

LESSON PLAN

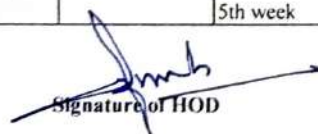
Name of Teacher :-

Subject: Applied Physics -II Class: 2nd Semester

Engg.

S. No.	Month	Week	Date	Name of Chapter	Contents to be taught	Remarks
1	Jan	5th Week		Wave motion and its applications	Introduction, Wave motion, transverse and longitudinal waves with examples, definitions of wave velocity, frequency and wave length	
2	Feb.	1st week		Wave motion and its applications	wave velocity, frequency and wave length and their relationship,	
3					Sound and light waves and their properties, wave equation ($y = r \sin \omega t$) amplitude, phase, phase difference, Principle of superposition of waves and beat formation	
4		2nd week		Wave motion and its applications	Simple Harmonic Motion (SHM): definition, expression for displacement, velocity, acceleration, time period, frequency etc. Free. Forced and Resonant Vibrations and their Examples	
5		3rd week		Wave motion and its applications and Optics	Acoustics of buildings – reverberation, reverberation time, echo, noise, coefficient of absorption of sound, methods to control reverberation time and their applications. and Ultrasonic wave, basic law optics	
6		4th week		Optics	reflection and refraction, refractive index, Images and image formation by mirrors, lens and thin lenses, lens formula, power of lens, magnification.	
7	March	1st week		Optics	Total internal reflection, Critical angle and conditions for total internal reflection, applications of total internal reflection in optical fibre	
8		2nd week		Optics	Optical Instruments- simple and compound microscope, astronomical telescope in normal adjustment and their magnifying powers	Class Test - I
9		3rd week		Optics & Electrostatics	astronomical telescope in normal adjustment and their magnifying powers, Coulomb's law, unit of charge.	
10		4th Week		Electrostatics	Electric field, Electric lines of force and their properties	
11		5th week		Electrostatics	Capacitor and its working, Capacitance and its units. Capacitance of a parallel plate capacitor, Series and parallel combination of capacitors (related numerical), dielectric and its effect on capacitance, dielectric break down	

12	April	1st week		Current Electricity	Electric Current and its units, Direct and alternating current Resistance and its units, Specific resistance, Conductance, Specific conductance, Series and parallel combination of resistances Factors affecting resistance of a wire, carbon resistances and colour coding	
13		2nd week		Current Electricity	Ohm's law and its verification, Kirchhoff's laws, Concept of terminal potential difference and Electro motive force (EMF), Heating effect of current, Electric power, Electric energy and its units (related numerical problems), Advantages of Electric Energy over other forms of energy	Class Test - II
14		3rd week		Electromagnetism	Types of magnetic materials: dia, para and ferromagnetic with their properties Magnetic field and its units, magnetic intensity, magnetic lines of force, magnetic flux and units, magnetization Lorentz force (force on moving charge in magnetic field), Force on current carrying conductor	
15		4th Week		Semiconductor Physics	Energy bands in solids, Types of materials (insulator, semi-conductor, conductor), intrinsic and extrinsic semiconductors, p-n junction, junction diode and V-I characteristics	
16		5th week		Semiconductor Physics	p-n junction, junction diode and V-I characteristics	
17	May	1st week		Semiconductor Physics	Diode as rectifier – half wave and full wave rectifier (centre taped), Photocells, Solar cells, working principle and engineering applications	
18		2nd week	House Test			
19		3rd week		Modern Physics	Lasers: Energy levels, ionization and excitation potentials, spontaneous and stimulated emission, population inversion, pumping methods, optical feedback. Types of lasers: Ruby, He-Ne and semiconductor, laser characteristics, engineering and medical applications of lasers	
20		4th Week		Modern Physics	laser characteristics, engineering and medical applications of lasers, Fiber Optics: Introduction to optical fibers, light propagation, acceptance angle and numerical aperture, fiber types, applications in, telecommunication	
21		5th week		Modern Physics	applications in, telecommunication	


Signature of HOD


Signature of Teacher

Govt. Polytechnic Kangra
Distt. Kangra H.P. 176001

Lesson Plan
(Labs/Workshop)

Name of Teacher:-		Designation:- Lecturer/ Sr. lecturer	Group:-
Name of Lab/Workshop:- Applied Physics-II		Class/Branch:- / 2nd Semester	
Sr. No.	Description of Practical job	Date	
1	To determine and verify the time period of a cantilever		
2	To Verified the law of reflection of light using a plane mirror		
3	To Verified the law of refraction using a glass slab		
4	To verify Ohm's law by plotting graph between current and potential difference		
5	To verify laws of resistances in series and parallel combination		
6	To verify Kirchhoff's laws using electric circuits		
7	To draw V-I characteristics of a semiconductor diode (Ge, Si) and determine its knee voltage		
8	To find resistance of a galvanometer by half deflection method		



Signature of Teacher



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PLANNED SYLLABUS COVERAGE(Theory)

GP-K-F-17

SYLLABUS COVERAGE (Theory)						
G P Kangra		Department: <u>AS & H</u>		Subject <u>Environmental Science</u>		
SYLLABUS COVERAGE		Course <u>Diploma</u>		Duration <u>3 Yrs</u>		
		Total Periods <u>28</u>		Theory <u>28</u>		
Sr. No.	Period Nos.	Topic	Details	Instruction Reference	Additional Study Recommended	Remarks
1.	1-5	Ecosystem	Str of Ecosystem, Biotic & Abiotic Components, Food chain & Food web Aquatic (Lentic & Lotic), Terrestrial ecosystem - C, N, S, P cycle Global Warming - Cause, effects, Process, Green House Effects Ozone Depletion	Environmental Science (Eagle Pub.)	Environmental studies by Esach Bharucha	
2.	6-10	Air and Noise Pollution.	Definition of Pollution & Pollutant Natural and Manmade Source of Air Pol. (Refrigerant, I.C. Boilers) Air Pollutants, Types, Particulate Pollutant: Effects and Control (Bag Filter, cyclone separator, Electrostatic Precipitator. Gaseous Pol. Control: - Absorber, catalytic Converter, Effects of air Pollution due to Refrigerant I.C. Boiler Noise Pollution: - Source, Measurement of Pollution level, Effects, Noise Pollution (Regulation and Control) Rules 2000	Environmental Studies by S.C Sharma & M.P Poonia Keshav Kant Air Poll. & Control	Elements of Environmental Pollution Control O.P. Gupta	
3.	11-15	Water & Soil Pollution	Sources of water Pol, Types of water Pollutants, Characteristic of water Pollutants: Turbidity, pH, Total Suspended Solid, Total Solid BOD and COD Definition and Calculation Waste water Treatment: - Primary method Sec. Method, Tertiary Method Causes, Effect & Prevention of soil Pollution, Effective use of Fertilizers Pesticides and Insecticides, irrigation, E-waste	Arceivala Soli Asolekar Shyam. Wastewater Treatment for Poll. Control.	Environmental Science by P. N. Education	
4.	16-21	Renewable Source of Energy	Solar Energy: Basics of Solar Energy Flat Plate Collector. Theory of Flat Plate Collector. Importance of Coating. Advanced collector, Solar Pond Solar water Heater, dryer, Stills Biomass: - Overview of biomass as energy source. Thermal Chrac. of biomass as fuel. Anaerobic	Environmental Science (Eagle Pub)	Aldo Vieira, Da.Rosa, Fundamental of Renewable Energy Process	

To be approved from concerned HOD within seven days from beginning of semester & will be kept with the concerned teacher in his file.

Sr. No.	Period Nos.	Topic	Details	Instruction Reference	Additional Study Recommended	Remarks
5.	21-28	Solid waste Management, ISO 14000 & Environmental Management	Digestion, Biomass production mech. utilization & storage of biogas Wind Energy :- Current status and Future Prospects of Wind Energy Wind Energy in India, Env. benefits and Problem. New Energy source Needs. Diff. Types, App., Concept origin and power plants of geo-Thermal Energy. Solid waste generation - sources & charac. of : Municipal solid waste E-waste, bio-medical, metallic and Non-metallic wastes from industries Collection and disposal: MSW (BR Principles, Energy recovery, Sanitary landfill), Hazardous. Waste air quality Act 2004, Air pol. Control act 1981 and water Pollution and Control Act 1996 Structure and Role of Central & State Pollution Control Board. Concept of Carbon Credit, Carbon footprint, Environmental management in Fabrication industry ISO 14000: Implementation in Industries. Benefits.	Environment- al science By True Education Patvardhan A. D. Indust- rial Solid waste	Environmental Studies by Erach Bharucha.	

Extra Topics to be covered beyond the scope of the syllabus (as required by industry/ as recommended by Teacher which he/ she finds necessary)

Sr. No.	Period No.	Topic Covered	Instruction Reference	Additional Study recommended	Remarks

-B.C.-P1

Approved / Not approved

PLANNED SYLLABUS COVERAGE(Theory)

G P Kangra		Department: <u>Mechanical Engg.</u> Subject <u>Engineering Mechanics</u>				
		Course <u>Diploma in Instrumentation Engg.</u> Duration <u>14 weeks</u>				
SYLLABUS COVERAGE		Total Periods <u>56</u> Theory <u>14X4 = 56 days.</u>				
Sr. No.	Period Nos.	Topic	Details	Instruction Reference	Additional Study Recommended	R. marks
	1-12	Basics of Mechanics and force system	Significance and relevance of Mechanics, Applied Mechanics, Statics, Dynamics space, Time, Mass, Particle Flexible body and rigid body. Scalar and vector quantity Units of measurement (SI unit) Fundamental units and derived units. Force-unit, representation of vector and Bow's notation Characteristics and effect of a force. Principle of transmissibility of force Force system and its classification, Resolution of a force, orthogonal components of a force. Moment of a force, Varignon's Theorem, Composition of forces, Resultant, analytical method for determination of Resultant for concurrent non-concurrent and parallel coplanar force system. Law of triangle, parallelogram and Polygon Law of vector.	Fundamentals of Applied Mechanics By Brindar Singh Kalyan Publishing House New Delhi	Applied Mechanics by R.S Khosla S.Chand & Co, New Delhi	

To be approved from concerned HOD within seven days from beginning of semester & will be kept with the concerned teacher in his file.

Sr. No.	Period Nos.	Topic	Details	Instruction Reference	Additional Study Recommended
	13-22	Equilibrium	Equilibrium and equilibrium Free body & Free body diagram, Analytical and Graphical methods of Analysing equilibrium. Lami's Theorem, statement and explanation. Application for various engineering problems. Types of beam, Support (Simple, Hinged, roller & fixed) and Load acting on beam. Vertical point Load, U.d.l. Beam Reaction for Cantilever simply supported beam with or without overhang subjected to Combination of point Load & U.d.l. Beam Reaction graphically for simply supported beam subjected to vertical point Load only.		

Extra Topics to be covered beyond the scope of the syllabus (as required by industry/ as recommended by Teacher which he/ she finds necessary)

Sr. No.	Period No.	Topic Covered	Instruction Reference	Additional Study recommended	Remarks

Approved / Not approved.	
Date 27/01/26	HOD Sign [Signature]
Date	Principal Sign [Signature]

Use additional sheets (if required).

PLANNED SYLLABUS COVERAGE (Theory)

GPK-F-17

G.P.

Kangra

SYLLABUS
COVERAGE

Department: Mechanical Engg. Subject: Engineering Mechanics

Course: Diploma in Instrumentation Engg. Duration: 14 weeks

Total Periods: 56 Theory: 14 x 4 = 56 days

Period Nos.

Topic

Details

Instruction
Reference

Additional
Study
Recommended

Remarks

23-32

Friction

Friction and its relevance in engineering types and laws of friction, limiting equilibrium limiting friction, coefficient of friction, angle of friction, angle of friction repose. relationship between coefficient of friction and angle of friction. Equilibrium of bodies on level surface subjected to force parallel and inclined to plane, Equilibrium of bodies on inclined plane subjected to force parallel to plane only.

Fundamental of Applied Mechanics by B.S. Singh Kaphan Publishing House New Delhi

Applied Mechanics by R.S. Khurmi S. Chand & Co, New Delhi

33-42

Centroid and Centre of gravity

Centroid of geometrical plane figures (square, rectangle, triangle, circle, semi-circle, quarter circle). Centroid of Composite figures composed of not more than two geometrical figures. Centre of gravity of simple solids (Cube, Cuboid, cone, cylinder, sphere, hemisphere) Centre of gravity of Composite solids composed of not more than two simple solids.

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To be approved from concerned HOD within seven days from beginning of semester & will be kept with the concerned teacher in his file.

Period Nos.	Topic	Details	Instruction Reference	Additional Study Recommended	Remarks
43-56	Simple Lifting Machine	Simple Lifting Machine Load, effort, Mechanical advantage, applications and advantages, velocity Ratio, efficiency of machine Law of machine, Ideal Machine, friction in Machines Maximum M.A and efficiency Reversible & Non-reversible Machines. Condition of Reversibility, Velocity Ratio of Simple axle and wheel. Differential axle and wheel, worm & worm wheel, Simple screw Jack.			

Extra Topics to be covered beyond the scope of the syllabus (as required by industry/ as recommended by Teacher which he/ she finds necessary)

Period No.	Topic Covered	Instruction Reference	Additional Study recommended	Remarks

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Date 27/01/26	HOD Sign <i>ASHARON</i>
Date	Principal Sign <i>M</i>

Additional sheets (if required).

G P Kaugra

CPK-EL-18

GPK-EL-18

Practical Planning & Coverage Status

Department: Mechanical Engineering
 Course: Diploma in Instrumentation Engg.
 Laboratory: Engineering Mechanics Lab
 Subject: Engineering Mechanics Lab

Sr. No.	Details of Practical	Availability of		Likely Turn/Date	Actual Date	Responsibility	HOD Sign.	Remarks
		Equipment Set up	STD Ref. Write up					
1.	Verify Lami's Theorem	Yes	Yes	G ₁ - 29/1/26 G ₂ - 30/1/26				
2.	Determine resultant of Concurrent force System graphically	Yes	Yes	G ₁ - 5/2/26 G ₂ - 6/2/26				
3.	Determine resultant of parallel force system graphically	Yes	Yes	G ₁ - 12/2/26 G ₂ - 13/2/26				
4.	Determine resultant of Concurrent force System applying Law of polygon of forces using force table	Yes	Yes	G ₁ - 19/2/26 G ₂ - 20/2/26				
5.	Determine Support reactions for Simply Supported beam	Yes	Yes	G ₁ - 26/2/26 G ₂ - 27/2/26				
6.	Obtain Support reactions of beam using graphical method	Yes	Yes	G ₁ - 5/3/26 G ₂ - 6/3/26				

Approved/ Not approved:

Abhishek

27/01/26



Principal Signature with date

Department: Mechanical Engg. Practical Planning & Coverage Status
 Course: Diploma in Instrumentation Engg. Laboratory: Engineering Mechanics Lab
 Subject: Engineering Mechanics Lab

Sr. No.	Details of Practical	Availability of		Likely Turn/Date	Actual Date	Responsibility	HOD Sign.	Remarks
		Equipment Set up	STD Ref. Write up					
7.	Determine coefficient of friction for motion on horizontal and inclined plane	Yes	Yes	G ₁ - 12/3/26 G ₂ - 13/3/26				
8.	Determine centroid of geometrical plane figure	Yes	Yes	G ₁ - 19/3/26 G ₂ - 20/3/26				
9.	Study forces in various members of Jib Crane	Yes	Yes	G ₁ - 26/3/26 G ₂ - 27/3/26				
10.	To find the M.A, V.R efficiency and Law of machine for Differential axle & wheel	Yes	Yes	G ₁ - 2/4/26 G ₂ - 3/4/26				
11.	To find the M.A, V.R, efficiency and Law of machine for Simple Screw Jack	Yes	Yes	G ₁ - 9/4/26 G ₂ - 10/4/26				
12.	Derive Law of machine using worm & worm wheel	Yes	Yes	G ₁ - 16/4/26 G ₂ - 17/4/26				
13.	To study various equipments related to Engineering mechanics	Yes	Yes	G ₁ - 23/4/26 G ₂ - 24/4/26				

Approved/ Not approved

Abhramy
27/01/26

Principal Signature with date

PLANNED SYLLABUS COVERAGE(Theory)

G P Kangra SYLLABUS COVERAGE	Department: <u>Electrical Engg</u> Subject: <u>EEEE</u>					
	Course: <u>Diploma</u>		Duration: <u>3 Years</u>			
	Total Periods		Theory: <u>56 Theory</u>			
Sr. No.	Period Nos.	Topic	Details	Instruction Reference	Additional Study Recommended	Remarks
1.	11	Overview of Electronic Components & signals	Passive Active components Resistances, Capacitors, Inductors, Diodes, Transistors FET, MOS & CMOS & their Applications. Signals DC/AC, voltage / current, Periodic/non-periodic signals, Average rms, peak values, different types of signal waveforms, Ideal/non-ideal voltage/current sources.	① Textbook of Electrical Technology Vol -1 By S Chandra.		
2.	7	Overview of Analog Circuits.	Operational Amplifiers Ideal op -Amp, Practical op Amp, Open loop & closed loop configurations, Application of OP-Amp as amplifier, adder, Differentiator & Integrator.	② Basic Electrical Engg by V.K Mehta.		
3.	9	Overview of Digital Electronics	Introduction to Boolean Algebra Electronic Implement.	③ Basic Electrical Engg		

To be approved from concerned HOD within seven days from beginning of semester & will be kept with the concerned teacher in his file.

Sr. No.	Period Nos.	Topic	Details	Instruction Reference	Additional Study Recommended	Remarks
4	10	Electric & Magnetic Circuits	tation of Boolean operations, Gates-Functional Block Approach, Storage elements - Flip Flops, A functional block approach, counters, Ripple, Up/down & decade, Introduction to digital IC Gates (of TTL type) EMF, current potential difference, Power & Energy	By C.L. Wadhwa		

Extra Topics to be covered beyond the scope of the syllabus (as required by industry/ as recommended by Teacher which he/ she finds necessary)

Sr. No.	Period No.	Topic Covered	Instruction Reference	Additional Study recommended	Remarks
		NIL			

Approved / Not approved	
Date	HOD Sign
Date	Principal Sign

* If additional sheets are required

PLANNED SYLLABUS COVERAGE(Theory)

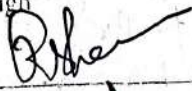
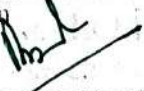
G P Kangra		Department: <u>Electrical Engg</u> Subject: <u>FEEF</u>				
		Course: <u>Electronics Engg Diploma</u>	Duration: <u>3 Years</u>			
SYLLABUS COVERAGE		Total Periods	Theory	56 Theory		
Sr. No.	Period Nos.	Topic	Details	Instruction Reference	Additional Study Recommended	Remarks
5	12	A.C. Circuits	M.M.F. Magnetic force, permeability, hysteresis, loop, reluctance, leakage factor & BH curve, Electromagnetic Induction, Faraday's Law of electromagnetism, Induction, Lenz's Law, Dynamically Induced emf, Statistically emf, Eqp of self & mutual Inductance, Analogy b/w electric & magnetic circuits, Cycle, frequency, periodic time, Amplitude, Angular velocity, RMS value, Average value, Form factor, peak factor, Impedance, phase angle & p.f., Mathematical & phasor representation of alternating emf and current, voltage			

To be approved from concerned HOD within seven days from beginning of semester & will be kept with the concerned teacher in his file.

Sr. No.	Period Nos.	Topic	Details	Instruction Reference	Additional Study Recommended	Remarks
6	7	Transformer & Machines	and current relationship in star delta connection. AC resistors, Inductors & capacitors. AC in R series, R-C, R-L-C & Hel ckt. Power in A.C, power triangle. General construction principle of core & shell type of T/F. Emf eqn & T/F ratio of Transformer. Auto T/F. Basic principle of electromechanical energy conversion.			

Extra Topics to be covered beyond the scope of the syllabus (as required by industry/ as recommended by Teacher which he/ she finds necessary)

Sr. No.	Period No.	Topic Covered	Instruction Reference	Additional Study recommended	Remarks
		NIL			

Approved / Not approved	
Date 27-01-2026	HOD Sign 
Date	Principal Sign 

2. If additional sheets are required.

Practical Planning & Coverage Status

Department: Electrical Engg (Electronics Engg) Laboratory: Machine Lab
 Course: Diploma Subject: FEE

Sr. No.	Details of Practical	Availability of:		Likely Turn/Date	Actual Date	Responsibility	HOD Sign.	Remarks
		Equipment Set up	STD Ref. Write up					
7.	measure the value of given capacitor	← Trainer kit →	← Trainer kit Manual →					
8.	Determine the value of given resistors using digital multimeter to confirm with colour code.	← do →	← do →					
9.	Test the PN-junction diodes using digital multimeter.	← do →	← do →					
10.	Test the performance of PN-junction diodes	← do →	← do →					
11.	Test the performance of Zener diodes.	← do →	← do →					
12.	Test the performance of LED.	← do →	← do →					
13.	Test the performance of NPN Transistor.	← do →	← do →					
13.	Determine the current gain of CE transistor configuration	← do →	← do →					

Approved/ Not approved

HOD Sign with date

Principal Signature with date

Practical Planning & Coverage Status

Department: Electrical Engg (Electronics Engg) Laboratory: Machine Lab
 Course: Diploma Subject: FEEE

Sr. No.	Details of Practical	Availability of:		Likely Turn/Date	Actual Date	Responsibility	HOD Sign.	Remarks
		Equipment Set up	STD Ref. Write up					
1.	(Any 12 practical to be performed) Identify various passive electronic components in the given circuits.	← Trainer kit →	← Trainer kit Manual →					
2.	connect resistors in series & parallel combination on bread board & measure its value using digital multimeter.	← do →	← do →					
3.	connect capacitors in series & parallel combination on bread board & measure its value using multimeter.	← do →	← do →					
4.	Identify various active electronic components in the given circuit.	← do →	← do →					
5.	Use multimeter to measure the value of given resistor.	← do →	← do →					
6.	Use L-CR - O tester to	← do →	← do →					

Approved/ Not approved

HOD Sign with date

Principal Signature with date

DEPARTMENT OF APPLIED SCIENCES & HUMANITIES

LESSON PLAN

Academic Year	2026
Semester	2 nd
Subject Code	BS102
Subject Title	Mathematics - II
Name of Faculty	Reema Choudhary Lecturer Mathematics
Semester Start & End Dates	27.01.2026 - 27.05.2026

Study and Evaluation Scheme

Sr. No.	Name of the Subject	Th	DCS	Pr	Total	Credits	Internal Assessment			External Assessment					Total Mark
							Th	Pr	Total	Th	Hrs	Pr	Hrs	Total	
2.2	Applied Mathematics-II	4	1	0	5	4	40	00	40	60	3	00	00	100	100

Course objectives:

- The students will be able to think logically and systematically. They will learn the importance of accuracy and develop attitude of problem solving with diligence and perseverance.

Day	Topic of Discussion	Topic Details	Delivery Method
Unit-1: Algebra			
Day 1	Determinants	Elementary properties of determinants upto 3rd order	Chalk & Talk
Day 2	Determinants	Elementary properties of determinants upto 3rd order	Chalk & Talk
Day 3	Determinants	consistency of equations	Chalk & Talk
Day 4	Determinants	Crammer's rule	Chalk & Talk
Day 5		DCS	Chalk & Talk
Day 6	Determinants	Crammer's rule	Chalk & Talk

Day 7	Matrix	Algebra of matrices, ,	Chalk & Talk
Day 8	Matrix	Inverse of a matrix	Chalk & Talk
Day 9	Matrix	Inverse of a matrix	Chalk & Talk
Day 10		DCS	Chalk & Talk
Day 11	Matrix	matrix inverse method to solve a system of linear equations in 3 variables.	Chalk & Talk
Day 12	Matrix	matrix inverse method to solve a system of linear equations in 3 variables.	Chalk & Talk
Day 13	Matrix	matrix inverse method to solve a system of linear equations in 3 variables.	Chalk & Talk
Unit-2 : Integral Calculus			
Day 14	Integration	as inverse operation of differentiation	Chalk & Talk
Day 15		DCS	Chalk & Talk
Day 16	Integration	as inverse operation of differentiation	Chalk & Talk
Day 17	Integration	as inverse operation of differentiation	Chalk & Talk
Day 18	Simple integration	by substitution	Chalk & Talk
Day 19	Simple integration	by substitution	Chalk & Talk
Day 20		DCS	Chalk & Talk
Day 21	Simple integration	by substitution	Chalk & Talk
Day 22	Simple integration	by parts	Chalk & Talk
Day 23	Simple integration	by parts	Chalk & Talk
Day 24	Simple integration	by parts	Chalk & Talk
Day 25		DCS	Chalk & Talk
Day 26	Simple integration	by parts	Chalk & Talk

Day 27	Simple integration	by partial fractions (for linear factors only)	Chalk & Talk
Day 28	Simple integration	by partial fractions (for linear factors only)	Chalk & Talk
Day 29	Simple integration	by partial fractions (for linear factors only)	Chalk & Talk
Day 30		DCS	Chalk & Talk
Day 31		1st Class Test (30 % Syllabus)	
Day 32	Use of formulas	$\int_0^{\frac{\pi}{2}} \sin^n x dx$	Chalk & Talk
Day 33	Use of formulas	$\int_0^{\frac{\pi}{2}} \cos^n x dx$	Chalk & Talk
Day 34	Use of formulas	$\int_0^{\frac{\pi}{2}} \sin^n x \cos^m x dx$	Chalk & Talk
Day 35		DCS	Chalk & Talk
Day 36	Use of formulas	$\int_0^{\frac{\pi}{2}} \sin^n x \cos^m x dx$	Chalk & Talk
Day 37	Applications of integration for	Simple problem on evaluation of area bounded by a curve and axes.	Chalk & Talk
Day 38	Applications of integration for	Simple problem on evaluation of area bounded by a curve and axes.	Chalk & Talk
Day 39	Applications of integration for	Simple problem on evaluation of area bounded by a curve and axes.	Chalk & Talk
Day 40		DCS	Chalk & Talk
Day 41	Applications of integration for	Calculation of Volume of a solid formed by revolution of an area about axes. (Simple problems).	Chalk & Talk
Day 42	Applications of integration for	Calculation of Volume of a solid formed by revolution of an area about axes. (Simple problems).	Chalk & Talk
Day 43	Applications of integration for	Calculation of Volume of a solid formed by revolution of an area about axes. (Simple	Chalk & Talk

		problems).	
Day44		DCS	Chalk & Talk
Day 45		2 nd Class Test (Next 30 % Syllabus)	
Unit-3 : Co-ordinate Geometry			
Day 46	Straight line	Equations of straight line in various standard forms (without proof)	Chalk & Talk
Day 47	Straight line	Equations of straight line in various standard forms (without proof)	Chalk & Talk
Day 48	Straight line	Equations of straight line in various standard forms (without proof)	Chalk & Talk
Day 49	Straight line	inter section of two straight lines	Chalk & Talk
Day50		DCS	
Day 51	Straight line	angle between two lines	Chalk & Talk
Day52	Straight line	Parallel and perpendicular lines	Chalk & Talk
Day 53	Straight line	Parallel and perpendicular lines	Chalk & Talk
Day 54	Straight line	perpendicular distance formula	Chalk & Talk
Day55		DCS	
Day 56	Circle	General equation of a circle and its characteristics	Chalk & Talk
Day 57	Circle	To find the equation of a circle, given: * Centre and radius	Chalk & Talk
Day 58	Circle	Three points lying on it	Chalk & Talk
Day59		House Test (80 % Syllabus)	
Day 60		DCS	Chalk & Talk
Day 61	Conics	Definition of conics (Parabola, Ellipse, Hyperbola) their standard Equations without proof	Chalk & Talk

	Name of Book	Author Name	Publication
Prescribed Books	Elementary Engineering Mathematics	BS Grewal	Khanna Publishers
	Engineering Mathematics	S Kohli	IPH Jalandhar
	Engineering Mathematics	C Dass Chawla	Asian Publishers
	Engineering Mathematics	AK Gupta	Macmillan India Ltd., New Delhi

Signature of Teacher
(Reema Choudhary)



HOD

(AS&H)

PLANNED SYLLABUS COVERAGE (Theory)

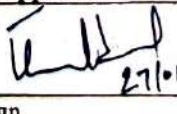
G P Kangra		Department: <u>Computer Engg.</u> Subject <u>Intro. to IT Systems</u>				
SYLLABUS COVERAGE		Course <u>Diploma</u>	Duration _____			
		Total Periods <u>28</u>	Theory _____			
Sr. No.	Period Nos.	Topic	Details	Instruction Reference	Additional Study Recommended	Remark
1.	1-6	Basics of Computer System	Block diagram of Computer System General understanding of various hardware components - CPU, memory, display devices (CRT & LCD Monitors), keyboard, mouse, HDD.	Computer fundamentals - also by R.S. Salaria	Internet	
2.	7-10	Software Concepts.	Software & its types, Operating System: definition, type & function of OS, Booting the system (cold & warm)	-do-		
3.	11-16	Internet Skills	Understanding the terminology of internet - web browsers, search engine, world wide web, Types of Network, Awareness about the govt. portals (State portals & national portals) & institute portals.	-do-		
4.	17-20	Working with MS-Word	File Management (Creating new document, saving document, printing a document), editing document, use of Home, Insert, Design layout ribbons.	-do-		
5.	21-25	Working with MS-Excel	Working with spread sheets, entering data into the cells, merging cells, formula bar, usage of simple functions such as sum, average, min, max, percentage, count, floor, ceiling, conditional formatting of cells.	-do-		

To be approved from concerned HOD within seven days from beginning of semester & will be kept with the concerned teacher in his file.

Sr. No.	Topic	Details	Period Nos.	Instruction Reference	Additional Study Recommended	Remarks
6.	Information Security	Concept of online frauds, threats of online crime, virus attacks & use of antivirus.	26-28			

Extra Topics to be covered beyond the scope of the syllabus (as required by industry/ as recommended by Teacher which he/ she finds necessary)

Sr. No.	Period No.	Topic Covered	Instruction Reference	Additional Study recommended	Remarks

Approved / Not approved	
Date 27/01/26.	HOD Sign 
Date	Principal Sign 

Use additional sheets (if required).

G P Kangra Practical Planning & Coverage Status

Department:
Course:

Laboratory:
Subject:

Sr. No.	Details of Practical	Availability of		Likely Turn/Date	Actual Date	Responsibility	HOD Sign.
		Equipment Set up	STD Ref. Write up				
1.	To identify the various hardware components of computer system.	Computer System		1			
2.	To assemble hardware components of computer system	— do —		1			
3.	To install WINDOWS OS	Computer Systems, Bootable image of WINDOWS		1			
4.	To study various features offered on the desktop, creating new folders & new file on the desktop.	Computers with MS-Office Windows installed		1			
5.	To work on different web browsers (Google Chrome, Internet Explorer) setting up default homepage on browser & study various settings available.	Computer Systems with internet connection		1			
6.	To open search engines & search different information using search engines, creating email account.	— do —		1			
7.	Visit various e-governance/digital India portals & understanding services offered	— do —		1			
8.	Opening, creating, saving document, locating files, copying contents in some different files, protecting files, giving password protection for a file, setting margins, tab setting, ruler, indenting, entering text, cut, copy, paste, using toolbar.	Computer Systems with MS-Word (Office) installed		2			

Approved/ Not approved

[Signature] 12/01/20
HOD Sign with date

[Signature]
Principal Signature with date

Practical Planning & Coverage Status

Department: Computer Engg.
Course: Diploma

Laboratory: NDL
Subject: Intro. to IT Systems

Sr. No.	Details of Practical	Availability of		Likely Turn/Date	Actual Date	Responsibility	HOD Signa.	Remarks
		Equipment Set up	STD Ref. Write up					
9.	formatting a document, Creating & editing tables, mail merge	Computers with ms-Office installed		2				
10.	Working on MS-EXCEL, Creating a worksheet in Excel, Copy, Move & Merge the cells & use various formatting features.	- do -		1				
11.	Using formula & functions prepare worksheet for storing subject marks of ten students & perform the following	- do -		2				
	• Calculate the student wise total & average • Calculate the subject wise total & average. • Calculate overall & individual percentage of student. • Creating a chart for the the above.							

Approved/ Not approved

HOD Sign with date 21/01/26.

Principal Signature with date