	Part A Introduction						
Prog	ram: Certificate	2	Clas	s: BSc-I	Year:2021	Sessi	on:2021-22
			•	Subjea	ct: Botany		
1	Course Code				S1-BO	TA2T	
2	Course Title				Basic	Botany	
3	Course Type (Course/Elective Elective/Vocat	(Core e/Generic ional/)			Electi	ve	
4	Pre-requisite ((if any)		To study the subje	this course, a ect botany in c	a student must class/12th/ cer	: have had tificate/diploma.
5	Course Learnin (CLO)	ng outcom	es	 7 d k I r 7 7 1 1 1 1 1 1 1 	This course will liversity of plan ingdoms. t gives an accou- condition to co The changes in eproductive stru- can be investig The economic in n nature will b They will be accon nicrobial disea	l help the stude ts and evolution ints of plant ada lonize terrestria morphological uctures that pro- ated. mportance and e understood. quainted with ses of plants an	nt to understand the ary process in plant ptations from aquatic al habitat. I, anatomical and pel plant evolution significance of plants locally prevalent nd humans
6	Credit Value					4 Credits	
7	Total Marks N			Max. Mar	:ks: 25+75	Min. Pas	sing Marks:33
			Par	rt B- Cont	ent of the Cou	urse	
Tota weel	ll No. of Lectur k): L-T-P:	es- 60Tute	orials	- 0 Practic	cal =0 (theory	y 4 hours per	
Unit	То	pics					No. of Lectures
I 1.1 History of Bo 1.2Morphological plants(Angiosperm 1.3Types of leaves 1.4 Structure of Pla and Eukaryotic Ce 1.5 Microscope stru (magnification and 1.6 Various types Contrast, SEM and				tany and Character (s). Inflorescent (nt cell and Ils, types of cture and f resolving of Microso (TEM.	Indian Contri eristics of low ence, Flowers cell organelles of Cell division function of light power), copes: Bright	butions. er and higher and Fruits. s, Prokaryotic t. t microscope field, Phase	12
II	1. 1.1 1.2 1.3 1.4	Algae General cl Range of t Types of a Role of a	haract hallus life-cy lgae ii	eristics organization ycles in al n nature ar	on, reproductio gae id its economic	n. c importance.	12

	2Bryophytes :				
	2. IGeneral characteristics, Ecology.				
	2.2Range of thallus organization, morphology,				
	anatomy(internal and external features) and reproduction				
	of any one Bryophyte.				
	2.3Economic importance of Bryophytes				
111	1 1 Constrained abore stariotics and morphology				
	1. Staler ergenization and reproduction				
	1.21 sterar organization and reproduction.				
	1.3Heterospory and seed nabit.				
	1.4Economical importance				
	2.Gymnosperms				
	2. IGeneral description and their distribution.	12			
	2.2Economical importance of Gymnosperms.				
	3.Paleobotany				
	3. Indian contribution in Paleobotany.				
	3.2Brief knowledge of Fossils and Geological time scale.				
IV	1Fungi	12			
·	1.1 General characteristics and cell wall composition				
	1.2 Mode of nutrition				
	1.2 Types of reproduction				
	1.5 Types of reproduction				
	1.4 Economic importance				
	1.5Parasexuality and Mycomilza				
	2. Lichens: Brief knowledge and their significance.				
V	1Microbes	12			
	1.1Brief outline of various types of Microbes				
	1.2Archaebacteria, Eubacteria, Cyanobacteria,				
	Mycoplasma, Actinomycetes and Virus.				
	1.3 Beneficial and harmful roles.				
Keywords/Tags:	History of Botany, Palebotany, Prokaryotes, Eukaryotes, Al	gae, Bryophyta,			
Pteridophyta, Gy	mnosperms, Fungi, Mycorrhiza, Lichens, Bacteria, Virus				
	Tart C-Learning Kesources				
Suggested Readi	ngs:				
I Oladele Ogunseitan, Microbial Diversity: Form and Function in Prokarvotes, Wiley					
Blackwell,2008.					
2. Pelczar, M.J et al., Microbiology, Tata McGraw-Hill Co, New Delhi, 5th edition, 2001.					
3. Presscott, L. Harley, J. and Klein, D., Microbiology, Tata McGraw-Hill Co. New Delhi,6th					
edn., 2005.					
4. Fritsch F.E., The Structure & Reproduction of Algae, Vol. I & Vol. 11., CambridgeUniversity					
Press, Car	mbridge, U.K. 1945.	a W			
5. Smith, G.	M., Cryptogamic Botany, Vol. I: Algae, Fungi, & Lichens, Me	cGraw-Hill Book			
6 IonMorrie	IUIK, 1933.	7			
0. Tamviorris	s, An incroduction to the Aigae, nutchinison, London, 190	1.			

Suggested equivalent online courses:					
Р	art DAssessment and Evalua	tion			
Suggested Continuous Evaluation Methods: Maximum Marks : 100 Continuous Comprehensive Evaluation (CCE) : 25marks University Exam (UE) 75 marks					
Internal Assessment :	Class Test	15			
Continuous Comprehensive	Assignment/Presentation	10			
Evaluation (CCE):25	Total	25			
External Assessment :	Section(A) : Three Very Short	$03 \ge 09$			
University Exam Section:	Questions (50 Words Each)				
75 Time : 02.00 Hours	Section (B) Four Short Questions (200 Words Each)	04 x 09 = 36			
	Section (C) Two Long	$02 \ge 15 = 30$			
	Questions (500 Words Each)	Total 75			

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Practical

	 Section cutting of Paleaves Specimen study of I Study of fugal struct Mucor, Rhizopus, A Albugo, Helimenth Permanent slides Study of various f Observation of sym Gram staining te 	teridophytes Deridophytes aures and pre Asperigillus, osporium. of Puccinia ungal plant ptoms of virus chniques	and Gymnosperms: Stem, root and s and Gymnosperms Cones eparation of temporary mounts of <i>Yeast, Pencillium, Alternaria,</i> on host. diseases s and bacteria on plants.		
Kovu	vorde/Tage: Microscope	Alago Brug	nhuta Ptaridanhuta Gumnosparm Fu	Ingi	
KCyv	olus/ lags. Microscope, 1	Part C-I	earning Resources	ligi	
	Text B	ooks Refer	rence Books. Other resources		
	I OAT D				
Sugg	ested Readings:				
1	Bendre Ashok and Ashok	Kumar, A T	Textbook of Practical Botany, vol. 1, R	astogi Pub.,	
2	Meerut, 1984. Dendey P. D.Medern Dreet	ical Potony	val L.S. Chand and Co. Ltd. N. Dolhi	17th odp	
Z	1999	ical bolariy,.	., vol. 1, S. Chand and Co. Ltd., N. Deini,	r/mean.,	
3	Singh M P Chaudhary S	B and Sah	u H_BA Textbook of Practical Botany Da	va Pub. House	
U	N. Delhi, 2005.			ja i abi i loaco,	
4.	Shahezad, Aki I Mohd., F	Practical Bot	tany, Shanti Prakashan, Gwalior, 2016.		
5	5. Elizabeth Margaret and Angela GPractical manual of Botany. vol.1. New Age (Pub.) Ltd.				
	Delhi, 2007.				
			1		
	Suggestive digital platio	rms web lin	KS		
Suga	acted aquivalant online aqu				
Sugg	ested equivalent onnie cot	ilses:			
	Pa	rt D-Asses	ssment and Evaluation		
Sugg	ested Continuous Evaluation	on Methods	:		
	Internal Assessment	Marks	External Assessment	Marks	
Class Interaction /Quiz		10	Viva Voca on Practical	15	
Class Interaction /Quiz		10	viva voce on Hachean	15	
Attendance		5	Practical Record File	10	
Assignments (Charts/ Model		10	Table work / Experiments	50	
Semi	nar / Rural Service/				
Tech	nology Dissemination/				
Repo	rt of / Lab Visits/ Survey /				
Indus	trial visit)				
TOTA	\L	25		75	

Any remarks/ suggestions: Practical may be adjusted accordingly by the teachers.

		Part A Int	roduction		
Program- CERTIFICA	re C	Class- B.Sc.	Year- First		Session- 2021-2022
		Subject –	Chemistry		
Course Co	ode		S1-CHI	EM2T	
Course Tit	ile	Analytical Chemistr	·y		
Course Ty	pe	Elective			
Pre-requis (if any)	ite	To study this course s Chemistry in class +2	students must have 2 or equivalent.	e had the	e subject
Course Le Outcomes	arning (CLO)	 By the this course stu 1. Basic concept 2. Fundamentals analysis. 3. Basic Knowle 4. Basic Concept 5. Principles of Concept 6. Various technological 	idents will learn the s of Mathematics of analytical cher edge of Computer ts of Chemical equ Chromatography a hic techniques. iques of Spectrosc	nefollow for Chen mistry an for chen uilibriun and copic Ana	ing aspects of Chemistry: mists. ndsteps involved in nists. n. alysis.
Credit Val	ue	4			
Total mark	KS .	Maximum Marks: CO University Exam (UE	CE-25, E)-75	Minim Marks:	um Passing 33

	Part B – Content of the course				
Total N	o. of Lectures-Tutorials-Practical (In hours per week): L-T-P: 90-0-30				
Unit	Торіс	No. of Lectures			
1	Mathematics for Chemists Straight line equation, Logarithmic relation, curve sketching, linear graphs & calculation of slopes. Differentiation, differentiation of functions like k _x , e ^x , x ⁿ , sinx, logx, maxima & minima, partial differentiation. Integration of some useful relevant functions. <i>Keywords/Tags: Linear graphs, Logarithmic Relation, Differentiation, Integration.</i>	10			
2	 Basic Analytical Chemistry: Introduction to Analytical Chemistry and its interdisciplinary nature. Concept of sampling. Importance of accuracy, precision and sources of error in analytical measurement . Presentation of experimental data and results, from the point of view of significant figures, statistical terms: mean, mean deviation, median standard deviation, Numerical Problems. Calculations used in Analytical Chemistry Some Important units of measurements- SI Units, distinction between mass and weight, mole, milli mole and Numerical Problems. Solution and their concentrations- Concept of Molarity, molality adn normality, Expressing the concerntration in parts poer million (ppm), parts per billion (ppb), Numerical Problems. Chemical Stoichiometry- Empirical and Molecular Formulas, Stoichiometric Calculations, Numerical Problems. Keywords/Tags: Accuracy, Precision, SI units, Units of Concentration, Chemical stoichiometry. 	10			

3	Computer for chemists	10
	Introduction to computer, Introduction to operating systems like- DOS, Windows,	
	Linux and Ubuntu.	
	Use of computer programs	

	Running of standard programs & packages such as MS-word, MS-excel, PowerPoint, Execution of linear regression x-y Plot. Use of software's for drawing structures and molecular formulae. <i>Keywords/Tags: Operating systems, MS-word, MS-excel, PowerPoint.</i>	
4	Chemical Equilibrium: Equilibrium constant and free energy, concept of chemical potential, Thermodynamic derivation of law of chemical equilibrium. Temperature dependence of equilibrium constant; Van't Hoff reaction isochore, Van's Hoff reaction isotherm. Le-Chetelier's principle and itsapplications. <i>Keywords/Tags: Chemical Equilibrium, Equilibrium constant, Free Energy, ChemicalPotential.</i>	10
5	 Chromatography: Introduction, Principle and Classification. Mechanism of separation: adsorption, partition & ion-exchange. Development of chromatograms: frontal, elution and displacement methods. Paper Chromatography (ascending, descending and circular), Thin layer Chromatography (TLC) and Column Chromatography (CC), Gas Chromatography (GC) and High Pressure Liquid Chromatography (HPLC), types of column and column selection, applications, limitations. Principle and Application of: Flash chromatography, Ion-exchange chromatography and Chiral chromatography. Keywords/Tags: Chromatography, Ion Exchange, Column Selection, Adsorption. 	10

Spectrum technique Basic of absorption Absorption, Absorption Lambert-Beer Law Constitution & work Ultraviolet (UV) ab	es of analysis on spectroscopy: Ele ptivity, Molar Absorpti and its limitations. ting of photometer, spec psorption spectroscopy	ctromagnetic radiatio vity, Fundamental La trometer, colorimeter.	n, Spectral range. ws of Absorption,	10
Presentation and an conjuction. Concept Hyperchromic and enones. Infra-red (IR) abso Molecular vibration Measurement of IR functional groups an <i>Keywords/Tags:</i> <i>Spectrum</i>	alysis of UV spectra, T of chromphore and au hypochromic shifts. U prption spectroscopy- s, Hooke's law, selection spectrum, finger print r d interpretation of IR sp <i>Hypsochromic</i> ,	Types of electronic tra exochrome. Bathochron JV spectra of conjug n rules, intensity and p egion, characteristic al pectra of simple organic <i>Hypochromic</i> ,	osition of IR bands, posorption of various compounds. <i>Absorption,</i>	

Part C- Learning resources

Text Books, Reference Books, Other Resources

Text Books

- 1. Gaur, S., Computer for Chemists, Neel Kamal Prakashan, 2017.
- 2. Khopkar, S.M. Basic Concept of Analytical Chemistry, New Age, Internations Publisher, 2009.
- 3. Kaur H, Analytical Chemistry, Pragati Prakashan(2008).
- 4. Gupta, Alka L., Analytical Chemistry, Pragati Prakashan (2020).
- 5. Bahl, A. & Bahl, B.S. Advanced Organic Chemistry, S. Chand, 2010.
- 6. Kaur H, Instrumental Methods of Chemical Analysis, Pragati Prakashan, 2018.
- 7. Sharma B.K., Chromatography, Krishna Prakashan, 2019.
- 8. Sharma Y.R., Elementry Organic Spectroscopy, S Chand, 2013.
- 9. Singh, DR Saxena, G., Singh, B., Inorganic Chemicals, Shivlal Aggrawal & Company, Agra.
- 10. Srivastava, S.S., Gehlot, A.S., Chemistry, Ratan Prakashan Temple, Indore.

- 11. Soni, PL, Organic Chemistry, Sultan Chand and Sons, Delhi.
- 12. Singh, R.K.P., Modern Chemistry, Sahitya Bhavan, Agra.
- 13. Agnihotri, PK, Sahu, D
- 14. P., Pillai, A., Sahu, M., Yugbodh Chemistry, YugbodhPublications, Raipur.

Reference Books:

- 1. Mitra Surbhi, Handbook of Computer Science & IT, Arihant, 2018.
- 2. Harris, D.C. Quantitative ChemicalAnalysis, 6th Ed., Freeman (2007).
- 3. Christian, Gary D; Analytical Chemistry, 6th Ed. John Wiley & Sons, New York, 2004.
- 4. Barrow, G.M. Physical Chemistry, Tata McGraw-Hill (2007)
- 5. Atkins' Physical Chemistry, 10th Edition, Oxford University Press 2014.
- 6. Gurtu J.N. Gurtu A, Advanced Physical Chemistry, Pragati Prakashan, Meerut, ISBN:9789386633347, 9386633345; Edition: IV,2017.
- 7. Atkins, P.W. & Paula, J. Physical Chemistry, Oxford Press, 2016.
- 8. Finar, I.L. Organic Chemistry (Vol. I & II), E.L.B.S.
- 9. Morrison, R.T. & Boyd, R.N. Organic Chemistry, Pearson, 2010.
- 10. Banwell, Molecular Spectroscopy, 2017.
- 11. Silverstien Robert, Spectrometric Identification of Organic Compounds, Wiley, 2014.
- 12. Dyer J.R., Applications of Absorption Spectroscopy of Organic Compounds, 2009.

Suggested equivalent online courses: MOOC: <u>https://www.edx.org/course/basic-analytical-chemistry</u>

NPTEL: https://nptel.as.in/courses/104/105/104105084/

Web sources

- 1. <u>https://www.freebookcentre.net/Chemistry/Analytical-Chemistry-Books.html</u>
- 2. <u>https://nptel.springer.com/journal/216</u>

Part D- Assessment and Evaluation	
Suggested Continuous Evaluation Methods: Continuous Internal Evaluation Shall be Based on Allotted Assignment and class Tests. The marks shall be as follows:	Marks
Assessment and presentation of assignment	04
Class Test-I (Objective Questions)	04
Class Text-II (Descriptive Questions)	04
Class Test-I (Objective Questions)	04
Class Test-II (Descriptive Questions)	04
Overall performance throughout the year (includes Attendance Behavior Discipline Participation in Different Activities)	05
Total	25
Elaboration: Assessment Theory	
External Assessment	
Theory Paper	75
Grand Total	100

	PRACTICAL					
Pr CH	ogram- ERTIFICATE	Class- B.Sc.	Year- First		Session: 2021-2022	
		Subject – C	hemistry			
1	Course Code		S1-CHEM2P			
	Course Title	Analytical Processes and Tech	niques			
2	Course Type	Elective				
3	 Course Learning Outcomes (CLO) By the end of this course students will learn the following aspects of Laboratory exercises in Chemistry: Concepts and analytical methods inChemistry. Preparation of solutions of different concentrations. Standardization of the solution. Identification of Organic compounds by chromatographic techniques. Analysis by Spectral Techniques. 					
4	Credit Value Total Marks	2 Maximum Marks: University Exam (UE)-75, CCE-25		Minimum Passi	ing Marks: 33	

	External Assessment	Mar ks
	Experiments to be performed in laboratory	50
1	Basic analytical exercises	10
	• Calibration of different weights and glass apparatus (measuring cylinder, burette, pipette, volumetric flasks).	
	• Preparation of solutions of different morality/normality by weighing and dilution.	
2	Quantitative Analysis	20
	Titrimetric Analysis	
	• Standardization of NaOH with Oxalic acid.	
	• Determination of carbonate and hydroxide presentin mixture.	
	• Determination of carbonate and bicarbonate present in a mixture.	
	• Determination of free alkali present indifferent soaps/detergents.	
3	Quantitative Analysis by Colorimetry	10
	• Verification of Lambert-BeerLaw	
	• Determination of concentration of coloured compounds (e.g., CuSO ₄ , KMnO ₄)	
4	Qualitative Analysis	10
	• Systematic identification of organic compound by qualitative analysis.	
	• Chromatography:	
	Identification by determination of the R_f values of the given organic/inorganic compounds by paper/thin layer chromatography.	
	Keywords/Tags: Analytical, Authentication, Molarity/Normality, Standardization,	
	Colorimetry, Qualitative Analysis	

Part C- Learning resources								
Text Books, R	eferences Books, OtherResources							
Referer	nces:							
1.	1. Skoog, D.A. and Leary, J.J.: Instrumental Methods of Analysis, Saunders College Publications, New York, 1992.							
2.	Vogel's textbook of quantitative chemical analysis, 7 th edition.							
3.	Goswami A.K., Mehta Anita, Khanam Rehnaa, ORS., UGC Practical Chemistry VOL. I, Pragati Prakashan, 2015.							
4.	Goyal Sudha, B.Sc. Chemistry Practical, Krishna Publication, 2017.							
5. 7	Tandon, M.N., unified Rasayan Vigyan, Shivlal Agarwal & Company, 2018.							
1. 2. 3. 4. 5.	https://www.youtube.com/watch?v=OAImRDzuTh8 https://amrita.olabs.edu.in/?sub=73&brch=8∼=133&cnt=1 http://chemcollective.org/vlabs http://mas-iiiith.vlabs.ac.in/exp6/Quiz.html https://chem/libretexts.org/Ancillary Materials/Laboratory Experi ments/Wet Lab Experiemtnts/General Chemistry Labs/Online Chemistry Lab Manual/Chem 9 Experiments/02%3A Paper C hromatography of Gel Ink Pens-(Experiment)							
6.	https://edu.rsc.org/experiment/leaf-chromatography/389/article							
7.	https://edu.rsc.org/experiments/chromatography-of-sweets/455.arti cle							
8.	http://swe.mit.edu/outreach/virtual_resources/paper_chromatograp_hy.pdf							
9.	http://www.chem.latech.edu/-deddy/chem104/104Standard.htm							
10.	https://www.chem.purdue.edu/course/chm224/Miscelleneous/Mod el report Expt2-							
	revised 2009.pdf							

Sri SatyaSai University of Technology & Medical Sciences, Sehore (M.P.)

11.	https:www.webpages.uidaho.edu/ifcheng/Chem%20253/labsExper iments%203.pdf	
12.	http://faculty.ccbcmd.edu/c-cyau/122%2007%20Acid-base%20titr ation%20AUG%2013.pdf	
13.	https://labbalances.net/blog/guide-to-calibration-weights	
14.	https://cdn2.hubspot.net/hubfs/2203666/Beamex White Papers/B eamex%20White%20Paper%20-%20Weighing%20scale%20calib ration%20ENG.pdf? hssc=107807261.6.1518193235316& hsfp=	
	2102249448&hsCtaTracking=8918cffa-b755-4f72-b4b1-24c1fa8d 1a6d%7C12eb2e3f-	
	<u>4b62-43eb-baf0-2da2a5d102b6</u>	

Part D-Assessment and Evaluation				
Suggested Continuous Evaluation Methods:				
Internal Assessment	Marks	External	Marks	
		Assessment		
Class Interaction on-	10	Viva Voce on Practical	15	
• Common glassware and lab wares for solution preparation and analysis.				
 Numerical problems related to solution preparation. 				
• Any other discussion.				
Note: description to be written in practical record.				
Attendance	5	Practical Record	10	
		File		
Assignment (Charts/Model Seminar/Rural Service/Technology Dissemination/Report of	10	Table work/Experiments	50	
Excursion/Lab Visits/Survey/Industrial visit)				
TOTAL	25		75	

	PART A : Introduction								
Program :Ce	rtificate		Class: B.Sc.	Year : I Year	Session: 2021-2022				
	Subject : Computer Science								
1.	Course Code		S1-C4	OSC2T					
2.	Course Title		Programming Method	ology & Data	a Structure				
3.	Course Type (Core Course/Elective/Generic Elective/Vocational)	Elective							
4.	Pre-Requisite (if any)	To study this course ,a students must have had the subject Physics/Maths in 12 th class .							
5.	Course Learning Outcomes(CLO)	 Physics/Maths in 12th class . On the Completion of this course ,learners will be able to: Develop simple algorithm and flow chart to solve the problem with programming using top down design principles . Writing efficient and well structured computer algorithms/programs . Learn to formulate iterative solutions and array processing algorithms for problems . Use the recursive technique ,pointers and searching methods in programming . Will be familiar with fundamental data structure ,their implementation ; become accustomed to the description of algorithm in both functional and procedural styles . Have knowledge of complexity of basic operations like insert ,delete ,search on these data structure to suitably model any data used in computer applications . Design programs using various data structure including hash table ,Binary and general search Tree ,heaps ,Graphs etc. Asses efficiency tradeoffs among different data structure implementations. 			l be able to: rt to solve the own design mputer ad array processing d searching structure ,their o the description of ural styles . operations like ture . to suitably model icture including ree ,heaps ,Graphs ent data structure f algorithms for field of				
6.	Credit value		Theory-	4 Credits					
7	Total Marks	Max .	Marks : 25+75	Min. Passi	ng Marks : 33				

	1	Part B:Content Of the Course		
	No. of Lect	ures (in hours per week): 2 Hours per	week	
		Total No. of Lectures :60 HRS.		
Module		Topics		No. of Lectures

т		0
1	Introduction to Programming : Program concepts, Characteristics of	8
	programming, Stages in program Development, Algorithms, Notations	
	,Design ,Flow chart, Types of programming Methodologies .	
	Inroduction to C++ Programming :Basic Program Structure in the	
	C++,Data types,Variable,Constatnts,Opearators and basic I/O.	
	Variable: Declaring , defining and initializing variables, scope of	
	variables, using named constants, Keywords, Casting of data types	
	Opearators(Arithmetic,Logical and Bitwise),Using comments in	
	programs.Character I/O (getc.getchr.putc.putchr etc.).Formatted and	
	console $I/O($ printf() scanf() cin cout) using basic header files	
	(stdio h jostream h conio h etc.)	
	Simple Expressions in C++ : (Including upary operator	
	Expressions Binery operator expressions) understanding operator	
	repressions, binary operator expressions), understanding operator	
п	It and find the second se	10
11	Iterativestatements :while ,do-while and for loops,use break and	10
	continue loops, Using nested Statements (Conditional as well as	
	Iterative).	
	Functions: Top-Down design, Pre-defined functions, Programmer	
	defined functions, local variable and global variables, Functionas with	
	default Arguments ,Call by Value and Call by References, Parameters,	
	Recursions.	
	Introduction to Arrays: Declaration and Referring Arrays, Arrays in	
	Memory, Initializing Array. Arrays in Functions, Multi-Dimentional	
	Arrays.	
III	Structures :Member Accessing ,Pointers to Structure ,Structureand	8
	Functions, Array of Structure.	
	Unions : Declaration and Initialization.	
	Strings:Reading and Writing Strings, Arrays of Strings, Strings and	
	Structures, Standard String and Structure, Standard String library	
	Functions.	
	Searching Algorithms: LinearSearch, Binary Search.	
	File Handling : Use of Files for data input and output , merging and	
	copying files .	
IV	Data Structure : Basic Concepts, Linear and non linear data structure	12
	Algorithm Specification –Introduction, recursive algorithms, Data	
	Abstraction, Performance Analysis.	
	Linked List: Singly Linked List. Operations.	
	Concatenating, Circularly linked list . Doubly linked list –Operations.	
	Array: Representation of single. Two Dimensional arrays, sparse	
	matrices-array and linked Representation.	
	Stacks: Operations array and linked implementations applications infix	
	to postfix conversion, postfix expression evaluation. Recursion	
	Implementation	
V	Oueue – Definition operation array and linked implementations	10
Ť	Circular Queue, insertion and deletion operations. Dequeue (Double	10
	anded Queue) priority Queue Implementation	
	chaca Queue, photicy Queue-implementation.	

	Trees : Binary Tree Representation – Properties of Binary Tree						
	,Binary Tree Representation,-Arrayand Linked Representation, Binary						
	Tree Traversal, Threaded Binary Tree.						
	Heap: Definition, Insertion, Deletion.						
VI	Graphs – Graph ADT, Graph Representation Graph Traversals,	10					
	searching.						
	Hashing - Introduction, Hash tables, Hash functions, Overflow						
	Handling						
	Sorting Methods – Comparison Sorting Methods.						
	Search Tree- Binary Search Tree, Avl Tree –definition and Examples.						
VII	Indian contribution to the field – Innovation in India, Origin of Julia	2					
	Programming Language, Indian Engineers who designed new						
	programming Languages, open sourselanguages, Dr. Sanjay Sahni-						
	Computer Scientist- pioneer of Data Structures, other relevant						
	contributors and contributions.						
Kevw	ords /Tags : Programming, C++, Data Structure, Expressions, Control, File						
Hand	ling, Arrays, Stack, Oueue, Linked List, Tree, Graphs, Structure, Union.						
Searc	h.Algorithm.						
~							
	PART C: Learning Recourses						
	Textbooks, References Books, Other Recourses						
Sugg	ested Readings :						
•	Lipschutz: Schaun's outline series Data Structure . Tata Mcgraw Hill						
•	Problem Solving and Program Design in C. J.R. Hanly and E.B. Koffman						
	Pearson 2015						
•	E Balaguruswamy "C++TMH Publication ISBN 0-07-462038-X						
•	HerbertzShield "C++ the complete References" TMH Publication						
	P Lafore 'Object Oriented Programming C++						
	N. Dala and C. Waama, Programming and Problem solving with C. L. shrie	f					
•	n. Date and C. Weenis, riogramming and rioblem solving with C++.one adition Iones & Partlett learning	51					
	A low Dwe late ? Data structure and A low it was in CUU? Think a litic of Cu						
•	Adam Drozdek, Data structure and Algorithms in C++, I hird edition Cer	ngage					
	Learning.	۹					
•	Hill.	Jraw					
•	Robert L. Kruse," Data Structure and Program Design inC++', Pearson.						
•	D.S. Malik, Data Structure using C++, Second Edition .Cengage Learning.						
•	M.A. Weiss ,Data structure and Algorithms Analysis in C.2 nd edition .Pear	son.					
•	M.A. Weiss, Data structure and Algorithm Analysis in C.2 nd edition. Pearson	n.					
	,						
Sugg	Suggested Digital Platforms ,Web links :						
Sugg	ested Digital Platforms ,Web links : https://www.youtube.com/watch?v=BC1S40yzssA						
Sugg 1. 2.	ested Digital Platforms ,Web links : <u>https://www.youtube.com/watch?v=BC1S40yzssA</u> <u>https://www.youtube.com/watch?v=vLnPwxZdW4Y&vl=en</u>						
Sugg 1. 2. 3.	ested Digital Platforms ,Web links : <u>https://www.youtube.com/watch?v=BC1S40yzssA</u> <u>https://www.youtube.com/watch?v=vLnPwxZdW4Y&vI=en</u> <u>https://www.youtube.com/watch?v=Umm1ZQ5ItZw</u>						
Sugg 1. 2. 3. 4.	ested Digital Platforms ,Web links : <u>https://www.youtube.com/watch?v=BC1S40yzssA</u> <u>https://www.youtube.com/watch?v=VLnPwxZdW4Y&vl=en</u> <u>https://www.youtube.com/watch?v=Umm1ZQ5ltZw</u> <u>https://www.youtube.com/watch?v=AT141CXuMKI&list=PLdo5W4Nhv31bbkJzr</u>	sKfMpo_					
Sugg 1. 2. 3. 4.	ested Digital Platforms ,Web links : <u>https://www.youtube.com/watch?v=BC1S40yzssA</u> <u>https://www.youtube.com/watch?v=vLnPwxZdW4Y&vl=en</u> <u>https://www.youtube.com/watch?v=Umm1ZQ5ltZw</u> <u>https://www.youtube.com/watch?v=AT141CXuMKI&list=PLdo5W4Nhv31bbkJzr</u> <u>grxuLl8LU</u>	sKfMpo_					
Sugg 1. 2. 3. 4.	ested Digital Platforms ,Web links : <u>https://www.youtube.com/watch?v=BC1S40yzssA</u> <u>https://www.youtube.com/watch?v=vLnPwxZdW4Y&vl=en</u> <u>https://www.youtube.com/watch?v=Umm1ZQ5ltZw</u> <u>https://www.youtube.com/watch?v=AT141CXuMKI&list=PLdo5W4Nhv31bbkJzr</u> <u>grxuLl8LU</u>	<u>sKfMpo_</u>					

http://nptel.ac.in/courses/106/105/106105151/ http://nptel.ac.in/courses/106/106/106106133/						
	Part D : Assessm	ent and Evaluation				
Internal Assessme Comprehensive Ev Marks Shall be based on a Class Tests.The marks sh	ent: Continuous caluation (CCE):25 allotted assignment and nall be as follows :	External Assessment: University Exam (UE) :75 Marks Time : 02.00 Hours				
Assessments and presentation of assignment	10 Marks	Section (A) : Three Very Short Questions (50Word)	03x03=9 Marks Or			
Class Test I (Objective Questions)	05 Marks	OR Nine MCQ Questions	09x01= 9 Marks			
Class Test II (Descriptive Questions)	05 Marks	Section (B) : Four Short Questions (200 Word)	04x09=36 Marks			
Class Test III(Based on solving circuit design problems)	05 Marks	Section (C) : Two Long Questions (500 Word)	02x15=30 Marks			
Total	25 Marks	Total	75 Marks			
Any remarks /Suggestions :Focus of the course /teaching should be on developing ability of the student in analyzing a problem, building the logic and efficient code for the problem .						

	PART A : Introduction						
Program : Certificate C		Cla	ass: B.Sc.	Year : I Year	Session: 2021- 2022		
	(Subje	ct : Compute	r Science			
1.	Course Code			S1-CO	SC2P		
2.	Course Title		Office Tools & Programming MethodologyLab				
3.	Course Type (Core Course/Elective/Generic Elective/Vocational)			Elect	tive		
4.	Pre-Requisite (if any)	To study a st /Maths in 12t	ident must hav h Class	ve had the subject Physics		
5.	Course Learning Outcomes(CLO)		On the Com able- 1. Develor solve a down of 2. Writin algorit 3. Learn array p 4. Use re search 5. Posses suitabl applica 6. Impler and so	pletion of this problem with lesign principl g efficient and hms/programs. to Formulate it rocessing algo cursive technic ng methods in s ability to cho y model any da titons. nentation of al rting.	course learners will be rithms and flow Chart to programming using top es. well structured computer reactive solutions and orithms for problems . ques, pointers and programming. bose a data Structure to ata used in computer gorithms for searching		
6.	Credit value			Practical -	2 Credits		
7	Total Marks		Max .Marks	25+75	Min. Passing Marks : 33		

PART B:Content Of the Course						
No. of Lab Practical's(in hours per week):2Hrs. Per week						
Total No. of Labor 20 House						
Total No. of Labs = 30 Hours						
Suggested list of Practical's						
 List of Practical I. Office Tools . Using a Text Editor Tool	30 Hours					
 Create a documents and apply different Editing options . Create Banner for your college . Design a Greeting card using word art for different festivals. Design your Bio Data and use page borders and shading . Create a documents and insert header and footer, apgetitle, date, time , apply various page formatting feature etc. Implement Mail Merge. Insert a table into a document and try different formatting options for the table . 						
Using a spreadsheet Tool						
 Design your class Time Table . Prepare a Mark Sheet of your class result . Prepare a salary slip of an employee of an organization. Prepare a bar chart & pie chart for analysis of election result. Prepare a generic Bill of a Super Market. Work on the following exercise on answer book; a. Copy an existing Sheet b. Rename the old Sheet c. Insert a new Sheet into an existing Workbook d. Delete the renamed sheet. Prepare an attendance sheet of 10 students for any 6 subjects of your syllabus.calculate their total attendance,total percentages of attendance of each students and average of attendance. Create a worksheet of students list of any 4 facilities and perform following database function on it. 						

	b. Filter data by Class
	c. Subtotal of students by class
Using	g a Presentation Tool
1.	Design a presentation of your institute using auto content
	wizard, design template and blank presentation.
2.	Design a presentation illustrating insertion of pictures,
	Word Art and Clipart .
3.	Design a presentation, learn how to save it in different
	formats, copying and opening an existing presentation.
4.	Design a presentation illustrating insertion of movie,
	animation and sound.
5.	Illustrate use of custom animation and slide transition
	(using different effects).
6.	Design a presentation using charts and tables of the marks
	obtained in class.
	II. Given a problem statements ,students are
	required to formulate
	problem,developflowchart/Algoriyhm,write code
	in C++, execute and test it. Students should be
	given assignments on following :
1.	A. To learn elementary technique involving arithmetic
	operators and mathematical expressions, appropriate use of
	selection (if, switch, conditional operators) and control
	structures.
	B.Learn how to use functions and parameter passing in
	functions, writing recursive programs.
2.	Write a program to swap the contents of two variables.
5.	white a program for finding the roots of a quadratic
1	education.
4.	white a program to find area of a circle, reactangle, square
5	Using Switch case. Write a program to shock whether a given number is even
5.	or odd.
6.	Write a program to print table of any number.
7.	Write a program to print Fibonacci series.
8.	Write a program to find factorial of given number.
9.	Write a program to convert decimal (integer) number in to
	equivalent binary number.
10	. Write a program to check given string is palindrome or not.
11	. Write a program to perform multiplications of two matrices.
12	. Write a program to print digits of entered number in reverse
	order .
13	. Write a program to print sum of two matrices .
14	. Write a program to print multiplication of two matrices.
15	. Write a program to generate even/odd series from 1 to 100.
16	. Write a program whether a given number is prime or not.
17	. Write a program for call by value and call by reference.

· · · · · · · · · · · · · · · · · · ·	
18. Write a program to generate a series	
1+1/1!+2/2!+3/3!+n/n!	
19. Write a program to create a pyramid structure	
**	

20. Write a program to create a pyramid structure	
1	
12	
123	
1234	
21. Write a program to check entered number is Armstrong or	
not.	
22. Write program for traversing an Array.	
23. Write a program to input N numbers, add them and find	
average.	
25. Write a program for linear search	
26. Write a program for binary search.	
27. Write a program for bubble sort.	
28. Write a program for selection sort.	
Keyword /Tags: Digital Electronics ,Logic gates ,AND ,OR,NOT ,IC 7486,IC	
7400,NAND ,NOR,IC 7483, Circuit , Flip Flop , Demorgan's Theorem	
Part C: Learning Recourses	
Textbooks, References Books, Other Recourses Suggested Deadings :	
• M Morris Mano "Computer System Architecture " PHI	
 Heuring Jordan "Computer System Design & Architecture" (A W L) 	
 William Stalling "Computer Organization & Architecture" Pearson Education 	on
Asia.	<i>,</i>
• V.CarlHamacher," Computer Organization "TMH	
• Tannenbaun,"Structured Computer Organization "PHI.	
Suggested Digital Platforms ,Web links :	
1. <u>https://www.youtube.com/watch?v=4TzMyXmzlL8M</u>	
2. <u>https://nptel.ac.in/course/106/106/106106166/</u>	
3. <u>https://nptel.ac.in/course/106/106/106106134/</u>	
Suggested Equivalent online course	
http://nptel.ac.in/course/106/105/106105163	

Part D : Assessment and Evaluation (theory)					
Internal Assessments : Con	ntinuous	External Assessments : University			
Compressive		Exam(UE):75 Marks			
Evaluation (CCE) :25 Mark	KS	Time :02.00 Hours			
Internal Assessment	Marks	External Assessment Mark			
Hands on Lab Practice	5 Marks	Practical Record File	10 Marks		
Lab Test Practical list &	12 Marks	Viva Voce on Practical	15 Marks		
Internal Viva					
Assignments(8 Marks	Table Work /Experiments	50 Marks		
Charts/Seminar/Rural					
Service/Technology					
Dissemination/Report of					
Excursion/ Lab					
Visits/Survey/Industrial					
Visit)					
Total	25	Total	75		

Any remarks /Suggestions :Focus of the course /Teaching should be on developing ability of the students in analyzing a problem, building the logic and efficient code for the problem.

		Part A- In	troduction	
Program: Certificate Class: B.S.		Sc. I Year	Year : 2021	Session: 2021-2022
		Subject: N	Iathematics	
Course Code			S1-MA	TH2T
Course Title		Calculus	and Differential Ed	quations
Course Type			Elec	tive
(Core/Elective/ Ge	neric			
Elective/Vocationa	al/)			
Pre-requisite (if a	nny)	To study	this course, a studen	nt must have had the subject
			Mathematics	in 12 class.
Course Learning		The cours	e will enable the stu	dents to:
Outcomes (CLO)				
		 Sketch curves in a plane using its Mathematical properties in the different coordinate systems of reference. Using the derivatives in Optimization, Social sciences, Physics and Life sciences etc. Formulate the Differential equations for various Mathematical models. Using techniques to solve and analyze various Mathematical models. 		ne using its Mathematical ent coordinate systems of an Optimization, Social Life sciences etc. ntial equations for various olve and analyze various
Credit Value		6		
Total Marks	rks Max. Marks: 25+75 Min. Marks: 33		Min. Marks: 33	

	Part B- Content of the Course	
То	tal numbers of Lectures(in hours per week): 3 hours per we	eek
	Total Lectures: 90 hours	
Unit	Topics	Numbers of Lectures
1	 1.1 Historical background: 1.1 Historical background: 1.1.1 Development of Indian Mathematics ancient and early classical period (Till 500 Cen.) 1.1.2 A brief biography of Bhaskaracharya (with special reference to Lilavati and Madhava) 1.2 Successive Differentiation 1.2.1 Leibnitz Theorem 1.2.2 Maclaurin's series Expansion 1.2.3 Taylor's series Expansion 	18

S1-MATH2T

1.3.1 Partial Derivatives of higher order 1.3.2 Euler's theorem on homogeneous functions	1.3 Partial Differentiation	
1.3.2 Euler's theorem on homogeneous functions	1.3.1 Partial Derivatives of higher order	
	1.3.2 Euler's theorem on homogeneous functions	

	1 A Agymmetatag	
	1.4 Asymptotes	
	1.4.1 Asymptotes of algebraic curves	
	1.4.2 Condition for Existence of Asymptotes	
	1.4.3 Parallel Asymptotes	
	1.4.4 Asymptotes of polar curves	
	2.1 Curvature	
	2.1.1 Formula for radius of Curvature	
	2.1.2 Curvature at origin	
	2.1.3 Centre of Curvature	
2	2.2 Concavity and Convexity	18
	2.2.1 Concavity and Convexity of curves	
	2.2.2 Point of inflexion	
	2.2.3 Singular point	
	2.2.4 Multiple points	
	2.3 Tracing of curves	
	2.3.1 Curves represented by Cartesian equation	
	2.3.2 Curves represented by Polar equation	
	3.1 Integration of Transcendental Functions	
	3.2 Introduction to Double and Triple Integral	
	3.3 Reduction formulae	
3	3.4 Quadrature	18
	3.4.1 For Cartesian coordinates	
	3.4.2 For Polar coordinates	
	3.5 Rectification	
	3.5.1 For Cartesian coordinates	
	3.5.2 For Polar coordinates	
	4.1 Linear Differential Equations	
	4.1.1 Linear equation	
	4.1.2 Equations reducible to the linear form	
	4.1.3 Change of variables	
4	4.2 Exact Differential equations	18
	4.3 First order and higher degree Differential equations	
	4.3.1 Fountions solvable for x v and n	
	4.3.2 Equations borreagenous in x and y	
	4.3.3 Clairant's equation	
	4.3.4 Singular solutions	
	4.3.4 Singular solutions	
	4.3.5 Ocometrical meaning of Differential equations	
	4.5.0 Ormogonal najeciones	

S1-MATH2T

	5.1 Linear Differential equation with constant coefficients5.2 Homogeneous linear ordinary Differential equations			
5	5.3 Linear Differential equations of second order	18		
	5.4 Transformation of equations by changing the			
	Dependent/Independent variables			
	5.5 Method of Variation of parameters			
Keywords/Tags:				

Indian Mathematics, Successive Differentiation, Partial Differentiation, Asymptotes, Curvature,

Tracing of Curves, Quadrature, Rectification, Linear Differential Equations, Method of Variation of Parameters.

Part C-Learning Resources				
Text Books, Reference Books, Other resources				
Suggested Readings:				
Text Books:				
 Gorakh Prasad: Differential Calculus, Pothishala Pvt. Ltd. Allahabad, 2016. Gorakh Prasad: Integral Calculus, Pothishala Private Lld Allahabad, 2015. M. D. Raisinghania: Ordinary and Partial Differential equations. S Chand & Co Ltd., 2017. Gerard G. Emch, R.Sridharan and M. D. Srinivas: Contributions to the History of Indian Mathematics, Hindustan Book Agency, vol. 3, 2005. Madhya Pradesh hindi granth academy books. Reference Books: 				
 N. Piskunov: Differential and Integral Calculus, CBS Publishers, 1996. G. F. Simmons: Differential Equations, Tata McGraw Hill, 1972. E. A. Codington: An introduction to ordinary differential Equation, Prentice Hall of India, 1961. D. A. Murray: Introductory Course in Differential Equations, Orient Longman (india), 1967. H. T. H Piaggio: Elementary Treatise on Differential Equations and their Application, C. B.S. Publisher & Distributors Delhi, 1985. Bibhutibhusan Datta and Avadhesh Narayan Singh: History of Hindu Mathematics Asia Publishing House 1962 				
Suggested Digital Platforms Web links:				
https://epgp.inflibnet.ac.in				
hnps://freevideolectures.com/university/iit-roorkee				
https://www.highereducation.mp.gov.in/?page=xhzlQmpZwkylQo2b%2Fy5G7w%3D%3D				
https://www.bhojvirtualuniversity.com				
Suggested Equivalent online courses:				
https://nptel.ac.in/courses/111105122/				
https://nptel.ac.in/courses/1111071 12/				
https://nptel.ac.in/courses/111/101/111101080/				

Part D-Assessment and Evaluation							
Suggested Continuous B	Suggested Continuous Evaluation Methods:						
Maximum Marks:100 ma	rks						
Continuous Comprehensi	ve Evaluation (CCE): 25 marks						
University Exam (UE): 7	5 marks						
Internal Assessment:	Class Test						
Continuous	Assignment/Presentation	15					
Comprehensive		10					
Evaluation (CCE)		Total: 25 marks					
External Assessment:	Section (A) : Three Very Short Questions	$03 \times 03 = 09$					
University Exam	(50 Words Each)						
Section:75	Section (B): Four Short Questions	$04 \times 09 = 36$					
Time : 02.00 Hours	(200 Words Each)						
	Section (C): Two Long Questions	$02 \times 15 = 30$					
	(500 Words Each)						
		Total = 75					

Part A Introduction						
Program Certificate Course Cla B.S			Year : FIRST	Year	Session :2021-2022 onwards	
		2.5 01	Subject : Mic	robiology		
1	Course Code			S1-MBIO	2T	
2	Course Title		Misushial Tash			
$\frac{2}{3}$	Course Type	Course Type Elective				
4	Pre- requisite (if any)		To Study this co subject	urse a stude	nt must have had the	
5	5 Course Learning outcomes (CLO) After completing student shall have a complete the student shall have a com		After completing student shall hav • Recall the the labor	g this course ye understan e basic lab g atory.	this course in Microbiology ,a e understanding of- basic lab glassware to be used in atory.	
			 Summari and isola Understar instrume 	tion of pure tion the worki nts and micr	cultures. ng of different kinds of coscopes.	
			Apply ser bacteria. Practice of	ial dilution	technique to isolate the	
			 Fractice C in the lat Illustrate 	a method to	differentiate between	
		gram positive and gram negative b			am negative bacteria.	
<u>6</u> 7	Credit Value Total Marks	Ma	ximum Marks:25+75	4 M	inimum Passing Marks	
,	7 I otai Marks Maximum Marks:25+73		33	initialiti i usonig iviarks.		
Part B- Content of the Course						
	Lectures- Tutorials- p	a Lectures –60 practical (in ho	ours per week) L-T-I Total No. of Lecture	P:4-0-0 s: 15		
Unit Topics			1	No. of Lectures		
Ι	 MICROSCOPY AND STAINING 1.1 MICROSCOPY- PRINCIPLES AND APPLICATION OF SIMPLE AND COMPOUND Bright- field microscopy, phase- contrast microscopy, transmission electron microscopy and scanning electron microscopy. 1.2 Preparation for light microscope Examination- wet mount and hanging – drop techniques preparation for simmer and fixation Staining- principles of staining negative staining simple 			15		
Staining- principles of staining, negative staining, simple staining, differential staining (Gram and acid fast staining), flagella staining capsule and endospore staining, D.C. Let Verse				of 2021-22		

	Key word: microscopy, light microscope, wet mount,Hnging drop method, Bacterial staining.				
П	Instruments				
11	Electronic Balance, autoclave, centrifuge ,colony counter, deep freezer, homogenizer, hot air oven,incubator,laminar air flow, magnetic stirrer, P h meter, spectrophotometer, vortex mixture, water bath, water distiller chromatography chamber anaerobic chamber and electrophoresis apparatus.		15	i	
III	Sterilization and culture medium				
IV	 3.1 Physical methods of sterilization: Dry heat, moist heat, radiation, filtration, and incineration. 3.2 Chemical methods of sterilization- Phenol and phenolic compounds, Alcohol, Halogens, and detergents. 3.3 Types of culture media- Natural, synthetic, complex, enriched, and selective. Anaerobic (Trio glycol ate broth, Robertson's media,) broth culture of aerobic bacteria. Keywords: Physical sterilization, Chemical sterilization, microbial culture media. 				
IV	 4.1 Natural microbial population- Pure culture 4.2 Isolation of microbial population- From air, water, and soil. 4.3 Methods for isolation: Streak plate, pour plate and spread plate. Serial dilution and micromanipulator methods. Cultivation on liquid and solid media, Isolation of micro organisms on potato slice and bread. 4.4 Maintenance and preservation for short term and long term. 4.5 Cultivation OF Anaerobic bacteria, and accessing non-cultivable microorganisms. Key words: Pure culture, isolation of microbes, preservation of culture. 				
	Part C-Learning Resource	es			
	Tavt hanks Pafarana Rooks Atha	r rosauroog			
	Suggested Reading:	resources			
	1. Pelzer, M.J., E.C.S and Krieg. N.R. "Microbio	ology" Tata	a McGraw-	Hill.	New
	, , , ,	0, - ,,,,			

	DELHI,(2001)	None "Minghislow" An Interduction Oth	dition Doomoon				
	2. Tortuga G.J, Finke Br, Case "Microbiology". An Introduction, 9 th edition Pearson Education (2008)						
	3. Willey J.M., Sherwood L.M., Wool verton C.J.,"PRESCOTT'S Microbiology", 9 th edition						
	(2013)						
	4. Madigan, M.T., Marino, J.M., Dunlap, P.V. AND Clark D.P., "Brock Biology of						
	Microorganisms, 12 th edition, Pearson Benjamin Cummings, San Francisco (2009).						
	5. Sum Bali, Gaeta and Mathura, R.S., "Principles of Microbiology" M.C. Grew Hill edition (2017)						
	6. Agatha Narayan, R. and Picnicker, C.K.S., "Text book of microbiology", 6 th edition						
	Oriental Longman Publication, U.S.A (2000).						
	7. Dubiety, R.C., And Maheshwari, D.K., "Text book of microbiology". S. Chand &						
	8 Sharma P D "Microbiolog	2008). y" Kasogi Publications Meerut (2014)					
	9. Singh, R.P., "Applied Micro	biology". Kalian Publishers, New Delhi. (2007)	<i>'</i>)				
	10 Shimmy, Q.J., "Microbiology	"-I". Kailās Sadden, Bhopal.	,				
		-					
	Suggested equivalent online cours	ses:					
	1. <u>https://www.com.mooc-list.c</u>	com/course/small-and-mighty-introduction-mic	<u>robiology-</u>				
	2. https://www.mooc-list.com/d	course/microbiology-saylororg					
	3. https://www.mooc-list.com/course/bacteria-and-chronic-infections-coursera						
	4. https://www.coursera.org/lecture/bacterial/-infections/1-1-introduction-to-bacteria-by-						
	bioinformaticstician-phd-peder-worning-HZ64m						
	5. <u>https://www.openstax.org/books/microbiology/pages/1-3-types-of-microorganisms</u>						
	6. <u>https://openstax.org/books/microbiology/pages/4-1-prokaryotic-habitats-relationships-and-</u>						
	microbiomes						
	7. https://swayam.gov.in/explo	rer?searchText=microbiology					
	Dort	D Assessment and evaluation					
	rart-	D'Assessment and evaluation					
	Suggested Continuous Evaluation	n Methods:					
	Maximum Marks:						
	University Evan (UE).	luation (CCE): 25 75					
1	Internal Assessment	Class Test	15				
(Continuous Comprehensive	Assignment / Presentation	10				
1	Evaluation(CCE):25	Total	25				
]	External Assessment	Section (A): Three Very	3x3=30				
University Exam		Short Questions (50 Words Each)					
8	Section:25						
	Time: 02.00Hours	Section (B): Four Short					
		Questions (200 Words Each)	4x9=36				
		(200 Words Each) Section (C): Two Long					
		Questions	2x15-30				
		(500 Words Each)	2415-50				
		Total	75				
			I				

		Part A Intro	duction				
Progra	am Certificate Course	Class: B.SC.	Year : FIRST Ye	ear Sea on	ssion :2021-2022 wards		
Subject : Microbiology							
1	Course Code		S1-MBIO2P				
2	Course Title	Microbial Too	ls and Techniques P	'ractical			
3	Course Type	Elective					
4	Pre- requisite (if any)	To Study this course a student must have had the subject					
5	Course Learning outcomes (CLO)	 On completion of this course, learners will be able to understand: Basic Knowledge of glassware, microscopes and different kinds of instruments used in the microbiology laboratory. Basic media preparation technique, autoclaving, cleaning and sterilization of glassware. Preparation of liquid and solid culture media. Isolation of microorganisms by different plating methods. 					
6	Credit Value	2					
7	Total Marks	Maximum Marl	ks:25+75	Minimu 33	m Passing Marks:		
Total I Lectur S. No.	l No. of Lectures:30 <u>ures – Tutorial – Practical (In hours per week): L-T-P: 0-0-2</u> Name of the Exercise No. Hou						
1.	Demonstration and briefing al	bout principles and	1 working of basic in	struments.	4		
2.	Basic media preparation technique, autoclaving, cleaning and sterilization of glass ware.			6			
3	Preparation of liquid culture media- Peptone water, nutrient broth				2		
4.	Preparation of solid culture media – Nutrient agar (agar slant/ agar plate)				2		
5.	Isolation of microbes from wa method.	3					
6.	Isolation of fungi from water, soil and air by serial dilution agar plating method.				3		
7.	Isolation of microorganisms by pour plate method.				3		
8.	Isolation of microorganisms by streak plate method				3		
9.	Isolation of microorganisms by spread plate method.				3		
10. Any other experiment may be designed on the basis of theoretical aspects.					1		
Keywords: Basic instruments, Culture media, pour plate, streak plate, spread plate.							
Part- C Learning Resources							
Text Books, References, and other Resources Books							
1. Cappuccino ,J and Sherman, N., "Microbiology : A Laboratory Manual ", 9 th edition .Pearson Eduction Limited .(2010).							

2. Dubey, R.C. and Maheswari, D.K., "Practical Microbiology", .S. Chand & Co.Ltd., New Delhi

3.M. Gopoal Reddy , M., Reddy m.n. Saigopal , D.V.R. and Mallaiah K.V.," Laboratory Experiments in Microbiology", Himaliya Publishing House , Mumbai (2007).

4. Aneja, K.R., "Laboratory Manual of Microbiology and Biotechnology. 2: Edition", Meditech Scientific International .(2018).

5.Patel, Rakesh J and Patel Kiran, R., "Experiments MicrobiologyVol. I and Vol. II", AdityaPrakashan Ahmadabad. (2009).

6. Varghese, Naveen and Joy, V," Microbiology LaboratoryManual "ED.1, Aromatic and Medicinal Plants Research Station, Odakkali, Ernakulam, Kerala. (2014).

7.Shammi, Q.J. "Microbiology-Tools and Techniques", KailashPustaksadan ISBN 978-81-89900-38-0 (In hindi also)

8. Grainger. John, Hurst Janet and Burdass. Dariel, "Basic Practical Microbiology: A Manual". The Society for General Microbiology. (2001).

Suggested Digital Platform /Web Links:

 1.
 https://www.mooc-list.com/course/introduction-practical-Microbiology-futurelearn

 2.
 https://study.com/articles/List_of_Free_Online_

 Microbiology

 Courses_and_Training_Options html

Microbiology_Courses_and_Training_Options.html

Part-D Assessment and evaluation					
Internal assessment	Marks	External assessment	Marks		
Class interaction Quiz	10	Viva voce on practical	15		
Attendance	05	Practical record file	10		
Assignment(Charts /Model Seminar /Rural service technology(Dissemination/Report of Excursion/ lab visit/Survey/Industrial visit)	10	Table work/Experiments	50		
Total	25		75		
Any remarks sugggestions:Nil					

Part A- Introduction						
Program:Certificate Class:B.Sc.IY		Year: 2021	Session: 2021-2022			
Subject: Physics						
Course Code		S1-PHYS2T				
. Course Title		Mechanics and General Properties of Matter				
Course Type (Core/Elective/ Generic Elective/Vocational/)		Elective				
Pre-requisite (if any)	T	To study this course, a student must have had the subject Physics in 12" class.				
Course Learning Outcomes (CLO)	1. T idea 2. It all tl 3. T appl of m 4. 7 matl phys 5. T effee	To study this course, a student must have had the subject Physics in 12" class. 1. The course would empower the students to develop the idea about the behavior of physical bodies. 2. It will provide the basic concepts related to the motion of all the objects around us in daily life. 3. The students would be able to build foundation to various applied field in science and technology especially in the field of mechanical engineering. 4. The students will acquire the knowledge of basic mathematical methods to solve the various problems in physics. 5. The students will be able to understand the relativistic effect and the relation between energy and mass.				
Credit Value		4				
Total Marks		Max. Marks: 25+75	Minimum passingMarks:33			
Part B- Content of the Course						
--	--	----------	--	--		
Total numbers of Lectures(in hours):60						
Unit	Topics	Numbers				
		of				
		Lectures				
1	Historical background and Mathematical Physics	12				
	 Historical background: A brief historical background of mathematics and mechanics in the context of India and Indian culture. A brief biography of Varahamihira and Vikram Sarabhai with their major contribution to science and society. Mathematical Physics: 					
	 2.1. Scalar and vector fields, Gradient of a scalar field and its physical significance. 2.2. Vector integral: line integral, surface integral and volume integral, Divergence of a vector field and its physical significance, Gauss divergence theorem. 2.3. Curl of a vector field and its physical significance, Stokes and Green's theorem, Numerical problems based on the above topics. Keywords/Tags: Scalar field, Vector field, Vector integral, Gradient, Divergence, Curl. 					
11	 1. Rigid body mechanics: 1.1. System of particles and concept of rigid body, Torque, centre of mass: position of the centre of mass, Motion of the centre of mass, Conservation of linear & angular momentum with examples, Single stage and multistage rocket. 1.2. Rotatory motion and concept of moment of inertia, Theorems on moment of inertia: theorem of addition, theorem of perpendicular axis, theorem of parallel axis, Calculation of moment of inertia of rectangular lamina, disc, solid cylinder, solid sphere. 2. Mechanics of deformable bodies: 2.1. Hooks law, Young's modulus, Bulk modulus, Modulus of rigidity and Poisson's ratio, Relationship between various elastic moduli. 2.2. Possible values of Poisson's ratio, Finding Poisson's ratio of rubber in the laboratory, Torsion of a cylinder, Strain energy of twisted cylinder. 2.3. Finding the modulus of rigidity of the material of a wire by Barton's method. Torsional momenta of momenta is a source of the source of a momenta of a wire by Barton's method. 	12				

	supported at its ends and loaded in the middle.	
	Keywords/Tags: Rigid body, Centre of mass, Moment of Inertia, Poisson's ratio.	
III	Fluid mechanics	12
	 1. Surface Tension: 1.1. Inter-molecular forces and potential energy curve, force of cohesion and adhesion. 1.2. Surface tension, Explanation of surface tension on the basis of intermolecular forces, Surface energy, Effect of temperature and Impurities on surface tension, Dally life application of surface tension. 1.3. Angle of contact, The pressure difference between the two sided of a curved liquid surface, Excess pressure inside a soap bubble, Capillarity, determination of surface tension of a liquid capillary rise method, Jaeger's method. 	
	 2. Viscosity: 2.1. Ideal and viscous fluid, Streamline and turbulent flow, Equation of continuity, Rotational and Irrational flow, Energy of a flowing fluid, Euler's equation of motion of a non-viscous fluid and its physical significance. 2.2. Bernoulli's theorem and its applications (Velocity of efflux, shapes of wings of airplane, Magnus effect, Filter pump, Bunsen's burner) 2.3. Viscous flow of a fluid, Flow of liquid through a capillary tube, Derivation of Polseuille's formula and limitations, Stocks formula, Motion of a spherical body falling In a viscous fluid. Keywords/Tags: Inter-molecular force, Surface tension, Angle of contact, Capillarity, Viscosity, Euler's equation, Polseulle's formula 	

IV	Cravitational notantial and contral forces	
1 V	Gravitational potential and central forces	12
	 Gravitational potential: 1.1. Conservative and non-conservative force field, Conservation of energy in motion under the conservative and non-conservative forces, Potential energy. 1.2. Conservative force, Conservation of energy, Gravitational potential and gravitational potential energy, Gravitational potential and intensity of gravitational field due to uniform spherical shell and a uniform sold sphere. 1.3. Gravitational self-energy, Gravitational self-energy of a uniform spherical shell and a uniform solid sphere. 	12
	 2 Central forces: 2.1. Motion under Central forces, Conservative ve characteristics of central forces. 2.2. The motion of a two particles system in Central force, Concept of reduced mass, Reduced mass of positronium and hydrogen. 2.3. Motion of particles in an inverse-square central force, Motion of celestial bodies and derivation of Kepler's laws, 2.4. Elastic and inelastic scattering (elementary idea). Keywords/Tags:Conservative force field, Gravitational potential, Gravitational self-energy, Central force, reduced mass, Scattering. 	
v	Relativistic Mechanics and Astrophysics	12
	 Relativistic Mechanics: Frame of references, Galilean transformation, and Michelson Morley experiment. Postulates of special theory of relativity, Lorentz Transformation, Simultaneity and order of events, Length contraction, Time dilation, Relativistic transformation of velocities, Variation of mass with velocity. Mass-energy. Equivalence and its experimental verification. Astrophysics: Introduction to the Universe, Properties of the Sun,Concept of Astronomical Distance. Life cycle of stars, Chandrasekhar Limit, H-R diagram. 	
	 2.2. Life cycle of stars, Chandrasekhar Limit, H-R diagram, Red giant star, White dwarf star, Neutron star, Black hole, 2.3. Big Bang Theory (elementary Idea). Keywords/Tags: Transformation, Mass-energy equivalence, Astronomical distance, Chandrasekhar limit, Black hole. 	

Part C-Learning Resources Text Books, Reference Books, Other resources

Suggested Readings:

- 1. Spiegel M. R., "Vector Anal ysis: Schaum Outline Series", McGraw Hill Education, 2017.
- 2 Mathur D. S., "Mechanics", S. Chand, 2012.
- 3. Ghatak A. K., Goyal I.C. and Chua S.J., "Mathematical Physics", Laxmi Publications Private Limited, 2017
- 4. Mathur D. S., "Properties of Matter", Shyamlal Charitable Trust, New Delhi.
- 5. Sears and Zeemansky, "University Physics", Pearson Education.

Suggested equivalent online courses:

1. https://nptel.ac.in/courses/115/103/115103036/ Mathematical Physics by Dr. SaurabhBasu, Department of Physics, Indian Institute of Technology Guwahati

2. https://nptel.ac.in/courses/115/106/115106090/ Mechanics, Heat, Oscillations and Waves by Prof. V. Balakrishnan, Department of Physics, Indian Institute of Technology, Madras

Part D-Assessment and Evaluation

Suggested Continuous Evaluation Methods: Maximum Marks: 100

Continuous Comprehensive Evaluation (CCE): 25marks University Exam (UE) 75 marks

Internal Assessment: Continuous Comprehensive Evaluation (CCE):25	ClassTest Assignment/Presentation	15 10			
External Assessment:	Section(A) : Three Very Short	$03 \ge 03 = 09$			
University Exam Section:	Questions (50 Words Each)				
75	Section (B): Four Short Questions	04 x 09= 36			
Time : 02.00 Hours	(200 Words Each)				
	Section (C): Two Long Questions	$02 \ge 15 = 30$ Total 75			
	(500 Words Each)				
Any remarks/ suggestions:					

	Part A- Introduction				
Program: Certificate	Class: B.Sc. I Year		Year : 2021	Session: 2021	
		Subject	Physics		
Course	Code		S1-I	PHYS2P	
. Cours	e Title	Mech	Mechanics and General Properties of Matter Lab		
. Cours Core/Electiv Elective/Vo	. Course Type Core/Elective/ Generic Elective/Vocational/			ective	
Pre-requis	Pre-requisite (if any		To study this course, a student must have had the subject Physics in 12" class.		
Course I Outcome	Learning s (CLO)	 The students would acquire bas practicalknowledge related to mechanics throu theexperiments. Students will be familiar with variousmeasuremed devices by which they can measurevarious physic quantities with accuracy. The students will develop the concept related tot mechanics and properties of matter. 			
Credit	Value			2	
Total I	Marks	N	Iax. Marks: 25+75	Min passing Marks :33	

	Part B- Content of the Course	
	Total numbers of Lectures(in hours):60	
Sr.No	List of experiments	Number of Practical (in hours)
1	Determination of Young's modulus, modulus of rigidity andPoisson's ratio of material of a wire using Searle's method.	30
2	Determination of Young's modulus of material of a metallic barby bending of beam method.	
3	Determination of acceleration due to gravity (g) using Bar pendulum.	
4	Determination of acceleration due to gravity (g) using Kater'sreversible pendulum.	
5	Determination of modulus of rigidity of a rod with the help ofBarton's apparatus.	
6	Determination of coefficient of viscosity of liquid usingPoiseuille's method.	
7	Determination of the moment of inertia of a flywheel about its axisof rotation	
8	Determination of the moment of inertia of a given body (irregularbody) with the help of inertia table.	
9	Verification of laws of the parallel/perpendicular axes of momentof inertia.	
10	Determination of modulus of rigidity of material of a wire with thehelp of Maxwell's needle.	
11	Determination of Young's Modulus of a material of a rod usingCantilever method.	
12	Determination of modulus of rigidity of material of a wire with thehelp of torsional pendulum.	
13	Determination of force constant of a spring.	
14	Determination of Poisson's ratio of rubber.	
15	Determination of surface tension of a liquid by Jaeger's method.	

Part C-Learning Resources Text Books, Reference Books, Other resources

Suggested Readings:

- 1. PrakashI. & Ramakrishna, "A Text Book of Practical Physlcs", KitabMahal, 2011, 11/e.
- 2. Squlres G. L, "Practical Physics", CambridgeUniversity Press, 2015, 4/e.
- 3. Flint B. L. and Workshop H. T., "Advanced Practical Physics for 2015, students", 4/e Asia Publishing House, 197.
- 4. Chattopadhyay D. & Rakshit P. C., "An Advanced Course in Practical Physics", NewCentral Book Agency.

Suggestive digital platforms web links

- 1. https://www.vlab.co.in/broad-area-physical-sciences
- 2. https://storage.aoogleapis.com/unique courses/online.html

Part D-Assessment and Evaluation

Suggested Continuous Evaluation Methods:

Internal Assessment	Marks	External Assessment	Marks
Class Interaction/Quiz	10	Viva Voce on Practical	15
Attendance	5	Practical Record File	10
Assignments (Charts/ Model Seminar/ Rural Service Technology Dissemination/ Report of Excursion/ Lab Visits/Survey / Industrial visit)	10	Table work/Experiments	50
TOTAL	25		75
Any remarks/ suggestions:			

	Part A Introduction					
Program	Program Certificate Course Cla B.S B.S		Year : FIRST Year		ession :2021-2022 nwards	
		2.50	Subject : ZOOLOG	Y		
<u>1</u>	Course Code		S1-ZOOL2T			
2	<u>Course Title</u>		Cell biology, reproductive biology and developmental biology			
<u>3</u>	<u>Course Type</u>		ELECTIVE	ELECTIVE		
<u>4</u>	<u>Pre- requisite (if any)</u>		To study this course a st subject Biology in class	To study this course a student must have had the subject Biology in class 12 th .		
<u>5</u>	<u>Course Learning outcomes</u> (<u>CLO</u>)	<u>5</u>	 After completing this course in ZOOLOGY, a student shall have understanding of. Develop deeper understanding of what life is and how it functions at cellular level. Understand the nature and basic concept of cell biology, Reproductive and Developmental biology. Understand structure and functions of cell membrane, and cellular organelles. Understand the importance of latest reproductive trends, reproductive techniques to be applied for human welfare. Understand the general patterns and sequential developmental stages during embryogenesis; understand how the developmental processes lead to establishment of body plan of multicellular organisms. Understand the the evolutionary development of various animals. 		OLOGY, a <u>f.</u> <u>tanding of what</u> <u>tons at cellular</u> and basic concepts <u>luctive and</u> <u>7.</u> <u>nd functions of</u> <u>lular organelles.</u> <u>ance of latest</u> <u>productive</u> <u>d for human</u> <u>batterns and</u> <u>tal stages during</u> <u>trstand how the</u> <u>es lead to</u> <u>plan of</u> <u>s.</u> <u>lutionary</u> <u>s animals.</u>	
<u>6</u> 7	<u>Credit Value</u> Total Marks	Mar	4 dimum Marks: 25+75	Minim	um Passing	
<u> </u>		1110	Minum warks.2 <i>3⊤13</i>	Marks:	<u>33</u>	
		Part	B- Content of the Course			
	<u>Total no of Lectures –6</u> <u>Lectures- Tutorials- pra</u>	0 organism actical (in h	<u>5</u> ours per week) L-T-P:4-0-(<u>)</u>		
Unit	Topics				<u>No. of</u> Lectures	

Ī	 <u>Cell biology:</u> 1.1 <u>Concept of prokaryotic and eukaryotic cell, difference between prokaryotic and eukaryotic cells.</u> 1.2 <u>Structure and functions of plasma membrane</u> 1.3 <u>Structure and functions of Golgi body, Mitochondria, Endoplasmic reticulum, ribosomes and lysosomes.</u> 1.4 <u>Structure and functions of Nucleus.</u> 1.5 <u>Structure and functions of Chromosomes and special types of chromosomes-Lamp brush and Polygenes chromosomes.</u> 1.6 <u>Cell cycle, Mitotic & Meiotic cell division and their significance.</u> 	<u>13</u>
	Keywords: Prokaryote, Eukaryote, cell organelles, chromosomes, cell cycle.	
Π	 <u>2. Reproductive Biology:</u> <u>1.1 Structure of Male reproductive system of Lupus.</u> <u>1.2 Structure of Female reproductive system of Lupus.</u> <u>1.3 Histology of testis, and Ovary of Lupus.</u> <u>1.4 Gametogenesis- Spermatogenesis and oogenesis, difference between spermatogenesis and oogenesis.</u> <u>1.5 Types of Eggs- based on amount and distribution of yolk with examples.</u> 	<u>13</u>
	Keywords: Reproductive system, Gametogenesis, sperms, eggs.	
Ш	Recent assisted Reproductive Techniques (ART):3.1 Stem cell- Types and their uses.3.2 Gene bank, sperm bank, superovulation, cryopreservation.3.3 In Vitro Fertilization (IVF) and Embryo Transfer (ET), Zygote.3.4 Placentation- Types, examples and functions.3.5 Placenta Banking- placenta preservation benefits.Key words: Gene bank, sperm bank, superovulation, IVF, ET.	<u>15</u>
<u>IV</u>	 4. Developmental Biology: 4.1 Fertilization 4.2Embryonic development of frog up to the formation of three layers 4.3 Fate map construction in frog. 4.4 Metamorphosis of Tale pole Larva. 4.5 Partheno genesis. Keywords: Fertilization, frog embryology, tadpole, metamorphosis, parthenogenesis. 	<u>11</u>
<u>V.</u>	Embryonic Development of Chick: 5.1 Structure of hen's egg. 5.2 Embryonic development of chick embryo unto the formation primitive streak. 5.3 Fate map construction in chick. 5.4 Extra embryonic membranes of chick, formation and functions. Keywords/tags: Hens egg, chick embryology, fate map, chick embryo membranes.	

	r					
	Part C-Learning Kesources					
	Text books	s, Reference Books, Other resources				
	Text books, Reference Books, Other resources Suggested Reading: 1. Arm gam, 'A TEXT BOOK OF EMBRYOLOGY'', Sara's publications 2005. 2. Babinski, BI, 'an Introduction to Embryology.'' CEng age learning 2012. 3. De Roberti's, EDP De Roberti's, EMF, ''Cell and molecular biology,''8 th edition, Williams &Wilkins, Philadelphia, 2006. 4. Gupta, PK, ''CELL BIOLOGY, Genetics and evolution'', Rastogi publications 2013 5. Heffner, L, ''Human reproduction at a glance,'' BWL Publications, 2013. 6. Larsen, Human Embryology,'' Churchill livingstone, 2001. 7. Powar, CB, ''CELL BIOLOGY'' Himalya publishing House,2010. 8. Rastogi, VB, ''Animal Distribution aqnd developmental biology .'' KNRNPublication, 2020. 9. Rastogi, VB, ''Animal Distribution aqnd developmental biology .'' KNRNPublication 2018 11. VERMA and AGRAWAL,'' A text Book of cytology,''S Chand & co. 1999 12. VERMA, PS, AGARWAL, VK ''Chordate Embryology,'' Akhand publishing house, New Delhi, 14. https://www.academic.oup.com 15. https://www.nedineplus.gov 16. https://www.nedineplus.gov 17. https://www.redineplus.gov					
	Suggested equivalent online courses: 8. Sway am online courses https://storage.googleapis.com/uniquecourses/onlinehtml 9. National Digital Library https://ndl.iitkgp.ac.in 10. E- PG Pataskala (MHRD) PORTAL,(HTTPS://EPGP.INFLIBNET.AC.IN) 11. Science Direct Open Access Content (https://www.sciencedirect.com/book/9781843342038/openaccess)					
<u>B</u>	Part-	D Assessment and evaluation				
Suggested Continuous Evaluation Methods: Maximum Marks: 100 Continuous Comprehensive Evaluation (CCE): 25 University Exam (UE): 75						
Int	ernal Assessment	Class Test		15		
Con	ntinuous Comprehensive	Assignment / Presentation		10		
Eva	aluation(CCE):25	Total		25		
<u>Ext</u> Uni	External AssessmentSection (A): Three Very3x3=30University ExamShort Questions (50 Words Fach)					

	Section:25				
	Time: 02.00Hours		Section (B): Four S	Short	
		Ouest	tions		4x9=36
		<u> </u>	(200 Words Each)		
			Section (C): Two L	ong	
		Quest	tions		<u>2x15=30</u>
			(500 Words Each)		
			<u>Total</u>		<u>75</u>
		ł		I	I
Part A	A Introduction				
PRACT	ICAL SYLLABUS				
Program	<u>m Certificate Course</u>	Class: B.SC.	Year : FIRST Yea	r Ses	sion :2021-
				<u>202</u>	22
				onv	wards
		<u>Subject: ZO</u>	<u>OLOGY</u>		
<u>1</u>	Course Code	S1-ZOOL2P			
<u>2</u>	Course Title	CYTOLOGY FMBROLOG	, REPRODUCTIVE	BIOLOGY	<u>&</u>
3	Course Type	ELECTIVE			
<u>5</u>	<u>Course rype</u>				
<u>4</u>	Pre- requisite (if any)	To Study this c	course a student must h	nave had the	<u>subject</u>
5	Course Leorning	On completion of this course, learners will be able to			
<u> </u>	Course Learning	On completion	<u>on of this course</u>	, learners	will be able to
2	outcomes (CLO)	<u>On completion</u> understand:	<u>on of this course</u>	, learners	will be able to
2	outcomes (CLO)	<u>On completion</u> <u>understand:</u> • <u>The diff</u>	on of this course	, learners	will be able to c cell division and
2	outcomes (CLO)	• The dift special	on of this course ferent stages of mitotic types of chromosomes	, learners c and meiotic	will be able to c cell division and
2	outcomes (CLO)	<u>On completion</u> <u>understand:</u> • <u>The diff</u> <u>special</u> • <u>Differen</u>	on of this course ferent stages of mitotic types of chromosomes nt stages of embryolog	, learners c and meiotic <u>.</u> <u>y.</u>	will be able to
2	outcomes (CLO)	<u>On completion</u> <u>understand:</u> • <u>The diff</u> <u>special</u> • <u>Differen</u> • <u>Throug</u>	on of this course ferent stages of mitotic types of chromosomes nt stages of embryolog h squash preparations	, learners <u>c and meiotic</u> <u>·</u> <u>y.</u> c understand	will be able to c cell division and the stage of cell
2	outcomes (CLO)	On completion understand: • The diff special • Differen • Through division	ferent stages of mitotic types of chromosomes at stages of embryolog and structure of polyg	, learners c and meiotic <u>.</u> y. understand gene chromos	will be able to c cell division and the stage of cell somes.
2	outcomes (CLO)	On completion understand: • The difficult special • Different • Through division • Enhance through	on of this course ferent stages of mitotic types of chromosomes at stages of embryolog h squash preparations and structure of polyge collaborative learni	, learners <u>c</u> and meiotic <u>y</u> . <u>y</u> . <u>understand</u> <u>gene chromos</u> <u>ng and com</u>	will be able to c cell division and the stage of cell somes.
2	outcomes (CLO)	On completion understand: • The difficult • Differen • Through division • Enhance through	ferent stages of mitotic types of chromosomes at stages of embryolog stages of embryolog and structure of polyge collaborative learni practical sessions,	, learners <u>c and meiotic</u> <u>y.</u> <u>understand</u> <u>gene chromos</u> <u>ng and com</u> <u>team work</u>	will be able to c cell division and the stage of cell somes. munication skills group discussion
2	<u>outcomes (CLO)</u>	On completion understand: • The different • Different • Through division • Enhance through assignm	ferent stages of mitotic types of chromosomes at stages of embryolog and structure of polyge collaborative learni practical sessions, hents & projects.	, learners <u>c</u> and meiotic <u>y</u> . <u>y</u> . <u></u>	will be able to c cell division and the stage of cell somes. nmunication skills group discussion
<u>5</u> <u>6</u> 7	<u>Credit Value</u>	On completion understand: • The different • Different • Through division • Enhance through assignment 2	on of this course ferent stages of mitotic types of chromosomes at stages of embryolog h squash preparations and structure of polyg collaborative learni practical sessions, tents & projects.	, learners <u>c and meiotic</u> <u>y</u> . <u>a understand</u> <u>gene chromos</u> <u>ng and com</u> <u>team work</u>	will be able to c cell division and the stage of cell somes. nmunication skills group discussion
<u>5</u> <u>6</u> <u>7</u>	<u>Course Learning</u> outcomes (CLO) <u>Credit Value</u> <u>Total Marks</u>	On completion understand: • The different • Different • Through division • Enhance through assignm 2	ferent stages of mitotic types of chromosomes at stages of embryolog h squash preparations and structure of polyg collaborative learni practical sessions, hents & projects.	, learners <u>c and meiotic</u> <u>y</u> . <u>a understand</u> <u>gene chromos</u> <u>ng and com</u> <u>team work</u> <u>Minimun</u> <u>33</u>	will be able to c cell division and the stage of cell somes. nmunication skills group discussion
<u>5</u> <u>6</u> <u>7</u>	<u>Credit Value</u> <u>Total Marks</u>	On completion understand: • The diff special • Differen • Through division • Enhance through assignm 2 Maximum Max	ferent stages of mitotic types of chromosomes at stages of embryolog and structure of polyg collaborative learni practical sessions, nents & projects.	, learners <u>c and meiotic</u> <u>y</u> . <u>a understand</u> <u>gene chromos</u> <u>ng and com</u> <u>team work</u> <u>Minimun</u> <u>33</u>	will be able to c cell division and the stage of cell somes. amunication skills group discussion n Passing Marks:
<u>5</u> <u>6</u> <u>7</u> Port P	<u>Content of the Course</u>	On completion understand: • The difficient • Differen • Through division • Enhance through assignm 2 Maximum Mar	ferent stages of mitotic types of chromosomes nt stages of embryolog h squash preparations and structure of polyg e collaborative learni practical sessions, ments & projects.	, learners <u>c and meiotic</u> <u>y.</u> <u>c understand</u> <u>gene chromos</u> <u>ng and com</u> <u>team work</u> <u>Minimun</u> <u>33</u>	will be able to c cell division and the stage of cell somes. nmunication skills group discussion n Passing Marks:
<u>5</u> <u>6</u> <u>7</u> <u>Part B</u>	<u>Content of the Course</u>	On completion understand: • The difficient • Differen • Through division • Enhance through assignm 2 Maximum Mar	ferent stages of mitotic types of chromosomes at stages of embryolog and structure of polyge collaborative learni practical sessions, ments & projects.	, learners <u>c and meiotic</u> <u>y.</u> <u>c understand</u> <u>gene chromos</u> <u>ng and com</u> <u>team work</u> <u>Minimun</u> <u>33</u>	will be able to c cell division and the stage of cell somes. nmunication skills group discussion n Passing Marks:
<u>5</u> <u>6</u> <u>7</u> <u>Total N</u> Lecture	<u>Content of the Course</u> <u>Content of the Course</u>	On completion understand: • The different • Different • Through division • Enhance through assignm 2 Maximum Man	on of this course ferent stages of mitotic types of chromosomes at stages of embryolog h squash preparations and structure of polyg collaborative learni practical sessions, hents & projects. rks:25+75	, learners <u>c</u> and meiotic <u>y</u> . <u>y</u> . <u></u>	will be able to c cell division and the stage of cell somes. amunication skills group discussion n Passing Marks:
<u>5</u> <u>6</u> <u>7</u> <u>Total N</u> <u>Lecture</u> Unit	<u>Content of the Course</u> <u>Content of the Course</u>	On completion understand: • The different • Different • Through division • Enhance through assignment 2 Maximum Manter	on of this course ferent stages of mitotic types of chromosomes at stages of embryolog h squash preparations and structure of polyge collaborative learni practical sessions, nents & projects.	, learners <u>c and meiotic</u> <u>y.</u> <u>a understand</u> <u>gene chromos</u> <u>ng and com</u> <u>team work</u> <u>Minimun</u> <u>33</u>	will be able to c cell division and the stage of cell somes. nmunication skills group discussion n Passing Marks:
<u>5</u> <u>6</u> <u>7</u> <u>Total N</u> <u>Lecture</u> <u>Unit</u>	<u>Content of the Course</u> <u>- Content of the Course</u> <u>to of Lectures:30</u> <u>ropics - Tutorial - Practical (In has the Course</u>)	On completion understand: • The difficient • Differen • Through division • Enhance through assignm 2 Maximum Man	ferent stages of mitotic types of chromosomes at stages of embryolog and structure of polyg collaborative learni practical sessions, hents & projects. rks:25+75	, learners <u>c and meiotic</u> <u>y</u> . <u>a understand</u> <u>gene chromos</u> <u>ng and com</u> team work <u>Minimun</u> <u>33</u>	will be able to c cell division and the stage of cell somes. amunication skills group discussion n Passing Marks:
<u>5</u> <u>6</u> <u>7</u> <u>Total N</u> <u>Lecture</u> <u>Unit</u> <u>1.</u>	<u>Credit Value</u> <u>Credit Value</u> <u>Total Marks</u> <u>- Content of the Course</u> <u>to. of Lectures:30</u> <u>es – Tutorial – Practical (In h</u> <u>TOPICS</u> <u>Spotting related to the cytolo</u>	On completion understand: • The different • Different • Through division • Enhance through assignment 2 Maximum	on of this course ferent stages of mitotic types of chromosomes at stages of embryolog at stages of embryolog h squash preparations and structure of polyge collaborative learni practical sessions, nents & projects. attricts rks:25+75 attricts	, learners <u>c and meiotic</u> <u>y.</u> <u>understand</u> <u>gene chromos</u> <u>ng and com</u> <u>team work</u> <u>Minimun</u> <u>33</u>	will be able to c cell division and the stage of cell somes. nmunication skills group discussion n Passing Marks: No. of Lab Hours 13
<u>5</u> <u>6</u> <u>7</u> <u>Total N</u> <u>Lecture</u> <u>Unit</u> <u>1.</u>	<u>Credit Value</u> <u>Total Marks</u> <u>- Content of the Course</u> <u>to. of Lectures:30</u> <u>cs - Tutorial – Practical (In has the cytological for the cytolog</u>	On completion understand: • The diff special • Differen • Through division • Enhance through assignm 2 Maximum Max	on of this course ferent stages of mitotic types of chromosomes at stages of embryolog at stages of embryolog a squash preparations and structure of polyge collaborative learni practical sessions, nents & projects. at structure rks:25+75 at structure	, learners <u>c and meiotic</u> <u>y.</u> <u>understand</u> <u>gene chromos</u> <u>ng and com</u> <u>team work</u> <u>Minimun</u> <u>33</u>	will be able to c cell division and the stage of cell somes. nmunication skills group discussion n Passing Marks: No. of Lab Hours 13
<u>5</u> <u>6</u> <u>7</u> <u>Total N</u> <u>Lecture</u> <u>Unit</u> <u>1.</u>	<u>Content of the Course</u> <u>Content of the Cours</u>	On completion understand: • The difficient • Differen • Through division • Enhance through assignm 2 Maximum Man ours per week): I gy ttes cell ision	on of this course ferent stages of mitotic types of chromosomes at stages of embryolog h squash preparations and structure of polyge collaborative learni practical sessions, tents & projects.	, learners <u>c and meiotic</u> <u>y.</u> <u>w.</u> <	will be able to c cell division and the stage of cell somes. amunication skills group discussion n Passing Marks: No. of Lab Hours 13
<u>5</u> <u>6</u> <u>7</u> <u>Total N</u> <u>Lecture</u> <u>Unit</u> <u>1.</u>	<u>Credit Value</u> <u>Credit Value</u> <u>Total Marks</u> <u>- Content of the Course</u> <u>(o. of Lectures:30)</u> <u>es - Tutorial - Practical (In h</u> <u>TOPICS</u> <u>Spotting related to the cytolo</u> a. <u>Prokaryotes and Eukaryote</u> b. <u>Stages of mitotic cell div</u> c. <u>Stages of meiotic cell div</u>	On completion understand: • The different • Different • Through division • Enhance through assignment 2 Maximum Man	on of this course ferent stages of mitotic types of chromosomes at stages of embryolog h squash preparations and structure of polyge collaborative learni practical sessions, hents & projects.	, learners <u>c and meiotic</u> <u>y.</u> <u>understand</u> <u>gene chromos</u> <u>ng and com</u> <u>team work</u> <u>Minimun</u> <u>33</u>	will be able to c cell division and the stage of cell somes. nmunication skills group discussion n Passing Marks: No. of Lab Hours 13
<u>5</u> <u>6</u> <u>7</u> <u>Total N</u> <u>Lecture</u> <u>Unit</u> <u>1.</u>	<u>Credit Value</u> <u>Total Marks</u> <u>Total Marks</u> <u>Total Marks</u> <u>Spotting related to the cytolo</u> <u>a. Prokaryotes and Eukaryotes and Eukaryotes.</u> <u>Stages of meiotic cell div.</u> <u>Camp brush chromosome</u>	On completion understand: • The difficient • Differen • Through division • Enhance through assignm 2 Maximum Max	on of this course ferent stages of mitotic types of chromosomes at stages of embryolog h squash preparations and structure of polyge collaborative learni practical sessions, nents & projects.	, learners <u>c and meiotic</u> <u>y.</u> <u>understand</u> <u>gene chromos</u> <u>ng and com</u> <u>team work</u> <u>Minimun</u> <u>33</u>	will be able to c cell division and the stage of cell somes. nmunication skills group discussion n Passing Marks: No. of Lab Hours 13
<u>5</u> <u>6</u> <u>7</u> <u>Total N</u> <u>Lecture</u> <u>Unit</u> <u>1.</u> <u>2.</u>	<u>Credit Value</u> <u>Credit Value</u> <u>Total Marks</u> <u>- Content of the Course</u> <u>to of Lectures:30</u> <u>es – Tutorial – Practical (In h</u> <u>TOPICS</u> <u>Spotting related to the cytolo</u> a. <u>Prokaryotes and Eukaryo</u> b. <u>Stages of mitotic cell div</u> c. <u>Stages of meiotic cell div</u> d. <u>Lamp brush chromosome</u> <u>Spotting related to Reproduc</u>	On completion understand: • The difficient • Differen • Differen • Through division • Enhance through assignm 2 Maximum Max ours per week): I gy tess cell ision es. tive biology & Em	on of this course ferent stages of mitotic types of chromosomes at stages of embryolog h squash preparations and structure of polyge collaborative learni practical sessions, tents & projects.	, learners <u>c and meiotic</u> <u>y.</u> <u>w.</u> <	will be able to c cell division and the stage of cell somes. nmunication skills group discussion n Passing Marks: No. of Lab Hours 13

	b. T.S. Ovary of Mammal	
	c. Development stages of frog Embryology	
	d. Developmental stages of Chick embryology.	
<u>3</u>	Squash preparation of onion root tip to understand the stages of Mitotis	<u>8</u>
<u>4.</u>	Squash preparation of Grasshopper testis to understand the stage of Meiosis	<u>9</u>
<u>5.</u>	Try pan Blue exclusion test of cell viability	<u>3</u>
<u>6.</u>	Squash preparation of salivary gland chromosomes from Chironomus	<u>9</u>
	<u>larva/Drosophila</u>	
KEYV	VORDS: stages of cell division, stages of embryonic development squash preparation	l <u>.</u>

Part- C Learning Resources

Text Books, References, and other Resources Books

Suggested reading:

- Biffa, MM, Knight J. 'Experiments in practical development biology'', first edition 1. Cambridge university press,2011 2.
- Chai Tanya, KV'' Cell & molecular biology: a lab manual'', PHI, 2013. KELLER, LR Evans, JH, KELLER TCS ''experimental developmental biology'', 3. academic press, 1998
- 4. TIGUNAYAT, MM,"A manual of practical Zoology; biodiversity cell biology,
 - Genetics& development biology' 'scientific publishers,2019
- Virtual Labs (https://www.vlab.co.in) 5.

Part-D Assessment and evaluation

Internal assessment	<u>Marks</u>	<u>External assessment</u>	<u>Marks</u>
Class interaction Quiz	<u>10</u>	Viva voce on practical	15
Attendance	05	Practical record file	10
Assignment(Charts /Model	<u>10</u>	Table work/Experiments	<u>50</u>
Seminar /Rural service		-	
technology(Dissemination/Report			
of Excursion/lab			
visit/Survey/Industrial visit)			
Total	25		75
10000			<u> </u>
Any remarks sugggestions: Nil		•	

Programme: Certificate Class:B	.Com 1 St Year Session 2021-22	
Subject	Commerce	
Course Code	C1-COMA1G	
Course Title	Basics Of Business Studies	
Course Type	Elective	
Pre-Requiste	Not Required Open For All	
Course Objectives	To impart basic knowledge of the basiiness relevant to business activities.	
Course Learning Outcomes	The Successsful completion of this course shall enable the students :	
	 The course will be helpful to provide basic knowledge of business. 	
	• Student will be capable to understand business ethics to guide corporate sector and feel and perform its responsibilty towards society.	
	 Student will be capable to understand ethical aspect of business, banking system, banking procedure. 	
	 Student will be capable to understand practivcal banking insurance system, insurance procedure, stock exchange system, 	
	• To help	
Credit Value	4	
Total Marks	Max Marks:25 Minimum Passing	

Part A Introduction

	Marks:33
+75	

	Part B Content Of The Course	
Total No. of Lectures-60 (In Hour Per Week)3		
Unit	Торіс	Lectures
I	Concept Of Business : historical background of business in india. meaning and objectives of business industry, trade and commerce. business sectors: goods and service sectors. Concept and salient features of sole trade,partnership,LLP, and co-operative society, meaning, features, types of joint stock company. online business: need importance, limitations, process, dangers and precautions.	12
II	Business Ethics: historical background of business ethics in india, concept and significance of business ethics, balancing between objectives of business and ethics of business, evaluation of business ethics in india. Corporate Social Responsibily(CSR) historicqal cackground of CSR, concept, objectives, and inportance of CSR, contribution of indian corporate sector under csr, evaluation of CSR in india.	12
111	 Banking: historical backgroung, classification of bank, meaning, definition and functions of commercial banks, role of economics frowth, features of indian banking system. Bank Deposits: meaning and types, features of bank account, procedures to open and close bank accounts(including online procedures. Loans And Advances: principles to sanction loans and advances. classification of loans and advances, procedures to apply for house loan, personal loan, evaluation and commercial loan 	12
		1

Insurance: origin and development of insurance, meaning, principle and importance of insurance, classification of insurance.
 Life Insurance: meaning objectives, principles and importance.
 types of life insurance policy, claim procedutre and settlement.

General Insurance: meaning and objectives and importance,
general insurance policies: vehicl, health, household goods,
commercial premises and goods and another available policies.Stock Exchange: historicla background. meaning functions and
importance, important termonology related to stock exchange.
promary and secondary market, nse, bse, various index and
interpretation of fluctuations in it.12

Mutual Funds: concept, salient features, importance and types, systamatic investment plan(SIP). performance of mutual funds in India.

key words/Tags : Business, Ethics, General Insurance, Stock Exchange, Corporate Social Responsibility

Part C Learning Resources

Suggested Readings:

V

1. Dr. C.B. Gupta Values & Ethics In Business S.Chand & Sons New Delhi.

2. Dr.C.B. Gupta Business Organization & Management S.Chand & Sons New Delhi

3. Rathi And Agrawal Investment & Security Analysis S.Chnad & Sons New Delhi

4. Dr. S.C Saxena & Dr.V.P Agrawal Business Organization And Comminication Sahitya Bhawan Publication ,Agra

5. Dr. Op. Gupta & Dr. Sudhir Kumar Sharma Banking And Insurance Sahitya Bhawan Publication ,Agra

6. Dr. R.L. Nolakha Principles Of Insurance R.B.D. Publication Jaipur.

Suggestive Digital Platforms, Web Links

1.http://cbseacademic.nic.in/web_material/curriculummain20/Sr.secondary/ businessstudies. pdf

2. http://ncert.nic.in/textbook.php?kebs1=0-11

PART D ASSESSMENT AND EVALUATION

Suggested Continuous Evaluation Methods : Maximum Marks:100			
Continuous Comprehensive Evalua	tion(CCE):25 Marks, University Exam(U	e)75 Marks	
Internal Assessment:	Class Test (Objective Type) or	15 Marks	
	Descriptive		
Continuous Comprehensive	Assignment/Presentation	10	
Evaluation(CCE):			
External Assessment:	Section A: Three Very Short 3x3=9		
University Exam Section :75	Question		
Marks Time :2 Hours	(50 Word Each)		
	Section B: Four Short Questions 4x9=36		
	(200 Words Each)		
	Section C:Two Long Questions 2x15=30		
	(500 Word seach)		
	Total Marks	75	

Part A Introduction		
Programme: Certificate Class:B.Com 1 St Year Session 2021-22		
Subject	Commerce	
Course Code	C1-C	COMB2G
Course Title	Fundament	al Accounting
Course Type	Ele	ective
Pre-Requiste	Not Required Open For All (Except The Student Of Commerce)	
Course Objectives	To understand the meaning of accounting, accountanvy, To understand the terms insed in accounting system To know how the accounting system for non profit organization.	
Course Learning Outcomes	After the completion of the course, wstudent will be able to 1. To record the basic journal entries 2 Memorize how to calculate depreciation by applying various methods 3. Maintain the financial statement of a business entity 4. rectify errors in account.	
Credit Value	6	
Total Marks	Max Marks:25 +75	Minimum Passing Marks:33

Total No. of Lectures-90 (In Hour Per Week)3		
Unit	Торіс	Lectures
I	Accounts: history, definition, development, objective, basic concept, principles assumptions and convension of accounting.	10
П	Principles of double entry system, preparation journal, subsidiary books, preparation of ledger.	15
111	Preparation Of Trial Balance, Rectification Of Errors	10
IV	Preparation Of Final Accounts With Adjustment.	15
V	Depreciation Accounting: definition, reasins governing the existence of depreciation methods, objectives of providing of depreciation, factors determining the amount of depreciation, methods of charging depreciation practical questions of depreciation accounting- fixed and written down value mothods only.bank reconcialiation.	15
vi	Accounts of non- profit organisation and professionals.	10
key words/Tags : Financial Accounts, Balancesheet, P&L A/C, Single Entry System, Double Entry System.		

Part C Learning Resources

1 हिन्दी ग्रंथ अकादमी, भोपाल

2. Dr.R.K.Sharma/ Dr. R.S.Popli, Financial Accounting, Kitab Mahal Pub., Agra.

3. Anil, Rajesh, Mariya Financial Accounting, Himalaya Publication Nagpur.

5. Financial accounting-Dr.M.S.shukla, Sahityabhawan publication, Agra

6. M.C.Shukla, T.S.Grewal and S.C.Gupta. Advanced Accounts.Chand & Co. New Delhi.

7. S.N. Maheshwari, and. S. K. Maheshwari. Financial Accounting.Vikas Publishing House, New Delhi.

8. Deepak Sehgal. Financial Accounting. Vikas Publishing H House, New Delhi.

9. Gupta R.L. and Radhaswamy M, Advanced Accounting & S chand & Sons, new Delhi.

10. Bhushan Kumar Goyal and HN Tiwari, Financial Accounting, International Book House

11. Dr.S.K Singh, Financial Accounting, SBPD Publication , Indore.

Suggestive digital platforms,

web links:

1.http://www.ddegjust.ac.in/studymaterial/mba/cp-104.pdf

2. http://www.ddegjust.ac.in/studymaterial/bba/bba-104.pdf

3.http://www.deeppanacademy.com/pdf/cma/foundation/fundamentals-of-accounting.pdf

4.http://www.academia.edu/38623012/financial accounting/ifrse dition 2 ethjerry/we vegand

PART D ASSESSMENT AND EVALUATION

Suggested Continuous Evaluation Methods : Maximum Marks:100			
Continuous Comprehensive Evalua	tion(CCE):25 Marks, University Exam(U	e)75 Marks	
Internal Assessment:	Class Test (Objective Type) or	15 Marks	
	Descriptive		
Continuous Comprehensive	Assignment/Presentation 10		
Evaluation(CCE):			
External Assessment:	Section A: Three Very Short 3x3=9		
University Exam Section :75	Question		
Marks Time :2 Hours	(50 Word Each)		
	Section B: Four Short Questions	4x9=36	
	(200 Words Each)		
	Section C:Two Long Questions 2x15=30		
	(500 Word seach)		
	Total Marks	75	

Part A Introduction

Programme: Certificate Class:B.Com 1 St Year Session 2021-22		
Subject Rural Banking		Banking
Course Code	A1-I	RBAN2G
Course Title	Banking Inst	itutions in India
Course Type	Ele	ective
Pre-Requiste	No pre	-requisite
Course Objectives	To understand th Banking, To Understand Th Institutions in india	e meaning of Rural ne Terms Of Banking
Course Learning Outcomes	 After the completion of the course, wstudent will be get to 1. student will be gain a strong understanding about the banking structure in india. 2. student will be get aquainted with regulatory structure of banking sector in india 3. students will be understand about various banking institutions including rural banking institutions alon with their basic functions and their role in economic development. 4. student will be gain a deeper insight about emerging trends in banking in india. 	
Credit Value		4
Total Marks	Max Marks:25 +75 Minimum Passing Marks:33	

	Total No. of Lectures-60 (In Hour Per Week)2		
Unit	Торіс	Lectures	
I	Introduction: structure of indian banking system, origin and evaluation of banks, concept ,definition, and importance of bank, primary and secondary functions of bank, role of banks in economic development, prodpectus and challanges of indian banking system	12	
11	Regulatory Institutions: objectives of central bank and its role in economy, reserve bank of india, (RBI)-organisation, objectives, role, functions, credit creation and control, banking sector reforms, banking regulation act,1949, new licensing policy(RBI).	12	
111	Banking Institutions: types of banks- objectives, structire, functions of commercial banks, (public, private and foreign banks,), development bank, payments bank, small finance banks, indigenous banks, role of banking institutions in economic developments, prospectus and chalanges of banking institutions in india.	12	
IV	Rural Banking Instutions: rural banking institutions, features, objectives, structure, functions of commercial banks, co- iperative banks, primary agriculture societies, (PACS), regional rurla banks, microcredit, institutions, and nabard, role of banking institutions in rurla development, prospectus and chalenmges, of rurla banking institutions in india.	12	
V	Issues And Challenges To Banking Sector: financial inclusion in india, digital banking, technology in banking sector, issue of non-performing assets, (NPA), operational efficeincy & profitablity security issues, recent trends in banking system in india. Commercial Banks, prospectus and chalanges, rural banking institutions, co-operative banks,), regional rural banks, , microcredit, NABARD,	12	

key words/Tags Indian Banking System, Structure Of Indian Banking System, Challanges Of Indian Banking System..Central Bank, RBI, Banking Sector Reforms, Banking Regulation Act,1949, New Licensing Policy(RBi). **Banking Institutions,** Financial Inclusion, Digital Banking, NPA, Recent Trends In India.

Part C Learning Resources

1. Indian Institute Of Banking And Finance(Iibf), Rural Banking(Caiib2018) Macmillan Publishers India Private Limited ,2018

- 2. Chakrabarti, Manas, Rural Banking In India, New Century Publications, 2011
- 3. Gopinath ,M.N., Banking Principles And Operations, Snow White Publications 2017
- 4. Saha Satish Kumar, Indian Banking System, Sbpd Publishing House, 2020-21

5. Chawla, O.P. Evolution Of Banking System In India Since 1900, Sage Publications India Pvt. Ltd. July 2019.

- 6. Singh, Sultan Banking Sector Refirms, In India, Kanishka Publishing House, 2008
- 7. Indian Institute Of Banking, Basics Of Banking, Taxmann Publication, 2015
- 8. Indian Institute Of Banking: banking- an introduction, taxmann publication, 2015

Suggestive Digital Platforms, Web Links:

1.http://www.rbi.org.in/scripts/abouts/display.aspx

- 2. http://www.nabard.org
- 3. http:// www.sayulor.org/books

Suggested Continuous Evaluation	Methods : Maximum Marks:100		
Continuous Comprehensive Evalua	tion(CCE):25 Marks, University Exam(Ue)75 Marks	
Internal Assessment:	Class Test (Objective Type) or	15 Marks	
	Descriptive		
Continuous Comprehensive	Assignment/Presentation 10		
Evaluation(CCE):			
External Assessment:	Section A: Three Very Short 3x3=9		
University Exam Section :75	Question		
Marks Time :2 Hours	(50 Word Each)		
	Section B: Four Short Questions 4x9=36		
	(200 Words Each)		
	Section C:Two Long Questions 2x15=30		
	(500 Word seach)		
	Total Marks	75	

Programme: Certificate Class:E	B.Com 1 St Year Session 2021-22
Subject	Rural Banking
Course Code	A1-RBAN1G
Course Title	Money& Banking
Course Type	Elective
Pre-Requiste	No pre-requisite
Course Objectives	To understand the meaning of Rural Banking, To understand the terms of Money and Banking
Course Learning Outcomes	 After the completion of the course, wstudent will be able to 1. Understand about the origin of money and banking 2. Learn about concept of money, its functions, value, money market and monetary policy operations. 3. Understand about various banking institutions along with their basic functions and their credit creation role. 4. Understand about the central bank of our country and assess the objectives and functions of reserve bank of India (RBI) 5.Also analyze the banking sector reforms and gauge at the recent trents in banking system In India.

Part A Introduction

Credit Value		4
Total Marks	Max Marks:25 +75	Minimum Passing Marks:33

Total No. of Lectures-60 (In Hour Per Week)2				
Unit	Торіс	Lectures		
I	Money: Meaning, functions, and classification: concept, definition, functions and importance of money classification of money, role of money in capitalist, socialist and mixed economies. essecial quality of good money, money aggregates, paper money- meaning, forms, principles & methods of note issue in india. gresham's law. demonetization.	12		
II	Value Of Money And Economic Functions: theories of value money- quantity theory of money, fisher's and canbridge equations and income theory, economic fluctusations- inflation and deflation of money stagflation.	12		
111	Money Market And Monetary Policy: finctions and importance of money market, indian money market, monetary policy, and its objectives, indicators and instruments of monetary policy, monetary policy in an open economy, current monetery policy in india.	12		
IV	Banking Institutions: concept definition, functions, and importnace of bank, types of bank, commercial banks, development banks, co-operative banks,Regional rural banks (RRB), micro finance institutions, private banks, indigenous banks, credit creation, role of banking in an economy.	12		
v	Central Banks And Policy Reforms In Banking objective of centrla bank and its role in the economy, reserve bank of india(RBI)- organisation, structure, and its functions, credit creation and control by RBI, nationalization of banks and its objectives, banking sector reforms, recent trendss infn banking system in india.	12		

key words/Tags: Menyy, Role Of Money, Paper Money, Demonetization, Money Aggregate, Value Of Money, Economic Fluctuationas, Inflation, Deflation, Stagflation, Money Market, Credit Control, Monetary Policy, Current Monetary Policy In India, Tyoes Of Bank, Credit Creation, Role Of Bank, Ina An Economy, Central Bank, RBI, Nationalization Of Bank, Banking Reforms, Bank Recent Trends.

Part C Learning Resources

1 Brandi Michael- Money, Banking, Financial Market & Institutions, Cengage, New Delhi 2019 2 Nd Edition.

- 2. Wright Robert E- Money And Banking, Saylor Foundation New York 2012
- 3. Samys Guru- Banking Theory, Vijay Nicole Publication, Chennai 2015

4. Trivedi I.V. Dashora Rakesh, Nagpur, Ashok Jain Sanjay- Money And Financial System, Ramesh Books Depo, Jauipur, New Delhi 2006

- 5. Mishra J.P. Money And Banking, Sahitya Bhawan Publication, Agra.
- 6. Miney And Banking, M.P. Granth Academy, Bhopla.

Suggestive digital platforms, web links:

- 1.www.moneybanking.com
- 2. http://www.nabard.org
- 3. http:// www.sayulor.org/books
- 4.http://www.epw.in/
- 5.http://onlinecourses.nptel.ac.in/
- 6.http://www.eds.org/school/state-bank-of india

PART D ASSESSMENT AND EVALUATION

Suggested Continuous Evaluation Methods : Maximum Marks:100		
Continuous Comprehensive Evalua	tion(CCE):25 Marks, University Exam(Ue	e)75 Marks
Internal Assessment:	Class Test (Objective Type) or	15 Marks
	Descriptive	
Continuous Comprehensive	Assignment/Presentation	10
Evaluation(CCE):		
External Assessment:	Section A: Three Very Short	3x3=9
University Exam Section :75	Question	
Marks Time :2 Hours	(50 Word Each)	
	Section B: Four Short Questions	4x9=36
	(200 Words Each)	
	Section C:Two Long Questions	2x15=30
	(500 Word seach)	
	Total Marks	75

Programme: Certificate Class:B.Com 1 St Year Session 2021-22				
Subject	Business Organization And Management			
Course Code	C1-(COHB1G		
Course Title	Business Organiza	tion And Management		
Course Type	Ele	ective		
Pre-Requiste	No pre	-requisite		
Course Objectives				
Course Learning Outcomes	 After the completion of the course, wstudent will be able to CO1: Develop a basic understanding about business organization and its forms. CO2: develop rudimentary concept of plant location, layout and size of business units and their respective importance in the practical world. CO3: acquire an understanding of business combinations rationalization and nationalization. CO4: gain insight into the management process and its functions of planning, organization, staffing, directing, and control. 			
Credit Value	6			
Total Marks	Max Marks:25 Marks:33			

+/5	

Total No. of Lectures- (In Hour Per Week)L/T/P:4/0/0			
Unit	Торіс	Lectures	
	Business Organization & Its Forms		
	Business concept, meaning, features, stages of development of business, importance of business, classification of business activities.		
I	Business Organization: meaning, characteristics, objectives, evolution of business organization, difference between industry and commerce and business and profession, modern business and its characteristics.	18	
	Forms Of Business: sole trader, partnership, HUF, limited liability partnership, joint stock company, one person company, micro, small amd medium enterprises		
	plant location and layout and size		
11	Plant Location:concept, importance, factors affecting plant location, plant layout, : concept objectives, types and principles of layout, factors affecting layout, size of business unit: criteria for measuring the size of unit, factors affecting optimum size.	18	
	Business Combination		
111	Meaning, characteristics, objectives, causes, forms and kimds of business combination, rationalization, & nationalization,	18	
	Management:concept, of management, , nature and importance of management, functions of management, taylors scientific management, henry fayol's principles of management,		
11/	making, process, individual vs group decision making	10	
	Organising: concept & principles of organising: formal/ informal organization, virtual organization, organization structure ,span of management.	10	
	Delegation Of Authority centralization and decentralization, line and staff authority,		

Staffing: nature and scope of staffing, man power planningconcept and inportance , recruitment: concept and source, erecruitment, selection concept, importnats tests and types of interview.performance appraisal: objectives and modern methods. Directing: concept and importance of derecting Communication: concept and importance, channels of communication, formal/ informal communication, barriers of communication Motivation: concept and intrinsic extrinsic motivation, theories of motivation maslow's and need theory, hierarchy, herzberg V two factors theory, Mcgreger theory, X and Y theory. 18 Leadership: concept, style, leadership, theories,-Trait theory, behavioural theory, contingency / situational theory, Conflict: meaning& types of conflict. Control: concept, nature, importance, process and methods, Controlling, techniques, of control financial and quality Key Words: Business Organization, Industry And Commerce, Small Amd Medium

Key Words: Business Organization, Industry And Commerce , Small Amd Medium Enterprises, Plant Location, Plant Layout, Size Of Business Unit, **Business Combination, Rationalization, & Nationalization,** Management:Concept, Scientific Management, Henry Fayol's Principles Of Management, Planning, Organising, Delegation Of Authority ,Staffing, Performance Appraisal, Communication, Formal/ Informal Communication

Directing, Motivation, Leadership, Conflict, Control.

Part C Learning Resources

1 Koontz Horald O, Donneli And Wehrich, Heinz" Essentials Of Management New Delho Tata Macroe Hills, Latest Edition

2. Drucker Peter, Business Organization And Management, Tasks Responsibilities And Practices Allied Puiblishers New Delhi 2020

3. C.B. Gupta Business Organization And Management S.Chand Publication.

4. Shukla M.C Business Organization And Management , S.Chand New Delhi .

5. Chhabra T.N. Business Organization And Management , Sun India Publication , New Delhi

6 . Shah & Tatted, Business Organization And Management, Sahitya Bhawan Publication,

Suggestive digital platforms, web links:

1http:/ebooks read.com/authors-eng/h-e-morgan/ business- organizatio-hci-shtnl

2. http://in pinterest.com/pin/83513

3. http://nptel.ac.in/noc/course/noc21/sem2 PART D ASSESSMENT AND EVALUATION

Suggested Continuous Evaluation Methods : Maximum Marks:100			
Continuous Comprehensive Evalua	tion(CCE):25 Marks, University Exam(U	e)75 Marks	
Internal Assessment:	Class Test (Objective Type) or	15 Marks	
	Descriptive		
Continuous Comprehensive	Assignment/Presentation	10	
Evaluation(CCE):			
External Assessment:	Section A: Three Very Short	3x3=9	
University Exam Section :75	Question		
Marks Time :2 Hours	(50 Word Each)		
	Section B: Four Short Questions	4x9=36	
	(200 Words Each)		
	Section C:Two Long Questions	2x15=30	
	(500 Word seach)		
	Total Marks	75	

Program: Certificate	Class B.A. (Plain) I Year	Year:2021	Session:2 020-2021
Course Code	A1-ECON-2G		
Course Type (Core Course/Elective Course	Elective Course		
Course Tittle	Indian Economy- An Intro	duction (Eco	nomics)
Credit Value	04		
Total marks	Max. Marks :75+25		Min. Passing in Marks:33
Course Objectives:	 CO-1. The main objective of this pap introduce the student to basic underst. Indian economy and measurement of economic variables. CO-2. Students will be able to evalua consequences of economic activities of individual and social welfare. CO-3. To make awareness among the various economic issues in India. CO-4Organizing social and econom such as business club, exhibitions, eff salesmanship, and business fair for de commercial attitude among the student 	er is to anding of the various macro- te the on institution, e students about nic activities fective evelopment of nts	
Course learning out comes:- CLO	After completing th will be able to unde concepts of the Ind .they will be familia issues related to Ag Industry, Foreign Th economic Planning economic problems .They Will also be a understand the var Madhya Pradesh Ec	nis, students er the basic ian economy ar with the griculture, rade, and various s of India ble to able to ious issues of conomy	

Part	A	Introduction
Iaii		Introduction

Part B- Course Contents:				
Total No of Lectures-Tutorials – Practical (in hours per week): 3 hours				
UNIT	Topics	No of Lectures		
I Introduction	 Characteristics of Indian economy Trends and Sectorial Composition of National Income Sectorial Distribution of work force Nature Resources Endowments :- land ,water Livestock forest and mineral Resources Demographic Features: Population. Composition size and Growth Rates Problems and causes of over Population and Population policy 	12 Lectures		
II Agriculture	 Nature and Importance Characteristics of Indian Agriculture Trends in Agriculture Production and Productivity Green Revolution – Objectives achievements and failures Agriculture: Finance and Insurance Agriculture Marketing 	12 Lectures		
III Industry and foreign trade	 Industrial Development of India after Independence New Industrial Policy of 1991 Role of Public sector in Industrialization MSME- Definition, Characteristics and its Role Problems and Remedies of small – scale and cottage industries Start up India and Make in India Aatm Nirbhar Bharat 			

IV	1. Planning in India:- Objectives, Strategy,	12 Lectures	
Planning and	achievements and failures		
Development	2. NITI Aayog		
-	3. Problems of Indian Economy-Poverty,		
	Unemployment and		
	Regional Inequality		
	4 Infrastructure Composition- Power, Transport		
	and Communication.		
V	1. Salient features of Madhya		
Economy of	Pradesh Economy	12 Lectures	
Madhya	2. Nature Resources of Madhya		
Pradesh	Pradesh:- land ,water forest		
	and mineral		
	3. Trends and Regional Disparities		
	in Agriculture Sector of		
	Madhya Pradesh		
	4. Industrial Development in		
	Madhya Pradesh		
	6 Infrastructure Developments in		
	Madhya Pradesh- Power, Transport		
	And Communication		
	7.Employment oriented schemes in		
	Madhva Pradesh		
Key words: Sec	ctorial Composition, Human Resources of India, Indian	Agriculture,	
Industrialization	n, Infrastructure, Five year Plan in India, Regiona	Disparities,	
Industrial Devel	opment	_	

Part c- Learning resources			
Reference Books , Other resources			
1. Suggested readings:			
1.Pannagariya, Arvind (2020) –India Unlimited :Reclaiming the lost Glory, harper collins publishers India			
 Mishra and Puri (2020) – Indian Economy Himalaya publishing House New Delhi. 			
3. Rudra Dutt and Sundaram - – Indian Economy, S.Chand and Company House			

New Delhi.

- **4.** Hariharan, N.P (2008) –Lights and Shades of Indian Economy Vishal publishing, Jalandhar
- 5. Uma Kapila (20thEdition) (2009) Indian Economy since Independence, Academic Foundation, New Delhi.
- 6. Reserve Bank of India- Annual Reports

Suggested Equivalent online course:

https://online course.nptel.ac.in/noc21hs/preview

Suggested Digital platform:

.1.https://www.indiabudget.gov.in/economics survey/ebookes2021/index.html

2.https://des.mp.gov.in/Ports/o/Economic surely/ebookes2021%2020-21.pdf

3.www.indidbudget.gov.in/economic survey/

4.https://www.rbi.org.in/scripts/AnnulReportMainDisplay.aspx.

Part D-Assessment and Evaluation				
Suggested continuous Eval	uation Methods:			
Max. Marks :100				
Continuous Comprehensi	ve Evaluation (CCE):25 Mar	ks		
University Exam 75 Mark	<u>KS</u>			
Internal Assessment:	Class Test	15		
Continuous Comprehensive	Assessment/Presentation	10		
Evaluation(CCE):25 Marks				
External Assessment				
University Exam Section: 75	i i i i i i i i i i i i i i i i i i i			
Time:2.00 hours				

PART A INTRODUCTION					
Program: Certificate Class: BA I Year: 2021 Sessio				on: 2021-22	
		Subject: H	istory	1	
1	Course Code	A1-HIST-2G			
2	Course Title	Constitutional History of India			
3	Course Type (Core Course/Elective/Generic Elective/Vocational/)	Elective			
4	Pre-requisite (if any)	This course can be opted by any student who has passed 12th class.			
5	Course Learning outcomes (CLO)	Students will analyze the salient features of the constitutional development during Company's Rule in India from 1773 - 1857 and to assess their impact on the freedom struggle of India. They will know about the influence of the British Crown on India. They will be able to write a detailed essay on the various acts passed during the Crown's period in India from 1858- 1947 and their impact on the socio political life of India. Students will be able to critically examine the major reforms by the British Government in India and highlight their salient features. They will gain the knowledge of Indian Constitution.			
6	Credit Value	04			
7	Total Marks	Max. Marks: 25+75 1 Min. Passing Marks: 33			
PART B- CONTENT OF THE COURSE					
	Total No. of Lectures-Tutorials-Practical.(in hours per week) : L-T-P : 2 H/W				
Unit	t Topics			No. of Lectures	
I	IConstitutional Development During Company's Rule (1773. 1793)12Regulating Act of 1773 : causes for the passing of the Regulating Act, main provisions of the Act. Bengal Judicature Act 1781,' Iiiditati Bill of Dundas 1783, Fox India Bill 1783, Pitt's India Act of 1784, ClaitekAdt 1793.12				12
II	Constitutional, Development During Company's Rule.(1833-1854) Charter12Aclof 1813: main provisions of the Act; Charter Act of 1833-background, main provisions, Charter Act of 1853 - background, main provisions of the Act, significance of the Act, Government of India Act 1854.12			12	

III	Constitutional Development during the Rule of the Crown Government of India Act, 1858 - Background, main provisions of the Act, evaluation of the Act, Queen Victoria's Proclamation Letter', significance of the proclamation. Indian Council Act 1861- causes for the passing of the Act, provisions of the Act, provisions related to Provincial Legislative Assemblies defects of the Act, significance of the Act, Indian Council Act 1892 - causes for passing of the Act, main provisions of the Act, defects of the Act, significance of the Act,	12	
IV M G r G d t	Morley-Minto Reforms and Mont-Ford Reforms Government of India Act 1909 - Causes for passing of the Act, Government's outloo eforms, main provisions of the Act, defects of the Act, significance of the Act Government of India Act 1919 - Causes for passing of the Act, significance of leclaration, Montague-Chelmsford Report, passing of the Act, preamble of the Act, m he Act.	ok towards the the Montague nain features of	
V P 1 p G	Provincial Autonomy, Indian Independence and Indian Constitution The Government 1935 - Features of the Act, 'Home Government, Advisors of the Indian Secretary, High proposed Federal Plan—organization, criticism, conclusion. Meaning of Provincial auto Government of India Act, 1947-The Mountbatten Plan, Factors responsible for the In India, provisions and significance of the Act. Main Features of Indian Constitution.	of India Act of Commissioner, onomy. dependence of	12
Keyw	ords/Tags: Act, Constitution, Corn an Crown, Reforma and Autonomy		
	Part C-Learning Resources		
	Text Books, Reference Books, Other resources		
Sugges 1- 2- 3- 4- 5- 6- 7- 8- 9- 10- 11 12- 13- 14- 15- 16- 17- Sugges	sted Readings Sumit Sarkar: Modem India 1885 n 1947. Macmillian, 1983 R. Jeffery, J Masseloss: From Rebellion to the Republic Paul Brass: The Politics of India since Independence Agarwal, R.C.: Indian National Movement and Constitutional Development, New De Desai A.R.: India's Path of Development Tara Chand: History of Freedom Movement in India Vott1,2.3.4 Bipan Chandra and Others: Freedom Struggle. Majumdar, R.C.: History & Culture of Indian People, Vol. 8, 9, 10 &11, Bombay, 1954 Grover and Yashpal : Indian National Movement and Constitutional Development, D अग्रवाल आर.सी.: भारतीय संविधान का विकास राष्ट्रीय आन्दोलन, नई दिल्ली,1996 . ताराचंद: भारतीय स्वतंत्रता आन्दोलन का इतिहास, खंड 1,2,3,4 नई दिल्ली 1996 . पांडे, श्रीनेत्र: आधुनिक भारत का इतिहास, भाग 1 एवं 2 इलाहबाद 1988 . ग्रोवर एवं यशपाल: भारतीय स्वतंत्रता संग्राम तथा संवैधानिक विकास, नई दिल्ली 1996 . सिंह, वीरकेश्वर प्रताप: भारतीय राष्ट्रीय आन्दोलन एवं संवैधानिक विकास, नई दिल्ली 1995 . फड़िया, बी.एल. : भारतीय राष्ट्रीय आंदोलन एवं संवैधानिक विकास, इन्दौर 1995 . फड़िया, बी.एल. : भारतीय राष्ट्रीय आंदोलन एवं संवैधानिक विकास, आगाल 1990 . जैन, पुखराज : भारतीय राष्ट्रीय आंदोलन एवं संवैधानिक विकास, आगारा 1987 estive Digital Platform Web links:	lhi 4 Delhi 5 1995	

1- https://byjus.com/free-ias-prep/constitutional-development-of-india/					
2- http://www.ignt	2- http://www.igntu.ac.in/eContent/BA-PoliticalScience-02Sem-DrudaySingh				
3- Indian%20Gover	nment%20and%	20Politics.pdf			
5- https://www.jsto	edia org/wiki/Co	20021;seq= 1			
6- https://constitut	ionnetorg/count	try/constitutional-history-india			
7- https://blog.iple	adersin/history-a	and-develument-of-the-constitut	on-of-india/		
Suggested equivalent	online courses	:			
	Part D	– Assessment and Evaluation	ation		
Suggested Continuou	s Evaluation M	Iaximum			
Marks: 100					
Methods: Marks Univ	ersity Exam (U	E) 75 marks			
Continuous Comprehen	nsive Evaluatio	n (CCE): 25			
Internal	Class Test 15			15	
Assessment:	Assignment/Presentation 10			10	
Evaluation (CCE): 25					
Continuous					
Comprehensive					
External Assessment:		Section (A) : Three Very	$03 \ge 03 = 09$	I	
University Exam Section	on: 75 Time:	Short			
02:00 Hours		Question (50 Words Each)			
		Section (B) : Four Short	04 x 09 = 36		
		Questions (200 Words	02 x 15 = 30 Total 75		
Each)					
Section (C) : Two Long					
		Questions (500 Words			
		Each)			
Any Remarks/ Suggestions:					

Part A- Introduction					
Program : CertificateClass: B.A I YearYear : 2021-22Session : 2021-2022					
Subject : Generic English					
Course Code A1-ELIT-1G					
. Course Title	Communi	Communication English (Paper, Theory + Tutorial)			
Course Type (Core/Elective/ Generic		Elective			
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Electi	ve/Vocational/)				
Pre-I	requisite (if any)	This course can opted as an elective by the students of following subjects: Class 12 passed in any discipline / for all	f ⁄Open		
Co Ou	urse Learning tcomes (CLO)	1. The study of the course will enable the students to acquire the knowledge of Phonology and morphology syntax and structure Vocabulary and discourse.			
		2. The students will be able to converse in real life situ effective language skills the cost will also help them A literacy sense.	ations Acquire		
		Use atomic and lexical language effectively across the	e globe		
(Credit Value	4(3+1)+0=4			
	Total Marks	Max. Marks: 25+75 Minimum passingMar	rks:33		
Tatal	Part Part Part Part Part Part Part Part	art B- Content of the Course	T		
1 otal	No. of Lectures- 100	$\frac{1113-113-113-100}{113-113-100} = 0.2 L^{-1}$	-1-		
Unit		Topics	No. of		
		-	Lectu		
			+N0 of		
			Tutori		
			als		
1	1 Communication		10+03		
	1.1 What is communication? Its meaning types and its purpose in the age of Globalization.				
1.2 Communicative needs and problems.		eds and problems.			
	1.3 Expansion of an idea				
1.4 Rules of use of language use of appropriate words					
	Keywords/ Tags:				
	Linguistic and communicative competence .Communication effective and cognitive strategies ESL. EFL. acquisition of L1 L2 and Collocational language				
Π	Practicing listening skills reading and understanding skills		10+04		
	2.1 Listening to Radio and TV news, discussions and comprehension rules of grammar, speech of speech, pronunciation and intonation melodic parts of and Utterance variation of speech.				
	2.2 Reading newspape	rs, analysis and interpretation			
	2.3 IPA and phonetic symbol				

	2.4 Précis writing and paraphrasing					
	2.5 Vocabulary enrichment					
	Keywords/Tags: LRWS. Receptive skills. Attentive listening. Word stress. Syllable. Received pronunciation(RP). Summarizing pragmatic competence					
III	Practicing writing speaking skills	15+04				
	3.1 Formal and informal writing of letter and invitation, meeting minutes, official orders and appointment creative writing listening to talks and presentation, note making tips.					
	3.2 Communicative approach lexical approach task based learning.					
	3.3 Report writing story writing daily routine in English					
	3.4 Situational conversation between two friends on different topics .					
	Keyword/Tags Productive skills code mixing. Situational conversation. Structural English. Frequent use of proverbs, phrases and idioms.					
IV	Application of communicate in English	10.04				
	4.1 Translation (from Hindi to English and vice versa)	10+04				
	4.2 Group and Peer discussion ,role play					
	4.3 Contrastive analysis between 1.1 and 1.2 at structural. Phonological and lexical levels with example					
	Keywords/ Tags: Literary translation. translation theories L1 interference. Bilingualism types of Role –play conversational English					
Part C-Learning Resources						
Text Books, Reference Books, Other resources						

Suggested Readings:

1 . A communicative grammar of English" Leech Geoffrey, and Jan Svartvik Routledge, 2003 Third edition.

2. CLT for ESL Teachers and Learners" Gautam .GS. Classical Publishing Company, New Delhi India 2012 First ed.

3. Communicative English for Globalization" Gautam GS .Classical Publishing Company, New Delhi India 2030 First edition.

4. Communicative English language skills Sumi Sumague Juheta Arjuna Society Publishing 2020.

5. Communicative Methodology in Language Teaching Brumfit C Cambridge University Press 1984.

6. Language Teaching a Scientific Approach" Lado Robert, McGraw -Hill New York 1964.

7. Motivation -The Teacher's Responsibility" Allwright. Dick ELTS Journal 31st 4 1977...

8. Problems and Principles in Language Teaching Brumfit C Pergamon Institute of English 1980.

9. The Learner -Centred Curriculum" Nunan D Cambridge University Press 1988.

Suggested digital platform weblinks : 1. www.skillsyouneed.com/ips/what-is -communication html .www. slideshare. net/mwakidimi/communication- notes -6910 3614 2 Suggested equivalent online courses: https://www.coursera.org.specializations/improve-english Improve your English Communication Skills Specialization bye Gerry Landers, Amalia B. Stephens, Karen Peterson, Georgia Tech Language Institute. Part D-Assessment and Evaluation **Suggested Continuous Evaluation Methods:** Maximum Marks: 100 **Internal Assessment: Class Test** 15 **Continuous Comprehensive** Assignment/Presentation 10 Evaluation (CCE):25 **Total Marks 25 Section**(**A**) : Three Very Short $03 \ge 03 = 09$ **External Assessment:** Questions (50 Words Each) University Exam Section: 75 Time: 02.00 Hours **Section (B):** Four Short Questions 04 x 09= 36 (200 Words Each) Section (C): Two Long Questions 02 x 15 = 30 Total 75 (500 Words Each) Continuous Comprehensive Evaluation (CCE): 25marks University Exam (UE) 75 marks Any remarks/ suggestions: Tutorial activities (based on syllabus) in the class by students and

Any remarks/ suggestions: Tutorial activities (based on syllabus) in the class by students and teacher are desirable. These will strengthen the student's knowledge of communicative English.

Internal Assessment: Continuous Comprehensive Evaluation (CCE):25	Class Test Assignment/Presentation	15 10 Total Marks 25
External Assessment:	Section(A) : Three Very Short	$03 \ge 03 = 09$
University Exam Section: 75	Questions (50 Words Each)	
Time : 02.00 Hours	Section (B): Four Short Questions	
	(200 Words Each)	$02 \ge 15 = 30$
	Section (C): Two Long Questions	
	(500 Words Each)	

	भाग – अ – परिचय				
कार्य	किम : प्रमाण-पत्र	कक्षाः प्रथम वर्ष वर्षः २०२१ सत्र २१-२२			
	विषय ः प्रयोजनमूलक	हिंदी (Functional Hindi), प्रश्न पत्र प्रथम (वैकल्पिक)			
1	पाठ्यक्रम का कोड	A1-FHIN-1G			
2	पाठ्यक्रम का शीर्षक	हिन्दी और विज्ञापन व्यवसाय			
3	पाठ्यक्रम का प्रकार	जेनेरिक (Generic Elective)			
4	पूर्वापेक्षा (Prerequisite)	इस कोर्स का अध्ययन करने के लिए, छात्र ने किसी भी			
		संकाय/विषय में कक्षा 12वीं अथवा समकक्ष परीक्षा उत्तीर्ण की हो।			
		(Open for all)			
5	पाठ्यक्रम अध्ययन की	आज के वैश्वीकरण एवं बाजारवाद के दौर में विज्ञापन एक			
	परिलब्धियां (कोर्स लर्निंग	सशक्त माध्यम के रूप में उभरकर सामने आया है। विज्ञापन का			
	आउटकम) (CLO)	क्षेत्र अत्याधिक व्यापक एवं बहुआयामी है। न केवल उत्पादन			
		कंपनियों द्वारा वस्तु का प्रचार-प्रसार किया जा रहा है बल्कि			
		जनकल्याण, शैक्षणिक संस्थाओं एवं सूचनाओं के प्रचार-प्रसार में भी			
		विज्ञापनों की महती भूमिका है। हिन्दी आज बाजार की जरूरत बन			
		गयी है। हिन्दी बोलने-समझने वालों की संख्या में आशतीत वृद्धि			
		होने के कारण विपणन–कंपनियों को अपने उत्पाद बेचने के लिए			
		हिंदी में तैयार विज्ञापन की अत्यंत आवश्यकता है। हिंदी भाषा के			
		माध्यम से विभिन्न जनसंचार माध्यमों में विज्ञापन व्यवसाय द्वारा			
		रोजगार की अपार संभावनाएं हैं। विज्ञापन की अवधारणा,			
		आवश्यकता, निर्देश व सिद्वान्त, विज्ञापन-लेखन की रचना-प्रक्रिया			
		से विद्यार्थी को परिचित कराना ही इस पाठ्यक्रम के			
		अध्ययन–अध्यापन का प्रयोजन है।			
		पाठ्यकम के अध्ययन से –			
		1. इस पाठ्यकम के अध्ययनोपरांत विद्यार्थी को प्रिंट मीडिया,			
		इलेक्ट्रॉनिक मीडिया, विज्ञापन एजेंसियों व अन्य संस्थाओं में			
		विज्ञापन-लेखन के माध्यम से रोजगार के अवसर उपलब्ध हो			
		सकेंगे ।			
		2. विभिन्न प्रकार के विज्ञापनों से संबंधित स्लोगन, गीत,			
		जिंगल-लेखन, तुकांत कविता, रेखाचित्र, बैनर, पोस्टर,			
		रंग-संयोजन, कैलेंडर निर्माण आदि के कौशल का विकास			

		विद्यार्थी में हो सकेगा।
		3. अपने देश समाज एवं क्षेत्र विशेष के उपभोक्ता की रूचि,
		कय-शक्ति एवं वस्तु की मांग से विद्यार्थी विज्ञापन-लेखन के
		दौरान परिचित होगा, जिससे उसमें विश्लेषण क्षमता का विकास
		हो सकेगा।
		4. विज्ञापन की तथ्यात्मक बनाने के लिए विद्यार्थी विभिन्न उत्पाद
		कंपनियों के उत्पादों की जानकारी प्राप्त करने का प्रयास करेगा
		जिससे उसमें तुलनात्मक एवं तार्किक विवेचन की क्षमता का
		विकास होगा, जिससे वह स्वयं का व्यवसाय आरंभ करने के
		लिए भी प्रेरित हो सकेगा।
		5. विज्ञापन–लेखन के अभ्यास से विद्यार्थी में कल्पनाशीलता,
		रचनात्मक एवं भाषा के विविधता भरे कौशल की अभिवृद्धि
		होगी ।
6	केडिट मान	सैद्वान्तिक – ४
7	कुल अंक	अधिकतम अंक २५+७५ न्यूनतम उत्तीर्ण अंक : ३३

	भाग – ब – पाठ्यकम की विषयवस्तु			
व्याख्यात की कुल संख्या – ट्यूटोरियल – प्रायोगिक (प्रति सप्ताह घंटे में) : 3 घण्टे प्रति सप्ताह (L- T-P: 3-0-0) कुल व्याख्यान : 60				
इकाई	विषय (Topics)	व्याख्यान की संख्या		
Ι	विज्ञापन : अर्थ, परिभाषा एवं विशेषताएँ।			
	विज्ञापन का उद्देश्य, आवश्यकता एवं महत्व।			
	विज्ञापन और व्यापार का संबंध।	1 5		
	विज्ञापन का इतिहास और विकास।			
	विज्ञापन ः कानून और आाचार संहिता।			
II	विज्ञापनों का वर्गीकरण,			
	विज्ञापन के प्रमुख अंग और आधारभूत सिद्धान्त।			
	विज्ञापन – निर्माण की प्रविधि ः प्रारूप-निष्पादन,	1 5		

	अभिकल्पना (डिजाइन) और अभिविन्यास (ले–आउट)।			
	विज्ञापन–भाषा की विशिष्टताएँ एवं भाषा–संरचना।			
III	विज्ञापन के विविध माध्यम –			
	मुद्रण माध्यम – समाचार पत्र, पत्रिकाएँ।			
	श्रव्य माध्यम – रेडिया, एफ.एम. रेडियो, मुनादी।	1 5		
	दृश्य श्रव्य माध्यम – टी.वी., इंटरनेट, मोबाईल, सोशल			
	मीडिया, ई-विज्ञापन।			
	अन्य माध्यम – होर्डिंग, पोस्टर, बैनर, पर्चे, स्टीकर, प्रदर्शनी			
	आदि ।			
IV	विज्ञापन के नए संदर्भ ः प्रायोजित कार्यक्रम।			
	विज्ञापन का उपभोउक्ता बाजार एवं अर्थव्यवस्था पर प्रभाव।			
	हिन्दी विज्ञापनों से जुड़ी प्रमुख एजेन्सियों का परिचय।	1 5		
	हिंदी भाषा के विकास में विज्ञापनों की भूमिका।			
सार बिन्दु	(की वर्ड)/टैंग : विज्ञापन, विज्ञापन-भाषा, मुद्रित माध्यम, दृश्य-श्र	व्य माध्यम, सोशल मीडिया,		
	ई-विज्ञापन, विज्ञापन एजेंसी, ले-आउट, अभिकल्पना, रि	डेजाइन		
भाग–स – अनुशंसित अध्ययन संसाधन				
पाट्य पुस्तकें, संदर्भ पुस्तकें, अन्य संसाधन				
अनुशंसित ः	सहायक पुस्तकें / ग्रंथ / अन्य पाठ्य संसाधन / पाठ्य सामग्री	:		
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 पाण्डेय, कैलाश नाथ – ''विज्ञापन बाजार और हिंदी'' – वाणी प्रकाशन, दिल्लीसं.−2018 				
7. पाण्डेय, आशा – ''हिंदी विज्ञापनों की भाषा'' – ब्लेकी एण्ड पब्लिशर्स प्रा.लि., दिल्ली, सं.–1986				
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१०. मोह	न, महेन्द्र – ''एडवरटायजिंग मेनेजमेंट'' – मेंग्रोनिल एजुकेशन	इंडिया, सं२०१७		
11. शम	र्ग, कुमुद – ''विज्ञापन की दुनिया'' – प्रभात प्रकाशन, दिल्ली, र	मं.−2010		

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1. www.ndl.iitkgp.ac.in. (National Digital Library of India)
2. <u>http://www.csttpublication.mhrd.gov.in/</u>
3. http://ugcmoocs.inflibnet.ac.in/
4. <u>http://ugcmoocs.inflibnet.ac.in/</u>
5. <u>http://ugcmoocs.inflibnet.ac.in/</u>
6. <u>http://www.swayamprabha.gov.in/</u>
7. www.mghv.in

Part A Introduction					
Program : Certificate Class:B.A.1 st Year Year: 2021			Session :2021-2022		
	Subject : Psychology				
1	Course Code		A1-BECO-10	Ĵ	
2	Course Title			Organizationa	l Behavior
3	Course Title (Core				
	Course/Elective /Gene Elective /Vocational/	eric	Elective		
4	Pre- requisite (if any)	<u></u>	-		
5	Course Learning outco	omes	The course	will enable the student	s t develop an understanding
-	(CLO)		of the princi	iples of human behavio	or in organizations with
			relevance of	f the Indian business co	ontext
6	Credit Value		Televance of	t the mutan busiless co	Theory (
0	Tetal Marka		Mar Marin		Min Dessing Markey 22
/	I otal Marks		Max. Marks	5: 25+75=100	Min. Passing Marks: 33
Part B Content of the Course-GE Subject-I (Organizational Behavior) Total No. of Lectures –Tutorials –Practical (in hours per week):				Behavior) er week):	
			Tatal Na of	Lasturas 00	
I.I.a.it	Toniog		Total No. of	Lectures=90	No. of Lootunes
	I OPICS				No. of Lectures
Unit I	ILI INTRODUCTION:				12
skills and activities: Disciplines that contribute to OB.					
Opportunities for OB(Globalization, Indian workforce diversity,					
customer service, innovation and change, networked					
organizations, work-life balance, people skills, positive work					
environment, ethics					
Keywor	rds /Tags : Organizatio	nal Beha	vior(OB); Gl	obalization; Innovation	n; change; Networked
organiza	ations; Work-Life balan	ce; peop	le skills; Env	ironment; ethics	
Unit II	INDIVIDUAL BEHA	AVIOU	R:	· · · · · · · · · · · · · · · · · · ·	13
	1. Learning, attitude	and job	satisfaction	concept of learning,	
	conditioning, shaping	and rein	forcement. C	oncept of attitude,	
	components, behavior	and atti	tude. Job satis	sfaction: causation;	
	impact of satisfied employees on workplace.				
2. Motivation: Concept, Theories (Hierarchy of needs, X and ,					
Two factor, McClelland, Goal setting, Self-efficacy, Equity					
theory); Job characteristics model; Redesigning job and work					
arrangement; Employee involvement; Flexible benefits, Intrinsic rewards					
3.Personality and Values: Concept of personality; Myers-					
Briggs Type Indictor(MBTI): Big Five model. Relevance of					
values; Indian values; Linking personality and values to the					
workplace(person-job fit, Person-organization fit)					
	4. Perception, Decisi	on Maki	ing and Emo	tions: Perception	
	and Judgments; Factors; linking perception to individual				
	decision making; Decision making in organizations, Ethics in				
	decision making, Emotional labour; Emotional Intelligence				
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decision making emotions 11 III GROUP BEHAVIOUR: 11 I.Group and Work Teams: Concept; five stage model of group development; Group think and shift; Indian perspective on group norms. Groups and teams; Types of teams; Creating team players from individuals; Team building and team based work(TBW) 11 2.Leadership: Concept; Trait Theories; Behavioral Theories(Ohio and Michigan studies); Contingency theories(Fiedler, Hersey and Blanchard, Path-goal); Authentic leadership; Mentoring, Self leadership, online leadership; Inspirational Approaches(transformational, Charismatic); Comparison of Indian Leadership styles with other countries. Exercises, games and role plays may be conducted to develop team and leadership skills VI ORGANISATIONAL CULTURE AND STRUCTURE: Concept of culture; impact(functions and liability);creating and sustaining culture; Employees and culture; Creating positive and ethical cultures. Concept of structure, Prevalent organizational designs, New Design options. 12 VI ORGANISATIONAL CHANGE, CONFLICT AND POWER: Forces of change; planned changes; Resistances; Approaches(Lewin's model, Organizational Development); Learning organization; Organisational change in Indian businesses. Concept of conflict; Traditional ivex and interactions view of conflict; Conflict process; Functional/Dysfunctional. Introduction to power and politics. 12	Keywor	ds /Tags: Learning; Attitude; Job satisfaction ; Motivation; person	ality; values; perception;
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VI ORGANISATIONAL CULTURE AND STRUCTURE: 12 Concept of culture; impact(functions and liability);creating and sustaining culture; Employees and culture; Creating positive and ethical cultures. Concept of structure, Prevalent organizational designs, New Design options. 12 Keywords /Tags :Culture ; structure V ORGANISATIONAL CHANGE, CONFLICT AND POWER: Forces of change; planned changes; Resistances; Approaches(Lewin's model, Organizational bevelopment); Learning organization; Organisational change in Indian businesses. Concept of conflict; Traditional view and interactions view of conflict; Conflict process; Functional/Dysfunctional. Introduction to power and politics. 12			
VI OKGARUSATIONAL CULTOKE AND STRUCTOKE: 12 Concept of culture; impact(functions and liability);creating and sustaining culture; Employees and culture; Creating positive and ethical cultures. Concept of structure, Prevalent organizational designs, New Design options. 12 Keywords /Tags :Culture ; structure V ORGANISATIONAL CHANGE, CONFLICT AND 12 V ORGANISATIONAL CHANGE, CONFLICT AND 12 POWER: Forces of change; planned changes; Resistances; Approaches(Lewin's model, Organizational Development); Learning organization; Organisational change in Indian businesses. Concept of conflict; Traditional view and interactions view of conflict; Conflict process; Functional/Dysfunctional. Introduction to power and politics.	VI	ODCANISATIONAL CULTUDE AND STDUCTUDE.	13
Concept of culture, impact(functions and nability), cleating and sustaining culture; Employees and culture; Creating positive and ethical cultures. Concept of structure, Prevalent organizational designs, New Design options. Keywords /Tags :Culture ; structure V ORGANISATIONAL CHANGE, CONFLICT AND POWER: Forces of change; planned changes; Resistances; Approaches(Lewin's model, Organizational Development); Learning organization; Organisational change in Indian businesses. Concept of conflict; Traditional view and interactions view of conflict; Conflict process; Functional/Dysfunctional. Introduction to power and politics.	VI	Concern of cultures impact (functions and lightlifty) creating and	12
sustaining culture, Employees and culture, Creating positive and ethical cultures. Concept of structure, Prevalent organizational designs, New Design options. Keywords /Tags :Culture ; structure V ORGANISATIONAL CHANGE, CONFLICT AND 12 POWER: Forces of change; planned changes; Resistances; Approaches(Lewin's model, Organizational Development); Learning organization; Organisational change in Indian businesses. Concept of conflict; Traditional view and interactions view of conflict; Conflict process; Functional/Dysfunctional. Introduction to power and politics.		sustaining culture: Employees and culture: Creating positive and	
Image: Second problem in the structure of structure, if revalent organizational designs, New Design options. Keywords /Tags :Culture ; structure V ORGANISATIONAL CHANGE, CONFLICT AND 12 POWER: Forces of change; planned changes; Resistances; 12 Approaches(Lewin's model, Organizational Development); Learning organization; Organisational change in Indian 12 businesses. Concept of conflict; Traditional view and interactions view of conflict; Conflict process; Functional/Dysfunctional. Introduction to power and politics.		ethical cultures. Concept of structure. Prevalent organizational	
Keywords /Tags :Culture ; structure V ORGANISATIONAL CHANGE, CONFLICT AND 12 POWER: Forces of change; planned changes; Resistances; 12 Approaches(Lewin's model, Organizational Development); Learning organization; Organisational change in Indian 12 businesses. Concept of conflict; Traditional view and interactions view of conflict; Conflict process; Functional/Dysfunctional. Introduction to power and politics.		designs New Design options	
V ORGANISATIONAL CHANGE, CONFLICT AND 12 POWER: Forces of change; planned changes; Resistances; 12 Approaches(Lewin's model, Organizational Development); 12 Learning organization; Organisational change in Indian 12 businesses. Concept of conflict; Traditional view and 11 interactions view of conflict; Conflict process; 12 Functional/Dysfunctional. Introduction to power and politics. 12	Keywor	designs, reev besign options.	
POWER: Forces of change; planned changes; Resistances; Approaches(Lewin's model, Organizational Development); Learning organization; Organisational change in Indian businesses. Concept of conflict; Traditional view and interactions view of conflict; Conflict process; Functional/Dysfunctional. Introduction to power and politics.	V	ORGANISATIONAL CHANGE, CONFLICT AND	12
Forces of change; planned changes; Resistances; Approaches(Lewin's model, Organizational Development); Learning organization; Organisational change in Indian businesses. Concept of conflict; Traditional view and interactions view of conflict; Conflict process; Functional/Dysfunctional. Introduction to power and politics.		POWER:	
Approaches(Lewin's model, Organizational Development); Learning organization; Organisational change in Indian businesses. Concept of conflict; Traditional view and interactions view of conflict; Conflict process; Functional/Dysfunctional. Introduction to power and politics.		Forces of change: planned changes: Resistances:	
Learning organization; Organisational change in Indian businesses. Concept of conflict; Traditional view and interactions view of conflict; Conflict process; Functional/Dysfunctional. Introduction to power and politics.		Approaches(Lewin's model, Organizational Development):	
businesses. Concept of conflict; Traditional view and interactions view of conflict; Conflict process; Functional/Dysfunctional. Introduction to power and politics.		Learning organization: Organisational change in Indian	
interactions view of conflict; Conflict process; Functional/Dysfunctional. Introduction to power and politics.		businesses. Concept of conflict: Traditional view and	
Functional/Dysfunctional. Introduction to power and politics.		interactions view of conflict; Conflict process;	
		Functional/Dysfunctional. Introduction to power and politics.	
Keywords /Tags : Change: Resistance: Conflict: Power: Politics	Keywor	ds /Tags : Change: Resistance: Conflict: Power: Politics	

Part C-Learning Resources				
Text Bo	ok, Reference books, other resour	ces		
Suggested Reading:				
1. Luthans Fred, "Organizationa	ll Behaviour",McGraw Hills			
2. Hellriegel, Slocum and Wood	lman, OB,South-western, Thomson	leaning,9 th ed. 2001		
3. Behavior in organization, Jera	ald Greenberg, 8 th ed, pearson edu			
4. Arnold, John, Robertson, Ivan behavior in the workspace" M	t. and cooper, cary,I, "Work psycho Iacmillan India Ltd. Delhi.	logy: understanding human		
5. Dwivedi, R.S:"Human relation	ns and organizational behavior: A g	obal perspective". Macmillan		
India Ltd. Delhi.	5 5			
Suggestive equivalent online course	s:			
1. https://www.coursera.org/courses?course	<u>query=economics</u>			
2. https://www.mooc-list.com/tags/ec	onomics			
3. <u>https://www.coursera.org/learn</u>				
4. https://ocw.mit.edu/courses				
5. https://nptel.ac.in/courses/macroeco	onomics			
6. https://nptel.ac.in/courses/econom	ics			
7 https://nptel.ac.in/courses/manage	rial economics			
Part D-Assessment and Evaluation				
Suggested Continuous Evaluation Me	thods:			
Maximum Marks:100				
Continuous Comprehensive Evaluation	on (CCE): 25			
University Exam (UE) 75 marks				
Time: 02:00 Hours				
Internal Assessment:	Class Test	15		
Continuous Comprehensive	Assignment/Presentation	10		
Evaluation(CCE):	Total	25		
Evidential Assessment:	Section (A): Three Very Short	03*03-00		
L'Alemai Assessment.	Ouastions(50Words Each)	05.03-03		
University Exam:	Questions(JUW ords Each)	0.4*00-26		
	Section(B): Four very Snort	04*09=30		
	Questions(200Words each)	0000		
	Section(C):Two Long	02*15=30		
	Questions(500Words Each)			
		Total 75		

Dout A Justice duration					
Program:Class:Certificate/Diploma/YearDegree		B.A.1 st	Year: 2021	Session :2021-2022	
		1	Subj	ect : Political scie	nce
1	Course Code		A1-POS	C-1G	
2	Course Title			Indian pol	itical system
3	Course Title (Core Course/Elective /Generic Elective /Vocational/			Elective	
4	Pre- requisite (if ar	ıy)	To study the Student of	nis course, a stude any subject can st	nt must have passed 12 th udy this course.
5 Course Learning outcomes (CLO)		 Students will be able to understand nature of Indian political System and its determinates. They will be able to answer questions related to the functions and role of the president, prime Minister, parliament and Supreme Court, party system in the institutional settings of Indian political system. They will be a able to understand basic problems of Indian political system. They will be able to identity the challenges of Indian political system. 			
6	Credit Value		Theory-6		Theory-6
7	Total Marks		Max. Mark	ks; 25+75	Min. Passing Marks: 33
		Par	t B- Conter	nt of the Course	41
Total I	no of Lectures – Tuto	riais –P	ractical (in	nours per week	: 4 nours per week
Unit Topics					No. of Lectures
I	Fundamentals of India Indian political system			23	
	 Nature of Indian political system. Determinants of Indian political system. 2.1 Salient Features of Indian Constitution 2.2 preamble 				
 2.3 fundamental rights 2.4 Directive principles of state policy 3. Federal system 4. Parliamentary system 					

II	Institutional	setting of Indian political system	23		
	1.	Role of functions of president, prime			
		Minister and Council of Ministers			
	2.	Parliament and its working			
	3.	Supreme Court and judicial Review			
	4.	Panchayati raj Institutes			
III	Problem	ns of Indian political system :	22		
	1.	Linguism.			
	2.	Regionalism			
	3.	Casteism			
	4.	Communalism			
IV	Challen	ges of Indian political system :	22		
	1.	Poverty			
	2.	Social justice			
	3.	Gender justice			
	4.	Defection politics			
	5.	Election Reforms			
Keywords/ Tags					
		Part C-Learning Resources			
		Text Books, Reference Book, Other resources			
Suggested Readings:					
00	1- Austin,G	"The Indian Constitution: Cornerstone of a Nation"	', Oxford University		
	press, Del	hi,1966.	1 · · · · ·		
	2- Basu,D.D	"Introduction to the Constitution of Indian",24 th	edition,LexixNexi		
	3- Publication, Gurgaon, Haryana, 2020.				
	4- Jayal, Nirja Gopal and pratap Bhanu Mehta, Companion to politics in India student				
/	tunion, C Kashayan S	Syloid Oniversity press New defin: 2010.	Constitution and		
Const	titutional law"	National Book Trust India 2011	Constitution and		
5- Kashayan subhash "Constitution of India" National Book Trust India 2004					
6- Kaviraj, "politics in india", Oxford University press Delhi. 1970.					
7. Kothary, R, Politics in India", orientLongman, New Delhi, 1970.					
8	8. M. Laxmika	nt, Indian polity", McGraw Hill Education	-		
	0.11		11'1' 11		
	9- Narang, A	A.S "Indian Govertment and politics", Geetanjali pu	blishing House, New		
1	Delhi, 199	b (Latest edition)	coming Dalli: 2010		
	10-Sharma, B.K.' Introduction to the Constitution of india', PHI Learning Delhi, 2019. 11- Pylee, M.P., Saxena, R "Federalizing India in the age of Globalizations", primus Book.				

¹¹⁻ Pylee, M.P.,Saxena, R "Federalizing India in the age of Globalizations", primus Book, New Delhi, 2013.

Suggestive digital platforms web links

¹²⁻ Roy, H& Singh, M.P. Indian POLITICAL System", Pearson, Delhi 2018.

1. <u>https://WWW.Jstor.org/stable/</u>	/2125628?seq = 1	
2. <u>https://politicalscience.stanfor</u>	<u>d.edu/research/</u> political- theory	
3. https://link. Springer. Com/ref	erenceworkentry/10.1007%2f978	-1-4020-8265-8-1431
4. https:// www. YouTube. Watc	h? v= fd TNIx52weg	
	_	
Suggestive equivalent online cour	rses:	
NPTL- Introduction to political The	eory by Prof. Mithlesh kumar jha.	IIT gwahati
-		
Р	Part D-Assessment and Evaluation)n
Suggested Continuous Evaluation	n Methods:	
Maximum Marks:100		
Continuous Comprehensive Evalua	ation (CCE): 25marks University I	Exam (UE) 75 marks
Internal Assessment:	Class Test	15
Continuous Comprehensive	Assignment/Presentation	10
Evaluation(CCE):25	-	
External Assessment:	Section (A): Three Very Short	03x03=09
University Exam Section:	Questions(50Words Each)	
75	Section(B): Fore Short	04x09=36
Time:02.00 Hours	Questions(200Words each)	
	Section(C):Two Long	02x15=30 Total 75
	Questions(500Words Each)	
Any remarks suggestions:		

		D-			
Program	m :certificate Course	Pa Class:B.A.1 Year	rt A IntroductionstYear: 2021	Session :2021-2022	
	Subject :Sociology	- • • •	L		
1	Course Code	A1-9	OCI-1G		
2	Course Title		Introduc	ction to Sociology	
3	Course Title (Core C /Elective /Generic El /Vocational/	ourse ective	Elective		
4	Pre- requisite (if any) This exce	is an elective paper oper opt those who have opter	en for all B.A. 1 st Year Students, d Sociology as core paper	
5	Course Learning out (CLO)	comes	 This course will enhance the conceptual Learning and understanding of the basic concept used in Sociology. The Paper will contribute in enriching the vocabulary and scientific temperament of the student about human society. In this course student will get information about employment opportunities related to the discipline of Sociology. The Course will provide Knowledge about social- cultural processes. 		
6	Credit Value		The	eory-4	
7	Total Marks	Max	. Marks; 25+75	Min. Passing Marks: 33	
Total n	o of Lasturas Tutoria	Part B-	Content of the Course	houng non wook	
Unit	Topics	is – Fractical	(III HOURS PET WEEK): 0	No. of Lectures	
I	Emergence of Sociolo 1.Tradition of In 2 Sociology)gy dian Thinking	Ş	10	
	2.1 Meanir 2.2 Scope 2.3 Subject 2.4 Nature 2.5 Import 3.Development o 4. Job opportunit	ng Matter ance f Sociology ies in Sociology	٥v		
Keywor	rds /Tags : Emergence	of Sociology	Tradition of Indian Thi	nking, Development of Sociology,	
		opportunities	in Sociology		
Importa	nce of Sociology, Job	opportunities			
Importa II Kevwo	nce of Sociology, Job Basic Concepts : 1. Society 2. Relation b 3. Communit 4. Institution 5. Associatio 6. Social Gro 7. Status and rds /Tags : Relation bet	etween Individ y n up Role ween Individu	dual and Society	12 Structure, Social Group, Social	

Г

ш	Social Organization and Institutions:	12
111	(Concept Emergence Development Forms and Challenges)	12
	1 Family	
	2. Kinship	
	3. Marriage	
	4. Caste, Class and Power	
	5. Race	
Keywoi	ds /Tags : Social Organization, Social System, Social Institution, C	lass, Kinship, Race in
Sociolo	gy	
VI	Social Cultural Processes :	14
	1.Culture	
	1.1 Meaning	
	1.2 Characteristics	
	1.3 Types	
	1.4 Culture and Civilization	
	2. Socialization	
	2.1 Meaning	
	2.2 Characteristics	
	2.3Stages	
	2.4 Agencies	
	3.Social processes	
	3.1 Cooperation	
	3.2 Accommodation	
	3.3 Competition	
	3.4 Conflict	
Kowwo	de Tage : Cultura Social Process Civilization Socialization Coo	poration
V	Social Control and Change:	12
v	1 Social Control	12
	1.1 Concept	
	1.1 Concept 1.4 Means of Social Control	
	2 Social Stratification	
	2.1 Concept	
	2.2 Bases	
	3.Social Change	
	3.1 Meaning	
	3.2 Characteristics	
	3.3 Factors of social Change	
	3.4 Patterns of social change	
Keywoi	rds /Tags : Social Control, Social Stratification, Social Change, Fa	ctors of Social change, Patters
of Socia	l Change.	Ū.
	Part C-Learning Resources	
Suggest	ed Readings:	
1-Macly	ver, Robert M& Charles Hunt Page (1949) Society: An Introductory	Analysis, New York.
2- Betei	lle Andre (1965) Caste Class &Power, California University, Berkc	ley.
3-Ghury	GS (1961) Caste Class & Occupation, Popular Book Depot.,Bomb	ay.
4-Ogbur	rn &Nimkof (1947) Hand Book of Sociology, K.Paul, Trench, Preb	ner and Comp. LTD. London.
5- Gidd	ens,A.(2006).Sociology (5 th ed.).Oxford University Press.London	
6-Horto	n and Hunt .(1964)Sociology – TheDispline and its Dimensions:	New Central Book Agency,
Calcutta	ι.	

Sri SatyaSai University of Technology & Medical Sciences, Sehore (M.P.)

7- Johson Harry M (1988)Sociology-	A Systematic Introduction Allied Pu	blisher Pyt Ltd. New Delhi
		4
8–दुव श्यामाचरण(1993) मानव आर २ 	स्कात, राजकमल प्रकाशन, नइ दिल्ल	1,
9–आहुजा राम (2008) समाजशास्त्र वि	विचना और परिप्रेक्ष्य, रावल पब्लिकेशन	।, जयपुर
10– अग्रवाल जी के (2018) समाजशा	स्त्र की Pमूल अवभारणसंंटलाकि त्य भवन	न पब्लिकेशन,आगरा
Program:Certificate/Diploma/Deg 11 सिंह जे पी (2019) रामाजशारत अ	rree Class: 1 Year Xea विधारणाये एवं सिद्धन्ति , रावल पब्लि	r:2021 Session:2021-22
 12– बधेल डी एस (2020) समाजशास	त्र, कैलाश पुस्तक सदन, भोपाल	
13– पाटिल अशोक डी एवं भदौरिया	्र एस एस (2015) समाजशास्त्र परिचय,	मध्यप्रदेश हिन्दी ग्रन्थ अकादमी,
भोपाल	· · /	
Suggestive digital platforms web lin	hke	
https://nios.ac.in/online-course-mater	ial/sr-secondary-courses/Sociology-(3	331).aspx
Suggestive equivalent online course	s:	
IGNOU & Other centrally/stste opera	ted Universities /MOOC platforms as	s "SWAYAM" in india and
Abroad.		
I	Part D-Assessment and Evaluation	
Suggested Continuous Evaluation N	Aethods:	
Maximum Marks: 100		
Continuous Comprehensive Evaluation	on (CCE): 25marks University Exam	(UE) /5 marks
Internal Assessment:	Class Test	15
Continuous Comprehensive	Assignment/Presentation	10
Evaluation(CCE):23	Section (A): Three Very Short	02 + 02-00
External Assessment:	Questions(50Words Each)	03 X 03-09
75	Section(B): Fore Short	$0.4 \times 0.0-36$
Time:02.00 Hours	Questions (200Words each)	0+ A 07-J0
	Questions(200 words each)	$0.2 \times 15 - 20 \text{Totol} 75$
	Quastions(500Words Each)	$02 \times 13 = 3010$ tal /3
Any nomentic suggestions.	Questions(300 words Each)	
Any remarks suggestions:		

	Sub	ject: NCC		
1	Course Code			
2	Course Title	NCC Awareness		
3	Course Type(Core	Elective		
	course/Elective/Generic			
	Elective/Vocational/)			
4	Pre-requisite (if any)	To study this course ,a study	udent must ha	ve passed
		12 th with any subject and	must be medi	cally fit. This
		course can be opted as an	elective and	it is open for
5	Course Learning	all The students will develor	a conce of re	noncibility
5	outcomes(CLO)	and there by display sens	e of patriotism	sponsionity
	outcomes(CEO)	values discipline improv	e bearing and	develop the
		quality of immediate and	implicit obed	ience of good
		things. This paper will en	able the stude	nts to build
		and develop leadership th	rough commu	inication. The
		significant relationship be	etween person	ality traits
		and leadership will be acl	hieved and ex	ecuted.
6	Credit value	04		
7	TotalMarks	Max.Marks: 25+75	Min.Passing	Marks:33
	Part B- Con	tent of the Course		
	Total numbers of Lectures(in Total lectures:60]	hours per week) :2hours Hours L-T-P (02-00-00)	s per week	
Unit	Topics			No of
	-			Lectures
Ι	History of National Cadet Co	orps:		15
	National Cadet corps o	of Independent india		
	National Cadet corps A	Act,1948		
	Motto of National Cad	et corps		
	• Aims and Objectives.			
	Emblem,NCCflag.NCC	C song.		
	Organization of NCC-	Army.Navy and Air Wing.		
	Training centres of NC	CC		
II	Introduction to Defence Serv	vices		15
	• Army, Navy and Air F	orce.		
	Organizational Structu	re in Charts		
	• Regimental Structure:	command and control		
	Badges and Ranks: Arn	ny, Navy,Air Force		
TIT	Honors and Awards.			15
111	Introduction to person	lity dayslopmont		15
	Eactors influencing and	d shaping the personality		
	Team work and team h	u shaping the personality	lettes and	
	manners Decision mal	king and problem solving	Change	
	vour mind set	and the problem solving,	Chunge	
IV	Leadership:			15
_ ·	Introduction and typeo	f Leadership		
	• Leadership traits	L		

• How to develop leadership.
Leadership case study(Field Marshal General Sam
H.F.J.Manekshaw and General K.M Cariappa)
First Aid:
• Scope and objectives
• First aid in common emergencies, Dressing of Wounds.

	Part C- Learning Resources				
	Text Bo	ooks, Reference Books, Ot	ther resources		
Sug	gested Readings:				
S No	Name of Writers	Name of Book	Name of Publishers	Year of publicatio n	
1	Sabharwal,D.P	Personality Development	Finger print publishing,India	2015	
2	Sabharwal,D.P	Personality Development(Hindi)	publishing,India	2021	
3	Gurav, Aarti	50 Mantras of Personality Development	Buzzing stock Publishing	2013	
4	Vasudeva, Sangeetha	Personality Development	Clever Fox publishing	2021	
5	Kapoor ,Shikha	Personality Development and Soft skills	Dream Tech Press	2020	
6	Sinha, Surya	Complete Personality Development course (Hindi)		2012	
7	Agrawal,(Dr.) Vijay	Student and Personality Development (Hindi)	Benteen Books	2012	
8	Shekhar,(Dr0. Priyanshu	Personality Development guide (Hindi)	PrabhatPrakashan	2016	
9	Anand, Arunsagar	Personality Development Course (Hindi)	V & S Publication	2013	
10	Sharma, Robin	Leadership Wisdom	Jaico publishing House	2003	
11	Maxwell, John C	5-Levels of leadership	Cross liance	2014	
12	Dravid,Rahul and Iyer,Prakash	The Secret of Leadership	Penguin ,India	2020	
13	Dr. Bomi	The Leadership Handbook		2020	
14	Bindra, Vivek	Everything about Leadership	Diamond Pocket Books	2018	
15	Carnegie,Dala	The Leader in you	Amazing reeds	2018	
16	Subramanian,Ramesh and	Leadership by Values	Notion Press	2020	

lanivannan,C.andMan annan,T.Latha opli,Harvinder and harma, Nirmal in,N>C>and Saakshi ippa,Dr.Keech upta,RK	Text Book of FirstAid and Emergency Nursing Emergency First aid Safety Oriented First Aid and Emergency Case Practical Guide to First Aid NCC National Cadet Corps(Hindi & English)	EMMESS Medical Publishers CBS Publishers AITBS Publishers Anees Publishing House Ramesh Publication	2020 2019
annan,T.Latha opli,Harvinder and harma, Nirmal in,N>C>and Saakshi ippa,Dr.Keech upta,RK	Emergency Nursing Emergency First aid Safety Oriented First Aid and Emergency Case Practical Guide to First Aid NCC National Cadet Corps(Hindi & English)	Publishers CBS Publishers AITBS Publishers Anees Publishing House Ramesh Publication	2019
opli,Harvinder and harma, Nirmal harma, Normal hin,N>C>and Saakshi hppa,Dr.Keech upta,RK	Emergency First aid Safety Oriented First Aid and Emergency Case Practical Guide to First Aid NCC National Cadet Corps(Hindi & English)	CBS Publishers AITBS Publishers Anees Publishing House Ramesh Publication	2019
harma, Nirmal in,N>C>and Saakshi ppa,Dr.Keech upta,RK	Oriented First Aid and Emergency Case Practical Guide to First Aid NCC National Cadet Corps(Hindi & English)	AITBS Publishers Anees Publishing House Ramesh Publication	2019
in,N>C>and Saakshi ppa,Dr.Keech upta,RK	First Aid and Emergency Case Practical Guide to First Aid NCC National Cadet Corps(Hindi & English)	AITBS Publishers Anees Publishing House Ramesh Publication	2019
ippa,Dr.Keech upta,RK	Practical Guide to First Aid NCC National Cadet Corps(Hindi & English)	Anees Publishing House Ramesh Publication	
upta,RK	NCC National Cadet	House Ramesh Publication	
upta,RK	NCC National Cadet	Ramesh Publication	
	Corns(Hindi & English)		2021
	Hand Book of NCC	Kanti Publication,	2017
		Itawa	
	Hand Book of NCC an	Naveen Publication	2019
	unique book for NCC		
	Cadets		
anjan, Shashi and 1mar.Aashish	Hand Book of NCC	Goodwin Publication	2021
hauhan,Lt(Dr) Rajeev	NCC National Cadet Corps	Aakriti publication	2021
1111ai	Cadata Hand book	NCC Directorate	
	Cadels Halld book	Mp & C G	
ovel Heriom	Personality Davalonment	M.p.& C.U Kalpaz Dublication Indi	
0yal,11a110111	Personanty Development	Kaipazr ublication, indi	
litra Barun K	Personality Development	a Oxford University	
	and Soft Skills	Press India	
lishra Rajeev k	Personality Development	Runa and Company	
lisilia, Najeev k	Transform Yourself	India	
	njan, Shashi and mar,Aashish auhan,Lt(Dr) Rajeev mar oyal,Hariom tra,Barun K shra, Rajeev k	unique book for NCC Cadetsnjan, Shashi and mar, AashishHand Book of NCCnauhan,Lt(Dr) Rajeev marNCC National Cadet CorpsCadets Hand bookCadets Hand bookoyal,HariomPersonality Developmentitra,Barun KPersonality Development and Soft Skillsishra, Rajeev kPersonality Development- Transform Yourself	unique book for NCC CadetsGoodwin Publicationnjan, Shashi and mar,AashishHand Book of NCCGoodwin Publicationauhan,Lt(Dr) Rajeev marNCC National Cadet CorpsAakriti publicationCadets Hand bookNCC Directorate M.p.& C.GNCC Directorate M.p.& C.Goyal,HariomPersonality Development and Soft SkillsKalpazPublication,Indi atra,Barun KPersonality Development and Soft SkillsOxford University Press Indiashra, Rajeev kPersonality Development- Transform YourselfRupa and Company India

Suggested equivalent online courses:

Par	rt D- Assessment and Evaluation	
Suggested Continuous Eval	uation Methods:	
Maximum marks: 100 Continuous Comprehensive Evaluat	ion(CCE): 25 Marks University Exam (UE) 75 Marks	
Internal Assessment: Continuous Comprehensive Evaluation(CCE): 25 Marks	Class Test Assignment/Presentation	15 10
External Assessment: University Exam Section:75	Section(A): ThreeVery Short Questions(50 words Each)	03x03=09
Time ; 02.00 Hours	Section(C): Two Long Questions (500 Words Each)	04x09=30 02x15=30 Total 75
		1018175

Any remarks/Suggestions: NIL

Part A Introduction

Progr	am:	Class: 1 Year	Year:202	21 Sess	ion:2021-22	2
Certif	icate/Diploma/Degree		~			
		Subject: NC	<u>C</u>			
1	Course Code		NBCOS	SE(Y-106P		
2	Course Title		NCC	Training		
3	Course Type(Core		El	ective		
	course/Elective/Gen	neric				
	Elective/Vocational	/)				
4	Pre-requisite (if any	y) To study	this course ,a	student mus	t have	
		passed 12	^{2^m} with any su	ubject and m	ust be	
		medically	fit. This cou	rse can be op	oted as an	
		elective a	nd it is open	for all		
5	Course Learning	Aim of th	e Course is to	o inculcate a	sense of	
	outcomes(CLO)	discipline	e, create self c	confidence ar	nd to create	a
		human re	source of org	anized,traine	d youth and	
		to develo	p the quality	of immediate	e and implic	it
		the obedie	ence of order	s. Trained the	e youth to	
		meet any	medical eme	rgency by giv	ving aid.	
6	Credit value	02		1		
7	TotalMarks	Max.Mar	ks: 25+75	Min.Passin	gMarks:33	
	Pa	rt B- Content of th	ne Course			
Tot	al numbers of Lectures-	Tutorials-Practica	al (in hours j	per week) :2	hours per	
		week				
		L-T-P:00-00-	01			
S.No) Topics				No of	No of
					Lectures	Tutorial
UNII	-I Drill:				15	
	General and	Words of comma	nd:Attention	n,Stand at		
	ease, Stand e	easy.				
	Turning; Rig	ght turn,Left Turi	n and About			
	turn.Sizing,	Forming up in the	ee ranks. Ni	imbering		
	and dressing	g of Troupe.	-			
	Salute in Ari	my, Navy and Air	Force,			
	Its description	on and training. F	alling out an	d		
TINIT	Dismissing.		1 . (NI	4 1. 0	1 7	
	- Group Discussion o	n current topics a	nd issues(ina	itional &	15	
11	Dublic Speels	ing/Extomnour				
	• Fublic Speak					
	• FIFST AId: Da	TOTAL			20	
	Vormond	IUIAL	una Caluta I	First aid CI		
	Keyworu	Bort C Loom	bupe,Salute,	r irst alu, Cr	ĸ	
	Tout	Rooks Reference	ng Kesource	Resources		
	Ιζλί	Dooks, Neierender	book, Other	Resources		
Suga	ested Readings					
Sugg	Writers	Name of Rook		Name of Pul	hlishere	Vear of
No	**11015	TIGHT OF DUUK			011311013	nublicatio
						n
1	Ranian Shashi and	Hand book of NC	C	Goodwin Pu	blication	2021
	ranjun,onuom unu		~	coournin i u	- neurion	

	kumar,Aashish			
2	Chauhan,Lt(Dr)Rajeev kumar	NCC National Cadet Corps	AakritiPublicaction	2021
3		Cadets Hand book	NCC Directorate M.p.& C.G	
4	Goyal, Hariom	Personality Development	KalpazPublication,Indi a	
5	Mitra,Barun K	Personality Development and Soft Skills	Oxford University Press India	
6	Manivannan,C.andMan ivannan,T.Latha	Text Book of FirstAid and Emergency Nursing	EMMESS Medical Publishers	2020
7	Popli,Harvinder and Sharma, Nirmal	Emergency First aid Safety Oriented	CBS Publishers	
8	Jain,N>C>and Saakshi	First Aid and Emergency Case	AITBS Publishers	2019
9	Pippa,Dr.Keech	Practical Guide to First Aid	Anees Publishing House	
10	Gupta,RK	NCC National Cadet Corps(Hindi & English)	Ramesh Publication	2021
11		Hand Book of NCC	Kanti Publication, Itawa	2017
12		Hand Book of NCC an unique book for NCC Cadets	Naveen Publication	2019

2.Suggestive digital platforms web links: 1. <u>https://www.en.mwikipedia.org</u> 2. DG NCC TRAINING APP.

Internal Assessment	Marks	External Assessment	Marks
Class Interaction/Quiz	10	Viva Voce on Practical	15
Attendance	05	Practical Record File	10
Assignments	10	Table Work /Experiments	50
TOTAL	25		75

Program:- Certificate/Diploma/Degree/		Class: 1 Year	Year:2	2021	Session:2021-22	
Course						
	Su	bject: Na	ational Service S	Scheme (NSS)	
1	Course Code	NSS:10	1			
2	Course Title	Concep	t of National Ser	vice Sch	eme	
3	Course Type	Elective	2			41
4	Pre-requisite (if any)	To study this course ,a student must have passed 12 th with any subject. This course can be opted as an elective and it is open for				
	~ • •	all				
5	Course Learning	Course	Objective:-	c 11 1		• .1 .1•.
	outcomes(CLO)	1	Main objective of and character of t	f syllabu the stude	s is develop ents youth th	ang the personality arough voluntary
			community servi	ce.It will	l also help th	nem understand the
		1	rich cultural serv	ice. It wi	ill also help	them understand the
		1	rich cultural diversity of india and have pride through a			
			better Knowledge of the Country.			
		2.	2. Understand the community in which they work and their			
		relation.				
		5. Identity the needs and problems of the community and involve them in problem-solving				
		4. Develop capacity to meet emergencies and natural				
		disasters.				
		5. Practice national integration and social harmony and				
		6.	Utilize their know	wledge in	n finding pra	actical solutions to
		individual and community problems.				
	Learning Outcome:- To impart hands- on skills in Preparation.			kills in Preparation.		
		Theend	of the paper, a s	tudent sl	nould be abl	e to:
		1. U	Inderstand the im	portance	e of having of	community
		p	roblems and their	r solution	n. It might h	elp in job
		0	pportunity in son	ne Gove	rnment appr	oved NGOs, and
		Ministry of youth affairs and Sports.				
		2. The students can carry out basic information about				
			nanagement field	s in turn		icat neip in uisastel
		3 Students can also go for Social Community Courses				
		Opening opportunities in different social activity related				
		department.				
6	Credit Value	Theory	-04			
7	Total Marks	Max.M	arks: 25+75		Min.Passi	ng Marks:33

Part B- Content of the Course				
	Total numbers of Lectures(in hours per week) :2hours per week			
Total lectures: 60 Hours				
Unit	Topics	No of Lectures		

Ι	Introduction and Basic Concepts of NSS:	15 Hours		
	History and Philosophy.			
	Aims and Objectives.			
	• Emblem sign, NSS badge, NSS flag.			
	• NSS song: Lakshya Geet, Sadbhawna Geet, Rastriye yuva Geet.			
	Key Words:-Concept of NSS.			
II	Organization of NSS, Regular Activities and Programmes:	15 Hours		
	Organization structure of NSS.			
	Concept of regular activities.			
	• Basis of adoption of village/ slums.			
	Methodology of conducting survey.			
	Calendar of NSS activities.			
	Maintenance of nss work diary.			
	Key Words:- Regular Activities.			
III	Day camp, Special camp and Personality development:	15 HOurs		
	Various Demension of day camp.			
	• Special camp at college/Unit level.			
	Other Camps: District level camp, University level camp, State			
	level Leadership Training camp.			
	• NIC camp, Sahshik activity camp, pre –RDC,RDCcamp.			
	Key Words:- Youth Camping.			
IV	Youth and volunteerism:	15 Hours		
	 Definition, Issues, challenges and opportunities for Youth. 			
	• Youth as an agent of social change.			
	Indian Tradition of volunteerism.			
	Needs and importance of volunteerism.			
	Motivation and constraints of volunteerism.			
	Kev Words:- Youth volunteerism.			

Part C- Learning Resources				
Text Books, Reference Books, Other resources				
Suggested Reading Materials:				
1. National Service Scheme Manual, Government of india.				
2. Trainining Programme on national Programme scheme, TISS.				
3. Orientation Courses for NSS programme officers, TISS.				
4. Case material as Training Aid for field workers, Gurmeet Hans.				
5. Social service opportunities in Hospitals, Kapil K. Krishan, TISS.				
6. Social Problems in india, Ram Ahuja.				
Suggested equivalent online Courses:				
http://www.thebetterindia.com/140/national-service-scheme-nss				
htt://en.wikipedia.org/viki/national-service-scheme				
htt://nss.nic.in				
Part D- Assessment and Evaluation (Theory)				
Maximum Marks:	100			
Continuous comprehensive Evaluation (CCE):	25			
University Exam(UE): 75				

Time: 02.00Hours		
Internal Assessment:	Class Test	15
Continuous Comprehensive	Assignment/Presentation	10
Evaluation (CCE):	Total	25
External Assessment:	Section(A): Three Very Short	03x03=09
University Exam	Questions (50 words Each)	
	Section(B): Four Short	04x09 =36
	Questions (200 words Each)	
	Section(C): Two Long	02x15 = 30
	Questions (500 words Each)	
	Total	75

Part A : Introduction					
Program:- Certificate/Diploma/Degree/Course			Class: B.Sc.1 Year	Year:2021	Session:2021-22
	Su	bject: Na	ational Service So	cheme (NSS)	
1	Course Code	NSS:10	2		
2	Course Title	Project	Tool of NSS		
3	Course Type	Practica	Practical/ Project Work		
4	Pre-requisite (if any)	To stud	To study this course ,a student must have passed 12 th with any		
		subject. This course can be opted as an elective and it is open for all			
5	Course Learning	Course Objective:-			
	outcomes(CLO)	Each student Will Have the option to select two skill-areas			
		out of the list based on the local conditions and opportunities,			
		and will Prepare a report based on field situation.			
		Learning Outcome:- To impart hands- on skills in Preparation.			
		The end of the			
		paper, a student should be able to:			
		Project work of NSS will aim to enhance the employment			
		potential of the NSS volunteers or, alternately to help			
		them to job opportunities in government approved			
		NGOs,ministry of youth Affairs and Sports.			
6	Credit Value	Practic	ai -02	7.5	
7	Total Marks	Max.M	arks: 25+75	Min.	Passing Marks:33

Part B- Content of the Practical Course			
Total numbers of Lectures (in hours per week) :2hours per week			
Credits -02 (Total Lectures :30 Hours)			
	Scheme of Practical Examination :-		
	Max.Marks (25+75=100)		
• Internal Assessment:-	Max.		
Marks-25			
1. Class Interaction.			
(05)			

• Quiz.				
(05)				
• Seminar.				
(07)				
• Assignents.				
(08)				
• External Assessment:-	Max.			
Marks-75				
 Report of Regular Activities in the Society. (15) 				
 Report of NSS Volunteerism. (10) 				
Report of Communication Skills. (10)				
• Report of Camping Activity . (15)				
 Report of Excursion/Training/Survey/Data Collection . 				
$\sqrt{1}\sqrt{2}$				
• Practical Pacord				
(10)				
List of Proticol/ Project Activity:	05			
Communication Skill - Personality development communications Skill	05			
development. Problem Solving				
development, Problem-Solving.				
New words- Communication Skill project activity. Vouth and Community - Adaption of alum Surgery of alum Samilas of Shure 07				
I outil and Community Adoption of stuff, Survey of stuff, Service of Stuff,	U/			
Key Words, Youth community project activity	Hours			
New Words- Found community project activity.	05			
Yoga as a tool for healthy lifestyle ate				
You wonda. Decular activity, project activity	Hours			
Key words - Regular activity, project activity.	0.6			
Environmental Issues:- Natural disaster management, natural resource	06			
management,Rain water harvesting,Afforestation, Waste management etc.HoursKey words-Natural resources/ disaster management project activity.Hours				
Awareness Programe :- Peer mentoring in preventing crimes, cyber crime and	07			
prevention, juvenile justice, save girls child protection, Blood donation	Hours			
awareness,swacch Bharat abhiyan, Corona virus awareness etc.				
Key Words- Volunteerism awreness project activity.				
Part C : learning Resources				
Text Books, Reference Books, Other resources				
Suggested Reading Materials:				
National Service Scheme Manual, Government of india.				
Trainining Programme on national Programme scheme, TISS.				
Orientation Courses for NSS programme officers, TISS.				
Case material as Training Aid for field workers, Gurmeet Hans.				
 Social service opportunities in Hospitals, Kapil K. Krishan, TISS. 				
Social Problems in india, Ram Ahuja.				

Suggested equivalent online Courses:

http://www.thebetterindia.com/140/national-service-scheme-nss htt://en.wikipedia.org/viki/national-service-scheme htt://nss.nic.in