems
2. Enhance their ability to use EDA tools.
3. To develop the research work, about the design methods.
4. Awareness of latest technologies and developments.
5. Implement various methods used to design the digital circuit for future application.

Syllabus

Unit-I

Number Systems: Decimal, binary, octal, hexadecimal number system and conversion, binary weighted codes, error detecting and correcting codes. Signed numbers, 1s and 2s complement codes, Binary arithmetic. Boolean algebra: Binary logic functions, Boolean laws, truth tables, associative and distributive properties, DeMorgans theorems, realization of switching functions using logic gates.

Unit-II

Combinational Logic: Switching equations, canonical logic forms, sum of product & product of sums, Karnaugh maps, two, three and four variable Karnaugh maps, simplification of expressions, Quine-McCluskey minimization technique, mixed logic combinational circuits, multiple output functions.

Analysis & design of Combinational Logic: Introduction to combinational circuits, code conversions, decoder, encoder, priority encoder, multiplexers as function generators, binary adder, substractor, BCD adder, Binary comparator, arithmetic logic units

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Unit-III

Sequential Logic: Sequential circuits, flip-flops, clocked and edge triggered flipflops, timing specifications, asynchronous and synchronous counters, counter design with state equations, Registers, serial in serial out shift registers, tristate register, timing considerations.
Sequential Circuits: State diagrams and tables, transition table, excitation table and equations. Examples using flip-flops. Analysis of simple synchronous sequential circuits, construction of state diagram, counter design.

Unit-IV

Programmable Logic: Programmable logic devices, programmable read only memory, programmable logic arrays and programmable array logic, Design using PLA, field programmable gate arrays.
Introduction to various semiconductor memories, designing with ROM

Unit-V

Digital integrated circuits: Logic levels, propagation delay time, power dissipation fan-out and fan-in, noise margin, logic families and their characteristics TTL, LSTTL CMOS and ECL integrated circuits and their performance comparison, open collector and tristate gates and buffers.
Introduction to IOT, FPGA and familiarization of FPGA Board.
Introduction to A/D and D/A converters. Various types of Analog Digital & Digital to Analog converters.

Text Book

1. M. Morris Mano, "Digital Design", 4th Edition, Prentice Hall of India Pvt. Ltd., 2008 / Pearson Education (Singapore) Pvt. Ltd., New Delhi, 2003.. Mano; "Digital Logic & Computer Design"; PHI.

Reference Book

1. R.J. Tocci, "Digital Systems Principles & Applications".
2. Donald P.Leach and Albert Paul Malvino, "Digital Principles and Applications", 6th Edition, TMH, 2006
3. S Salivahanan,"Digital Circuits And Design"
4. John F.Wakerly, "Digital Design", Fourth Edition, Pearson/PHI, 2008
5. John.M Yarbrough, "Digital Logic Applications and Design", Thomson Learning, 2006.
6. Charles H.Roth. "Fundamentals of Logic Design", 6th Edition, Thomson Learning, 2013.

List of Experiments.

1. Getting familiar with various digital integrated circuits of different logic families. Study of data sheet of these circuits and see how to test these circuits using Digital IC Tester.
2. Configure diodes and transistor as logic gates and Digital ICs for verification of truth table of logic gates.
3. Configuring NAND and NOR logic gates as universal gates.
4. Verification & Implementation of Adders and Subtractors.
5. Design and Verification of Encoder and Decoder circuits.
6. Study and configurations of multiplexer and demultiplexer circuits.

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7. Study and configure of code converters& parity generator.
8. Study and configure of flip-flop, registers and counters.
9. Study basics of Xillinx(VHDL) Program
10. Design of combinational circuit using basics of Xillinx(VHDL) Program.

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B.Tech. Electronics and Instrumentation

SUBJECT CODE	Category	SUBJECT NAME	TEACHING & EVALUATION SCHEME								
			THEORY			PRACTICAL		Th	T	P	CREDITS
			END SEM University Exam	Two Term Exam	Teachers Assessment*	END SEM University Exam	Teachers Assessment*				
BTEI302	EI	Measurement and Instrumentation	60	20	20	30	20	3	1	2	5

Legends: **L** - Lecture; **T** - Tutorial/Teacher Guided Student Activity; **P** – Practical; **C** - Credit;
***Teacher Assessment** shall be based following components: Quiz/Assignment/ Project/Participation in Class, given that no component shall exceed more than 10 marks.

Course Educational Objectives (CEOs):

1. To introduce the basic functional elements of measurement
2. To educate on different types of signal generator.
3. To introduce various storage and display devices
4. To introduce various Environmental Pollution Monitoring Instruments

Course Outcomes (COs):

After completion of this course the students are expected to be able to demonstrate following knowledge, skills and attitudes

The students will be able to

1. To apply knowledge of measurement system.
2. To identify, formulate, and solve the different types of Ammeter & Voltmeter
3. Demonstrate various types of of signal generator instrument.
4. Demonstrate various types of environmental pollution monitoring instruments.

Syllabus

Unit-I

Measurement and error, Accuracy and precision, sensitivity resolution, Error & Error analysis, Effect of temperature, Internal friction, Stray field, Hysteresis and Frequency variation & method of minimizing them, Loading effects, due to shunt connected and series connected instruments, calibration curve, Testing & calibration of instruments

Unit-II

Different types of Ammeter & Voltmeter – PMMC, MI, Electrodynamometer, Hotwire, Electrostatic, Induction, Rectifier, Ferro dynamic & Electro-thermal, Expression for control & deflection torque, their advantages, disadvantages & error, Extension of range of instruments using shunt & multiplier.

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Unit-III

Miscellaneous Instruments & Measurements:. Frequency meter – Vibrating reed, Resonance type & Weston type, Synchronoscope, Ohmmeter – series & stunt type, Multi-meter, Megger & Ratio meter. Signal generator: Function generator, sweep frequency generator, Pulse and square wave generator, Wave Analysers, Harmonic Distortion Analyser, Spectrum Analyses, frequency counter.

Unit-IV

R, L, C Measurement: Bridges: Measurement of resistance using Wheatstone bridge, Kelvin's double bridge, Loss of charge method, ohm meter, Measurement of inductance and capacitance by A.C. bridges: Maxwell's bridge, Anderson bridge, Schering bridge, Hay's bridge, Wein's bridge, Shielding and grounding, Q meter.

Unit-V

Gas Analysis: Gas chromatography, Thermal conductivity method, Heat of reaction method Zirconia-probe oxygen analyser. Paramagnetic oxygen meters, electrochemical reaction method. Environmental Pollution Monitoring Instruments: Air pollution monitoring instruments, Water pollution monitoring instruments.

Text Book

1. A.K. Sawhney; Electrical & Electronic Measurements & Instrument; Dhanpat Rai & Sons Pub.

Reference Book

1. Patranabis D-Principles of Industrial Inst. TMH Publication
2. Electronic Instrumentation – Kalsi – TMH

List of Experiments:

1. Study of CRO and DSO.
2. Perform component testing using Measuring Devices.
3. Demonstration of CRO.
4. Study of phase & frequency using Lissajous pattern with help of CRO.
5. Measurement of high resistance by loss of charge method
6. Study of function generator with its application.
7. To study and find out the balance condition for the Maxwell's bridge.
8. To study and find out the balance condition for the Schering bridge.
9. To study and find out the balance condition for the Hay's Bridge.
10. To study and find out the balance condition for the Wein's bridge.
11. To study and find out the balance condition for the Anderson's Bridge.

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			THEORY			PRACTICAL		Th	T	P	CREDITS
			END SEM University Exam	Two Term Exam	Teachers Assessment*	END SEM University Exam	Teachers Assessment*				
BTEC302	EC	Network Analysis	60	20	20	30	20	3	1	2	5

Legends: **L** - Lecture; **T** - Tutorial/Teacher Guided Student Activity; **P** – Practical; **C** - Credit;
***Teacher Assessment** shall be based following components: Quiz/Assignment/ Project/Participation in Class, given that no component shall exceed more than 10 marks.

Course Educational Objectives (CEOs):

Being one of the fundamental course Electronics stream its prime objective is to make the students capable of analyzing any given electrical network composed by passive network and some active network. Understand the fundamental concepts and theories about networks. - Apply this knowledge to solve real-world, network-centric problems. - Use advanced network analysis methods and tools to visualize and analyze networks. Interpret the results with respect to exploratory, quantitative and substantive questions. - Design and execute a small-scale network analysis project in a systematic manner. To make the students learn how to synthesize an electrical network from a given impedance/admittance function.

Course Outcomes (COs):

After completion of this course the students are expected to be able to demonstrate following knowledge, skills and attitudes

The students will be able to

1. To apply knowledge of mathematics, science in engineering.
2. To identify, formulate, and solve engineering problems.
3. Apply the fundamental concepts in solving and analyzing different Electrical networks
4. Select appropriate and relevant technique for solving the Electrical network in different conditions
5. Apply mathematics in analyzing and synthesizing the networks in time and frequency domain
6. Estimate the performance of a particular network from its analysis.

Syllabus

Unit-I

Preliminaries of Electrical elements R, L, C, and circuits; Kirchhoff's laws Basic elements: Voltage and current sources, M; Linearity of elements, Elements in series and parallel Controlled sources. Source transformations – Star Delta conversion, Power and energy in electrical elements.

Unit-II

Circuit Analysis Methods: Nodal analysis, Mesh analysis, Circuit Theorems: Therenins' theorem, Norton's theorem, Maximum power transfer theorem, superposition theorem, Reciprocity theorem, Network topology.

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Unit-III

Transient Analysis: Source free RL and RC circuits, Elementary function unit step, unit ramp, unit impulse function and synthesis from source free parallel and series RLC circuit, complete response of the RLC circuit, lossless LC circuit.

Unit-IV

Frequency Domain Analysis: The phasor concept, sinusoidal steady state analysis; Network theorem in ac domain. AC circuit power analysis. Resonance. Laplace transform, initial and final value theorem, circuit analysis in s-domain, frequency response of simple passive filters.

Unit-V

Two Port Networks: Z, Y, h and ABCD parameters, analysis of interconnected (magnetically coupled) two port, three terminal networks. Transfer function, immittance function.

Text Books:

1. M.E. Van Valkenburg, Network Analysis, (Pearson)
2. S P Ghosh A K Chakraborty Network Analysis & Synth. (MGH).

References Books:

1. Fundamentals of Electric Circuits, Gordon J Alexander and Matthew N.O. Sadiku.
2. Engineering Circuit Analysis, Jack Ellsworth Kemmerly and William H. Hayt
3. Linear Circuit Analysis, Pen-Min Lin and Raymond A DeCarlo.
4. http://www.nptelvideos.in/2012/11/networks-and-systems.html

LIST OF EXPERIMENTS:

1. Introduction of Simulation software Tina-TI
2. To Verify Thevenin's Theorem and Norton's Theorem.
3. To Verify Superposition Theorem and Reciprocity Theorem.
4. To Verify Maximum Power Transfer Theorem.
5. To Determine Open Circuit and Short Circuit parameters of a Two Port Network.
6. To Determine A,B, C, D parameters of a Two Port Network.
7. To determine h-parameters of a Two Port Network.
8. To Find Frequency Response of RLC Series Circuit RLC parallel Circuit.
9. To determine resonance and 3dB frequencies.
10. To determine charging and discharging times of Capacitors.

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Six Year Dual Degree (B.Tech.+M.Tech.)-Mechatronics w.e.f July2017

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			THEORY			PRACTICAL		Th	T	P	CREDITS
			END SEM University Exam	Two Term Exam	Teachers Assessment*	END SEM University Exam	Teachers Assessment*				
BTEC305	EC	Electronic Circuits	60	20	20	30	20	3	1	2	5

Legends: **L** - Lecture; **T** - Tutorial/Teacher Guided Student Activity; **P** – Practical; **C** - Credit; ***Teacher Assessment** shall be based following components: Quiz/Assignment/ Project/Participation in Class, given that no component shall exceed more than 10 marks.

Course Educational Objectives (CEOs):

The objective of this course is to-

1) Use abstractions to analyze and design simple electronic circuits.

2) Design and construct circuits, take measurements of circuit behavior and performance, compare with predicted circuit models and explain discrepancies.

Course Outcomes (COs):

Students who are successful in this class will be able to:

1. Understand the basic physics of carrier transport in bulk semiconductors and real device structures. 2. Understand the fundamentals of operation of the main semiconductor electronic devices.

3. Understand the basic parameters of electronic devices, their performance, and limiting factors.

4. Understand the basic principles of electronic device.

SYLLABUS

Unit-I

Physical Electronics: Electrons and holes in semiconductors, Carrier Statistics, Energy bands in intrinsic and extrinsic silicon; Mechanism of current flow in a semiconductor; Carrier transport: diffusion current, drift current, mobility and resistivity; Generation and recombination of carriers; Poisson and continuity equations, Hall Effects.

Unit-II

PN junction diode: PN junction diode in forward and reverse bias, temperature dependence of V-I characteristics, diode resistances, diode junction capacitance. Types of diodes: Zener Diode, Varactor Diode, Tunnel Diode, PIN Diode, Schottky Diode, LED and Photo Diodes, Switching characteristics of diode.

Bipolar junction transistor: Construction, basic operation, current components and equations,

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CB, CE and CC configuration, input and output characteristics, Early effect, Region of operations: active, cut-off and saturation region. BJT as an amplifier. Ebers-Moll model, Power dissipation in transistor (Pd, max rating), Photo transistor.

Unit-III

Transistor biasing circuits and analysis: Introduction, various biasing methods: Fixed bias, Self bias, Voltage Divider bias, Collector to base bias, Load-line analysis: DC and AC analysis, Operating Point and Bias Stabilization and Thermal Runaway. Transistor as a switch.

Unit-IV

Small Signal analysis: Small signal Amplifier, Amplifier Bandwidth, Hybrid model, analysis of transistor amplifier using h-parameter, Multistage Amplifier: Cascading amplifier, Boot-strapping Technique, Darlington amplifier and cas-code amplifier, Coupling methods in multistage amplifier, Low and high frequency response, Hybrid π model, Current Mirror circuits.
Large Signal analysis and Power Amplifiers: Class A, Class B, Class AB, Class C, Class D, Transformer coupled and Push-Pull amplifier

Unit-V

FET: JFET- Construction, n-channel and p-channel transistors, drain and transfer characteristics, parameters, Equivalent model and voltage gain, analysis of FET in CG, CS and CD configuration. Enhancement and Depletion MOSFET drain and transfer Characteristics.
Uni-junction Transistor (UJT): UJT - Principle of operation, characteristics, UJT relaxation oscillator, PNPN Diode and its characteristics,
Thyristors: Silicon controlled rectifier: V-I characteristics, DIAC and TRIAC, Thyristors parameters and applications.

Text Books:

1. Boylestad and Nashelsky: Electronic Devices and Circuit Theory, Pearson Education
2. Sedra and Smith: Microelectronics, Oxford Press.

Reference Books:

1. Ben G. Streetman, Sanjay Bannerjee, Solid State Electronic Devices.
2. Graham Bell: Electronic Devices and Circuits, PHI.
3. Millman and Halkias: Integrated electronics, TMH
4. Donald A Neamen: Electronic Circuits Analysis and Design.
5. Robert F. Pierret, Semiconductor Device Fundamentals.

LIST OF EXPERIMENTS:

1. To determine and analyze the V-I characteristics of PN Junction diode.
2. To determine and analyze the V-I characteristic of Zener diode and its load regulation capability.
3. To design clipper and clamper circuits.
4. To determine input and output characteristics of transistor amplifiers in CE configurations.
5. To determine input and output characteristics of transistor amplifiers in CC configurations.

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6. To determine input and output characteristics of transistor amplifiers in CB configurations.
7. To determine the frequency response of CE amplifier, direct coupled and RC coupled amplifier.
8. To determine Drain and Transfer Characteristics of JFET Amplifier.
9. To determine Drain and Transfer Characteristics of MOSFET Amplifier.
10. To determine characteristics of class A and B power amplifiers.

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SUBJECT CODE	CATEGORY	SUBJECT NAME	TEACHING & EVALUATION SCHEME								
			THEORY			PRACTI-CAL		Th	T	P	CREDITS
			END SEM University Exam	Two Term Exam	Teachers Assessment*	END SEM University Exam	Teachers Assessment*				
ML301	Compulsory	**Environment and Energy Studies**	60	20	20	0	0	4	0	0	4

Legends: **L** - Lecture; **T** - Tutorial/Teacher Guided Student Activity; **P** – Practical; **C** - Credit;
***Teacher Assessment** shall be based following components: Quiz/Assignment/ Project/Participation in Class, given that no component shall exceed more than 10 marks.

Course Objectives: The students will be able to:

1. To understand sources of information required for addressing environmental challenges
2. To identify a suite of contemporary tools and techniques in environmental informatics
3. To apply literacy, numeracy and critical thinking skills to environmental problem-solving

Course Outcomes: The students should be able to:

1. Apply the principles of ecology and environmental issues that apply to air, land and water issues on a global scale.
2. Develop critical thinking and/or observation skills, and apply them to the analysis of a problem or question related to the environment.
3. Demonstrate ecology knowledge of a complex relationship between predators, prey, and the plant community.

SYLLABUS

Unit I

Environmental Pollution and Control Technologies: Environmental Pollution & Control: Classification of pollution, Air Pollution: Primary and secondary pollutants, Automobile and industrial pollution, Ambient air quality standards. Water pollution: Sources and types, Impacts of modern agriculture, degradation of soil. Noise Pollution: Sources and Health hazards, standards, Solid Waste management composition and characteristics of e - Waste and its management. Pollution control technologies: Wastewater Treatment methods: Primary, Secondary and Tertiary.

Unit II

Natural Resources: Classification of Resources: Living and Non - Living resources, water resources: use and over utilization of surface and ground water, floods and droughts, Dams: benefits and problem, Mineral resources: use and exploitation, environmental effects of extracting and using

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mineral resouces, Land resources: Forest resources, Energy resources: growing energy needs, renewable energy source, case studies..

Unit III

Ecosystems: Definition, Scope and Importance ecosystem. Classification, Structure and function of an ecosystem, Food chains, food webs and ecological pyramids. Energy flow in the ecosystem, Biogeochemical cycles, Bioaccumulation, ecosystem value, devices and carrying capacity, Field visits.

Unit IV

Biodiversity and its Conservation: Introduction - Definition: genetic, species and ecosystem diversity. Bio-geographical classification of India - Value of biodiversity: consumptive use, productive use, social, ethical, aesthetic and option values - . Biodiversity at global, National and local levels. - . India as a mega diversity nation - Hot-sports of biodiversity - Threats to biodiversity: habitat loss, poaching of wildlife, man wildlife conflicts; Conservation of biodiversity: In-situ and Exsitu conservation. National biodiversity act.

Unit V

Environmental Policy, Legislation & EIA: Environmental Protection act, Legal aspects Air Act-1981, Water Act, Forest Act, Municipal solid waste management and handling rules, biomedical waste management and handling rules, hazardous waste management and handling rules. EIA: EIA structure, methods of baseline data acquisition. Overview on Impacts of air, water, biological and Socio-economical aspects. Strategies for risk assessment, Concepts of Environmental Management Plan (EMP)

Suggested Readings:

1. Agarwal, K.C.,(latest edition).**Environmental Biology**, Bikaner :Nidi Pub. Ltd.,
2. Brunner R.C.(latest edition) **Hazardous Waste Incineration**, McGraw Hill Inc.
3. Clank R.S. .,(latest edition. **Marine Pollution**, Clanderson Press Oxford (TB).
4. **Environmental Encyclopedia**, Jaico Pub. Mumbai,
5. De A.K(latest edition) **Environmental Chemistry**, Wiley Wastern Ltd.
6. ErachBharucha(2005).**Environmental Studies for Undergraduate Courses** by for University Grants Commission.
7. R. Rajagopalan(2006).**Environmental Studies**. Oxford University Press.
8. M. AnjiReddy(2006).**Textbook of Environmental Sciences and Technology**. BS Publication.
9. Richard T. Wright(2008).**Enviromental Science: towards a sustainable future** PHL Learning Private Ltd. New Delhi.
10. Gilbert M. Masters and Wendell P. Ela .(2008).**Environmental Engineering and science**. PHI Learning Pvt Ltd.
11. Daniel B. Botkin& Edwards A. Keller(2008).**Environmental Science** Wiley INDIA edition.
12. AnubhaKaushik(2009).**EnviromentalStudies**. New age international publishers.

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			THEORY			PRACTICAL		Th	T	P	CREDITS
			END SEM University Exam	Two Term Exam	Teachers Assessment*	END SEM University Exam	Teachers Assessment*				
BTCS207		**Computer Programming-II**	0	0	0	30	20	0	0	2	1

Legends: L - Lecture; T - Tutorial/Teacher Guided Student Activity; P – Practical; C - Credit;
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Course Objectives:

1. To understand Object oriented concepts.
2. To understand programming using object oriented techniques.
3. To understand the use of various system libraries.
4. To have the knowledge of important topics and principles of software development.
5. To write a computer program & to solve specified problems.
6. To use the Java SDK environment to create, debug and run simple Java programs.
7. To study event driven Graphical User Interface (GUI) programming

Course Outcomes:

1. Students should be able to explain the object oriented concepts.
2. Students should be able to write programs using object-based programming techniques including classes, objects and inheritance.
3. Able to use of various system libraries.
4. Be aware of the important topics and principles of software development.
5. Have the ability to write a computer program to solves pecified problems.
6. Be able to use the Java SDK environment to create, debug and run simple Java programs.
7. Introduce event driven Graphical User Interface (GUI) programming

UNIT-I

Java Fundamentals: Features of Java, OOPs concepts, Java virtual machine, Byte code interpretation Data types, variable, arrays, expressions, operators, and control structures, Objects, Introduction to Class: Instance members and member functions, constructors, constructor overloading, Static Method, Static classes, Inner classes

UNIT-II

Introduction to Java classes and objects: Java features: Java syntax, data types, data type conversions, control statements, operators and their precedence. Introduction to Class: Instance members and member functions. Inner Classes, String Handling, Wrapper classes

UNIT-III

Inheritance, Polymorphism and Collection: Class relationships: Inheritance and its types, Merits and

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Demerits. Association, Association inheritance, Polymorphism: Dynamic method dispatch, Runtime polymorphism, Abstract classes, Interfaces and packages, Collections.

UNIT-IV

Exception Handling and Multithreading: Exceptions: Need for exceptions, Exception hierarchy: Checked Unchecked exceptions, Try, catch, finally, Throw, throws, creating exceptions.
Multithreading: Thread Life cycle, Multi threading advantages and issues, Simple thread program, Priorities and scheduling, Thread Synchronization.

UNIT-V

Java I/O, Applets, Event Handling, and Database Connectivity: Basic concept of streams I/O stream & reader-writer classes. File handling. Applet and its Life Cycle, Basic GUI elements, Event Delegation Model and event handling Swing components: Applet, JButton, JFrame, etc.Sample swing programs JDBC architecture, establishing connectivity and working with connection interface working with statements, Creating and executing SQL statements, working with Result Set

References:

1. Java- Head First 2nd edition Kathy Sierra , Bert Bates.
2. Programming with Java A Primer, E. Balaguruswamy Tata McGraw Hill Companies.
3. Java Programming John P. Flynt Thomson 2nd.
4. Java Programming Language Ken Arnold Pearson.
5. The complete reference JAVA2, Hervert schildt. TMH.
6. Big Java, Cay Horstmann 2nd edition, Wiley India Edition.
7. Java – Balaguruswamy.

Practical's List:

1. Installation of J2SDK
2. Write a program to show Scope of Variables
3. Write a program to show Concept of CLASS in JAVA
4. Write a program to show Type Casting in JAVA
5. Write a program to show How Exception Handling is in JAVA
6. Write a Program to show Inheritance
7. Write a program to show Polymorphism
8. Write a program to show Access Specifiers (Public, Private, Protected) in JAVA
9. Write a program to show use and Advantages of CONTRUCTOR
10. Write a program to show Interfacing between two classes
11. Write a program to Add a Class to a Package
12. Write a program to show Life Cycle of a Thread
13. Write a program to demonstrate AWT.
14. Write a program to Hide a Class
15. Write a Program to show Data Base Connectivity Using JAVA
16. Write a Program to show "HELLO JAVA" in Explorer using Applet
17. Write a Program to show Connectivity using JDBC
18. Write a program to demonstrate multithreading using Java.
19. Write a program to demonstrate applet life cycle.
20. Write a program to demonstrate concept of servlet.

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			THEORY			PRACTICAL		Th	T	P	CREDITS
			END SEM University Exam	Two Term Exam	Teachers Assessment*	END SEM University Exam	Teachers Assessment*				
BTPD101		Personality Development-1	0	0	0	0	50	0	0	2	1

Legends: **L** - Lecture; **T** - Tutorial/Teacher Guided Student Activity; **P** – Practical; **C** - Credit;
***Teacher Assessment** shall be based following components: Quiz/Assignment/ Project/Participation in Class, given that no component shall exceed more than 10 marks.

Course Educational Objectives (CEOs):

1. To develop inter personal skills and be an effective goal oriented team player.
2. To develop professionals with idealistic, practical and moral values.
3. To develop communication and problem solving skills.

Course Outcomes

Student will be able to

1. Re-engineer attitude and understand its influence on behavior.

UNIT I - SELF ANALYSIS SWOT Analysis, Who am I, Attributes, Importance of Self Confidence, Self Esteem.

UNIT II - CREATIVITY Out of box thinking, Lateral Thinking.

UNIT III - ATTITUDE Factors influencing Attitude, Challenges and lessons from Attitude, Etiquette.

UNIT IV - MOTIVATION Factors of motivation, Self talk, Intrinsic & Extrinsic Motivators.

UNIT V - GOAL SETTING Wish List, SMART Goals, Blue print for success, Short Term, Long Term, Life Time Goals. Time Management Value of time, Diagnosing Time Management, Weekly Planner To do list, Prioritizing work. Extempore

TEXT BOOK:

1. SOFT SKILLS, 2015, Career Development Centre, Green Pearl Publications.

REFERENCE

1. Covey Sean, Seven Habits of Highly Effective Teens, New York, Fireside Publishers, 1998.
2. Carnegie Dale, How to win Friends and Influence People, New York: Simon & Schuster, 1998.
3. Thomas A Harris, I am ok, You are ok , New York-Harper and Row, 1972 4. Daniel Coleman, Emotional Intelligence, Bantam Book, 2006

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