I Semester

PLANNING STUDIO - I: AREA APPRECIATION AND SPACE PERCEPTIONS			
Course Code	**21 PLN11**	CIE Marks	50
Teaching Hours/Week (L:T:P: S)	0:0:10:0	SEE Marks	50
Total Hours of Pedagogy	160	Total Marks	100
Credits	5	Exam Hours	-

Course objectives:
● First-semester will focus on understanding basic terminologies in planning through study of different areas. It would also focus on developing observation and mapping skills

Teaching-Learning Process (General Instructions)
These are sample Strategies, which teachers can use to accelerate the attainment of the various course outcomes.
● Planning requires hands-on experience to utilize the knowledge gained out of theoretical subjects. This is done through exposure to site visits and site studies
● The faculty can make the students think based on small activity based exercises and projects, manual sheets are to be prepared.

Elements of a city: Understanding various building blocks of a city; Developing understanding about city planning elements using movies, lectures and city tours

Distance and Area Perception: Developing an understanding about distance and area and translating the same to scale on drawings.

Space Perception: Study of areas with varying characters to appreciate the concepts of built form, activities and people. Appreciate various elements of built form such as plot sizes, FAR, densities, building heights and open spaces; Understanding how built form supports various activities in different areas.

Neighbourhood Perception: Mapping of a neighbourhood and appreciating the basic characteristics of a neighbourhood; Creation of base maps, recording and presenting information on maps, both manually and digitally.

Use of mapping and presentation skill and representations learnt in planning communication into studios

Teaching-Learning Process	Practical field based exercises to be undertaken, studios help students to work in teams, and get acquainted with live case areas and their problems and help them prepare a professional plan that is relevant to the residents and local bodies, also enables them to critically analyse the area around them and appreciate the same.

Course outcome (Course Skill Set)

Upon the completion of this course, the students would be able:
1. To develop an understanding of the key components of a city and show familiarity with the basic planning terminologies.
2. To show understanding of different patterns and forms that forms the physical fabric of a city.
3. To express awareness of planners' sensibilities.
4. To develop skills to prepare technical drawings and maps for small areas.
5. To develop the ability to visualize areas in two and three dimensions and draw them accurately.
6. To show ability to observe, record, map and present different activities and spaces.

Assessment Details (both CIE and SEE)

(methods of CIE need to be define topic wise i.e.- MCQ, Quizzes, Open book test, Seminar or micro project)

The weightage of Continuous Internal Evaluation (CIE) is 50% and for Semester End Exam (SEE) is 50%. The student has to obtain a minimum of 40% marks of maximum marks in CIE and minimum 35% marks of maximum marks in SEE to pass, and a minimum of 40% (40 marks out of 100) in the sum total of the CIE (Continuous Internal Evaluation) and SEE (Semester End Examination) taken together. Semester End Exam (SEE) is conducted for 100 marks and scaled down to 50 marks. Based on this grading will be awarded.

Continuous Internal Evaluation:

- Continuous Internal Evaluation (CIE): The CIE marks awarded in case of Studio shall be based on the weekly evaluation of progress of the studio works after the conduction of every Presentation

Semester End Examination:

- Planning Studio SEE will be conducted by the University as per scheduled time table, in a batch wise with External examiner and Internal Examiner reviewing the works of the students through Viva voice.

Suggested Learning Resources:

Books

1. Brownill, S. (ed.) (2017) Localism and Neighbourhood Planning, Policy Press, Bristol.
2. Parker, G., Salter, K. and Wargent, M. (2019) Neighbourhood Planning in Practice, Lund Humphries Publishers, London.

Web links and Video Lectures (e-Resources):

- https://www.my-mooc.com/en/categorie/urban-planning
- https://www.youtube.com/watch?v=knUerjiLmNw

Activity Based Learning (Suggested Activities in Class)/ Practical Based learning

- Site visits and physical case studies based learning to be adapted

I Semester

FUNDAMENTALS OF URBAN AND REGIONAL PLANNING				
Course Code	21 PLN12	CIE Marks	50
Teaching Hours/Week (L:T:P: S)	3:0:0:0	SEE Marks	50
Total Hours of Pedagogy	48	Total Marks	100
Credits	3	Exam Hours	3

Course objectives:
- To introduce to students, the basic concepts and rationales of planning, plan making processes, planning organizations, and theories of urbanization.

Pedagogy (General Instructions)

These are sample Strategies, which teachers can use to accelerate the attainment of the various course outcomes.
- FURP components of planning to be focused upon, various parameters and analysis to be brought out
- Innovative lecture methodologies to be adapted to improve the teaching and learning process
- Visits to concerned site studies, if need be
- Short videos for better understanding
- Encourage collaborative (Group Learning) learning in the class
- Ask at least three HOT (Higher order Thinking) questions in the class, which promotes critical thinking
- Adopt Problem Based Learning (PBL), which fosters students Analytical skills, develop thinking skills such as the ability to evaluate, generalize, and analyse information rather than simply recall it
- Discussion in class to elevate thinking and different methodologies of problem solving

Module-1

Rationales of Planning and Planning as a Discipline

Various definitions of town and country planning; Goals, objectives and components of planning; Benefits of planning; Planning as a discipline and multidisciplinary nature of planning; Different roles of planners.

Pedagogy	Taught through ppts and pdf materials

Module-2

Foundations of Planning

Orthodoxies of planning; Components of sustainable urban and regional development; Reasoning and its forms in planning; Planning knowledge and its various forms; Arguments for and against planning; Economic and societal aspects as bases of town and country planning.

Pedagogy	Taught through ppts and pdf materials

Module-3

Development Plans and Planning Organizations

Defining development plan; Types and scope of development plans: regional plan, master plan, zonal plan, town planning scheme, layout plan; Structure plan, district plan, action area plan, subject plan; Hierarchy of plans and its significance; Development regulations;

Pedagogy	Taught through ppts, pdf materials and group discussions

Module-4

Governance of Planning

Local government of India; District Planning Committees and Metropolitan Planning Committees; Different development authorities and other organizations like improvement trusts.

Pedagogy	Taught through group ppts, pdf materials and group discussions

Module-5

Theories of Urbanization and Role of Planning Organizations

Theories of urbanization including Concentric Zone Theory, Sector Theory, Multiple Nuclei Theory and other latest theories; Land Use and Land Value Theory of William Alonso; Meanings and forms of globalization;

	Characteristics of a global city; Principles for planning for a global city.
Pedagogy	Taught through group ppts, pdf materials and group discussions

Course outcome (Course Skill Set)

At the end of the course the student will be able to :
- To demonstrate understanding about the foundational concepts and rationales of planning, learn processes affecting preparation, content and types of development plans.
- To develop knowledge of theories of urbanization

Assessment Details (both CIE and SEE)

(methods of CIE need to be define topic wise i.e.- MCQ, Quizzes, Open book test, Seminar or micro project)

The weightage of Continuous Internal Evaluation (CIE) is 50% and for Semester End Exam (SEE) is 50%. The student has to obtain a minimum of 40% marks of maximum marks in CIE and minimum 35% marks of maximum marks in SEE to pass, and a minimum of 40% (40 marks out of 100) in the sum total of the CIE (Continuous Internal Evaluation) and SEE (Semester End Examination) taken together. Theory Semester End Exam (SEE) is conducted for 100 marks (3 hours' duration) and scaled down to 50 marks. Based on this grading will be awarded.

Continuous Internal Evaluation:

1. Methods suggested: Test, Open Book test, Written Quiz, Seminar, report writing etc.
2. The class teacher has to decide the topic for closed book test, open book test, Written Quiz and Seminar. In the beginning only the teacher has to announce the methods of CIE for the subject.

Semester End Examination:

Theory SEE will be conducted by University as per scheduled time table, with common question papers for subject

1. The question paper will have ten questions. Each question is set for 20 marks.
2. There will be 2 questions from each module. Each of the two questions under a module (with a maximum of 3 sub questions), should have a mix of topics under that module.
3. The students have to answer 5 full questions, selecting one full question from each module

Suggested Learning Resources:

Books

1. Alexander, E.R. (1987) Planning as Development Control: Is That All Urban Planning Is For? Town Planning Review, Vol. 58, No. 4, pp. 453-467.

2. Baer, W.C. (2007) General Plan Evaluation Criteria: An Approach to Making Better Plans, Journal of the American Planning Association, Vol. 63, Issue 3, pp. 329-344.

3. Branch, M.C. (2018) Comprehensive City Planning: Introduction and Explanation, Routledge. First Edition published in 1985

4. Kasarda, J.D. and Crenshaw, E.M. (1991) Third World Urbanization: Dimensions, Theories, and Determinants, Annual Review of Sociology, Vol. 17, pp. 467-501.

5. King, A. (1976) Colonial Urban Development: Culture, Social Power, and Environment, Routledge and Kegan Paul, New York.

6. Klosterman, R.E. (1985) Arguments for and Against Planning, Town Planning Review, Vol. 56, No. 1, pp. 5-20.

7. Patel, S.B. (1997) Urban Planning by Objectives, Economic and Political Weekly, Vol. 32, No. 16, pp. 822-826.

8. Roberts, T. (2002) The Seven Lamps of Planning [with Comments] by Cliff Hague, Glyn Roberts and Lesley Punter, Town Planning Review, Vol. 73, No. 1, pp. 1-15.

9. Vidyarthi, S. (2018) Spatial Plans in Post-liberalization India: Who's making the plans for fast-growing Urban Regions? Journal of Urban Affairs, DOI: 10.1080/07352166.2018.1527658

Web links and Video Lectures (e-Resources):	

- https://www.my-mooc.com/en/categorie/urban-planning
- https://www.youtube.com/watch?v=g18a4I9fMtk
- https://nptel.ac.in/courses/124/107/124107158/

Activity-Based Learning (Suggested Activities in Class)/ Practical Based learning
- Module based activity related to topics
- Presentation preparation related to the given topics
- Debate on various topics from the module or current affairs

I Semester

TECHNIQUES OF PLANNING I			
Course Code	**21PLN13**	CIE Marks	50
Teaching Hours/Week (L:T:P: S)	2:2:0:0	SEE Marks	50
Total Hours of Pedagogy	64	Total Marks	100
Credits	3	Exam Hours	3

Course objectives:
- This course introduces students to know the data requirements for planning and undertake surveys and map data collected for a neighbourhood and a city and present it in a coherent and analytical manner.

Pedagogy (General Instructions)
These are sample Strategies, which teachers can use to accelerate the attainment of the various course outcomes.
- Techniques of planning components to be focused upon, various concepts, parameters and analysis to be brought out
- Innovative lecture methodologies to be adapted to improve the teaching and learning process
- Visits to concerned site studies, if need be
- Short videos for better understanding
- Encourage collaborative (Group Learning) learning in the class
- Ask at least three HOT (Higher order Thinking) questions in the class, which promotes critical thinking
- Adopt Problem Based Learning (PBL), which fosters students Analytical skills, develop thinking skills such as the ability to evaluate, generalize, and analyse information rather than simply recall it
- Discussion in class to elevate thinking and different methodologies of problem solving

Module-1	

Types of Data and Sources of Data for Planning
Understanding difference between data, information and knowledge; Distinction between facts and opinions; Reliable sources of data and information; Data requirements for urban and regional planning; Sources of primary and secondary data; Overview of data availability from different sources including Census of India, NSSO, etc.

Pedagogy	Taught through ppts and pdf materials

Module-2	

Data Collection Methods - Socio-Economic Surveys
Questionnaire design, design of sample surveys, types of sampling, measurement scales, data coding and data verification; Qualitative data collection methods: focus group surveys, individual interviews, observations, ethnographic methods; Validity and reliability of data.

Pedagogy	Taught through ppts and pdf materials

Module-3	

Data Collection Methods - Physical Surveys and Mapping Physical Surveys and Mapping Physical surveys for the preparation of base maps at different scales, contents of base maps; Land use classifications; Techniques for conducting field surveys for land use, building use, density and other surveys needed for planning; Use of information, communication and technology (ICT) based data collection methods.	
Pedagogy	Taught through ppts and pdf materials, group discussion and activities

Module-4

Data Analysis, reasoning and relationships Data tabulation, statistical methods, frequency distribution, classification, mean, median, mode, correlation, content analysis, Land Use classification system, planning standards, population and economic analysis, Land Suitability analysis, housing analysis, development of indicators.	
Pedagogy	Taught through ppts and pdf materials, group discussion and activities

Module-5

Data Presentation Preparation of tables and charts; Interpreting statistical, qualitative and spatial data to identify trends, patterns and processes; Communication of data through presentations, reports, etc.	
Pedagogy	Taught through ppts and pdf materials, group discussion and activities

Course outcome (Course Skill Set)

At the end of the course the student will be able to :
- To develop the skills for preparing a base map at different scales and representation of relevant planning information on it.
- To know data requirements for planning and to demonstrate skills for undertaking surveys.
- To produce data through tables, charts and reports.

Assessment Details (both CIE and SEE)

(methods of CIE need to be define topic wise i.e.- MCQ, Quizzes, Open book test, Seminar or micro project)
The weightage of Continuous Internal Evaluation (CIE) is 50% and for Semester End Exam (SEE) is 50%. The student has to obtain a minimum of 40% marks of maximum marks in CIE and minimum 35% marks of maximum marks in SEE to pass, and a minimum of 40% (40 marks out of 100) in the sum total of the CIE (Continuous Internal Evaluation) and SEE (Semester End Examination) taken together. Theory Semester End Exam (SEE) is conducted for 100 marks (3 hours' duration) and scaled down to 50 marks. Based on this grading will be awarded.

Continuous Internal Evaluation:
3. Methods suggested: Test, Open Book test, Written Quiz, Seminar, report writing etc.
4. The class teacher has to decide the topic for closed book test, open book test, Written Quiz and Seminar. In the beginning only the teacher has to announce the methods of CIE for the subject.

Semester End Examination:
Theory SEE will be conducted by University as per scheduled time table, with common question papers for subject
4. The question paper will have ten questions. Each question is set for 20 marks.
5. There will be 2 questions from each module. Each of the two questions under a module (with a maximum of 3 sub questions), should have a mix of topics under that module.
6. The students have to answer 5 full questions, selecting one full question from each module

Suggested Learning Resources:
Books
1. Berke, P.R. and Goodschalk, D.R., Kaiser, E.J. and Rodriguez, D.A. (2006) Urban Land Use Planning, University of Illinois Press, Champaign, Illinois. Fifth Edition.

2. Dandekar, H.C. (ed.) (2019) The Planner's Use of Information, Routledge, New York. Third Edition.

3. Guthrie, G. (2010) Basic Research Methods: An Entry to Social Science Research, Sage, Los Angeles.

4. Krueckeberg, D.A. and Silvers, A.L. (1974) Urban Planning Analysis: Methods and Models, Wiley, London.

5. Monmonier, M. (1996) How to Lie with Maps, University of Chicago Press, Chicago.

6. Wang, X., Rainer, A. and Hofe, V. (2007) Research Methods in Urban and Regional Planning, Springer, Berlin

Web links and Video Lectures (e-Resources):

- https://www.my-mooc.com/en/categorie/urban-planning
- https://www.youtube.com/watch?v=Ywrag8amNsU

Activity Based Learning (Suggested Activities in Class)/ Practical Based learning
- Group activities, group presentations
- Assignment on various topics from the modules

I Semester

PLANNING COMMUNICATION I			
Course Code	**21 PLN14**	CIE Marks	100
Teaching Hours/Week (L:T:P: S)	2:0:1:0	SEE Marks	-
Total Hours of Pedagogy	48	Total Marks	100
Credits	2	Exam Hours	-

Course objectives:
- To introduce to students applications of computer software for report writing, data analysis and presentations required for planning. To expose students to the use AutoCAD and similar software to prepare drawings and presentations. This course intends to equip the students to present their work through reports and learn how to critically examine literature review for the purposes of developing an
Understanding about a particular topic.

Pedagogy (General Instructions)
These are sample Strategies, which teachers can use to accelerate the attainment of the various course outcomes.
- Exposing students to manual sheet preparation, manual drafting and architectural design principles
- Innovative lecture methodologies to be adapted to improve the teaching and learning process
- Short videos, model making and activity based methods to be adapted for better understanding
- Encourage collaborative (Group Learning) learning in the class
- Ask at least three HOT (Higher order Thinking) questions in the class, which promotes critical thinking
- Adopt Problem Based Learning (PBL), which fosters students Analytical skills, develop thinking skills such as the ability to evaluate, generalize, and analyses information rather than simply recall it
- Discussions on grammar and other language and software oriented technical topics

Module-1

Visual Communication – Drawings
Visual studies about use of line, shape, form, texture, color, composition, and scale in cities and buildings, streets, cities with special emphasis on rhythms, balance, harmony and proportion etc.; Sketching as a tool for communication; Techniques of preparation of base maps at area, city and regional level; Presentation of planning information through maps, thematic maps

Pedagogy	Chalk and talk method and various teaching aid

Module-2

Verbal Communication

Language and communication; Differences between speech and writing, distinct features of speech; Body language, eye contact, speech, and spoken expression, Elements of a good verbal presentation.

Pedagogy	Chalk and talk method and various teaching aid

Module-3

Photography and Model Making

Photography as a tool for visual information; Images and history; Developing basic understanding of photography, use of camera and its functions; Elements of good photographs; Understanding of different materials for models and built form models to understand the concepts learnt in the studio; A study of basic land and built forms through models, and presentation models.

Pedagogy	Chalk and talk method and various teaching aid

Module-4

Intrapersonal Communication, Listening Skills, Self-Awareness

Listening as an active skill; Types of listeners; Listening for general content; Listening to fill up information; Intensive listening; Listening for specific information; Can intensive listening improve understanding.

Pedagogy	Chalk and talk method and various teaching aid

Module-5

Introduction to Computer Application in planning

Various software packages, utility of computers in planning assignments, current trends in planning with respect to use of computer applications, advanced features of MS word - Use of MS Word in report preparation, Adding and updating table of contents, Spell check, thesaurus, working with columns, tabs and indents, creation and working with tables, margins and space management in a document; Adding references and graphics; Importing and exporting across various formats; Creating questionnaires using macros, PowerPoint and Advanced features of MS excel - Defining data and database management; Working with census data; Data analysis using various functions and tools; Creating formulas, using formulas, cell references, replication, sorting, filtering, functions; Preparation of charts and graphs, creating trend lines, and simple macros. Introduction to AutoCAD; Concept of Mapping and Drafting techniques, introduction to AutoCAD, Understanding the fundamental concepts and the terminologies used in CAD; Tools for digitization; Modifying tools; Layer creation and management; Creating Blocks; Annotation; Scaling; Plotting and Printing and hand-on exercises. Introduction to Google Sketch.

Pedagogy	Chalk and talk method and laboratory exposure to various planning software

Course outcome (Course Skill Set)

At the end of the course the student will be able to :
- Upon the completion of this course, the students would be able:
- To show the ability to appreciate the basic elements of composition in drawings and photographs.
- To demonstrate the ability to prepare base maps at different scales.
- To demonstrate the ability to prepare a model for a given area.
- To identify and name feelings and become aware of patterns of communication of the self
- To design and produce written reports using software, and perform analysis of data.
- To compose data in the form of graphs, charts and also able to prepare maps, plans and sketches to present planning information.

Assessment Details (both CIE and SEE)

(methods of CIE need to be define topic wise i.e.- MCQ, Quizzes, Open book test, Seminar or micro project)

The weightage of Continuous Internal Evaluation (CIE) is 100% and for Semester End Exam (SEE) is Nil, No Semester End Exam (SEE) for the subject. The student has to obtain a minimum of 40% marks in CIE. Grading will be awarded based on CIE.

Continuous Internal Evaluation:
1. Methods suggested: Test, Open Book test, Written Quiz, Seminar, report writing etc.
2. The class teacher has to decide the topic for closed book test, open book test, Written Quiz and Seminar. In the beginning only the teacher has to announce the methods of CIE for the subject.

Suggested Learning Resources:

Books
1. Machi A.L., McEvoy B.T. (2016) Literature Review: Six Steps to Success, Corwin (Sage), New Delhi.

2. Kousoulas, C.A. (2019) Writing for Planners: Handbook for Students and Professionals in Writing, Editing, and Document Production, CRC Press, New York

3. Macris, N. (2002) Writing in Planning English: Writing Tips for Urban and Environmental Planners, Routledge, New York.

Web links and Video Lectures (e-Resources):

- https://www.my-mooc.com/en/categorie/urban-planning
- https://www.youtube.com/watch?v=eLZc-jGXQ8A
- https://www.youtube.com/watch?v=H_GVANPyI18
- https://www.youtube.com/watch?v=w8LCcTm1o5U
- https://www.youtube.com/watch?v=O5A58npxsps

Activity Based Learning (Suggested Activities in Class)/ Practical Based learning
- Design principles and manual sheet preparation
- Various activities such as model making and photography adapted innovatively
- Manual architectural plan drafting assignments, measure the actual dimensions and draw in converted metric scales
- Planning software assignments

I Semester

QUANTITATIVE AND QUALITATIVE METHODS FOR PLANNERS			
Course Code	**21PLN15**	CIE Marks	50
Teaching Hours/Week (L:T:P: S)	1:2:0:0	SEE Marks	50
Total Hours of Pedagogy	48	Total Marks	100
Credits	2	Exam Hours	3

Course objectives:
- To comprehend various techniques and methods of quantitative analysis relevant for planning.
- To show how these techniques could be used to identify planning problems and help in taking planning decisions.
- To expose students to various qualitative analysis techniques and their relevance for planning practice and research.

Pedagogy (General Instructions)
These are sample Strategies, which teachers can use to accelerate the attainment of the various course outcomes.
- Orienting Planners towards various analysis involving statistical methods
- Innovative lecture methodologies to be adapted to improve the teaching and learning process
- Short videos for better understanding
- Encourage collaborative (Group Learning) learning in the class
- Ask at least three HOT (Higher order Thinking) questions in the class, which promotes critical thinking
- Adopt Problem Based Learning (PBL), which fosters students Analytical skills, develop thinking skills such as the ability to evaluate, generalize, and analyse information rather than simply recall it
- Discussion in class to elevate thinking level and different problem solving levels

Module-1

Correlation and Regression Analysis
Degree of correlation, Scatter Diagram, correlation analysis, correlation coefficient, co– efficient of rank correlation, partial correlation analysis and multiple correlation, simple Linear and nonlinear regression, lines of regression, coefficient of regression; Multiple Regression Analysis; Use of SPSS and its applications in planning

Pedagogy	Taught in presentations and pdf materials, problem solving in class

Module-2

Statistical Inference and Chi-Square Test and Analysis of Variance
Types of estimation; Point, interval, testing of hypothesis, statistical hypothesis, simple and composite tests of significance, null hypothesis, alternative hypothesis; Types of errors, level of significance, critical region; Two tailed and one tailed tests, large and small sample tests for mean and proportion; Chi-square distribution: applications of chi-square distribution; Test of goodness of fit; ANOVA distribution; Use of SPSS; Applications in planning

Pedagogy	Taught in presentations and pdf materials, problem solving in class, group ppts related to topics etc

Module-3

Mathematical Programming Techniques
Mathematical Programming models, linear programming problems, transportation problems, assignment problems, applications in planning

Pedagogy	Taught in presentations and pdf materials, group ppts related to topics etc

Module-4

Qualitative Methods
Dimensions of qualitative research; Designing qualitative research; Terms and principles in qualitative data analysis; Content analysis; Narrative analysis; Discourse analysis for planning.

Pedagogy	Taught in presentations and pdf materials, problem solving in class, group ppts related to topics etc

Module-5

Decision Theory

Decision making under conditions of certainty, uncertainty, and conditions of risk decision trees, payoff matrix, applications in planning

Pedagogy	Taught in presentations and pdf materials, problem solving in class, group ppts related to topics etc

Course outcome (Course Skill Set)

Upon the completion of this course, the students would be able:
1. To demonstrate use of quantitative and qualitative techniques for planning analysis.
2. To show knowledge about interpreting findings from such analysis to pursue planning decisions.

Assessment Details (both CIE and SEE)

(methods of CIE need to be define topic wise i.e.- MCQ, Quizzes, Open book test, Seminar or micro project)

The weightage of Continuous Internal Evaluation (CIE) is 50% and for Semester End Exam (SEE) is 50%. The student has to obtain a minimum of 40% marks of maximum marks in CIE and minimum 35% marks of maximum marks in SEE to pass, and a minimum of 40% (40 marks out of 100) in the sum total of the CIE (Continuous Internal Evaluation) and SEE (Semester End Examination) taken together. Theory Semester End Exam (SEE) is conducted for 100 marks (3 hours' duration) and scaled down to 50 marks. Based on this grading will be awarded.

Continuous Internal Evaluation:
1. Methods suggested: Test, Open Book test, Written Quiz, Seminar, report writing etc.
2. The class teacher has to decide the topic for closed book test, open book test, Written Quiz and Seminar. In the beginning only the teacher has to announce the methods of CIE for the subject.

Semester End Examination:

Theory SEE will be conducted by University as per scheduled time table, with common question papers for subject
1. The question paper will have ten questions. Each question is set for 20 marks.
2. There will be 2 questions from each module. Each of the two questions under a module (with a maximum of 3 sub questions), should have a mix of topics under that module.
3. The students have to answer 5 full questions, selecting one full question from each module

Suggested Learning Resources:

Books
1. Gelman, A. and Hill, J. (2006) Data Analysis Using Regression and Multilevel and Hierarchical Models, Colombia University Press, New York.

2. Molugaram, K. and Rao, G.S. (2017) Statistical Techniques for Transportation Engineering, BSP Books Pvt. Ltd. Published by Elsevier, London.

3. Kambo, N.S. (2008) Mathematical Programming Techniques, Affiliated East-West Press Pvt. Ltd. New Delhi.

4. Braun, V. and Clarke, V. (2013) Successful Qualitative Research: A Practical Guide for Beginners, Sage, New Delhi

5. Gupta S.C., 'Fundamentals of Statistics'. Himalaya Publishing House, Delhi. (BOOK)

6. Ash Robert B., 'Basic Probability Theory' Dover Publications, New york. 6. Veerarajan T., ' ProbabilityStatistics and Random Processes, India

Web links and Video Lectures (e-Resources):

- https://www.youtube.com/watch?v=V3iEsLPAD68&list=PLU6SqdYcYsfLRq3tu-g_hvkHDcorrtcBK
- https://www.youtube.com/watch?v=COI0BUmNHT8&list=PLyqSpQzTE6M_JcleDbrVyPnE0PixKs2JE
- http://www.sagepub.in/upmdata/43350_4.pdf
- https://www.youtube.com/watch?v=wRZwrcPnmc4
- https://www.youtube.com/watch?v=VK-rnA3-41c

Activity Based Learning (Suggested Activities in Class)/ Practical Based learning
● Presentation preparation on the given topics from each module
● Problem solving on topics

I Semester

Rural Development and Management				
Course Code	**21PLN16**	CIE Marks	50
Teaching Hours/Week (L:T:P: S)	2:2:0:0	SEE Marks	50
Total Hours of Pedagogy	4	Total Marks	100
Credits	2	Exam Hours	3

Course objectives:
Significance of rural development and management could not be better explained than the fact that a majority of Indians still live in rural areas. The chief objective of this subject is to introduce rural development and management by concentrating on understanding the idea of rural development, and how we planned for rural areas and people after 1947 to 2020. Second, we seek to teach students how institutions of local self-government developed after the most important amendment to the Constitution of India was made in 1992.

Pedagogy (General Instructions)
These are sample Strategies, which teachers can use to accelerate the attainment of the various course outcomes.

1. Lecturer method (L) does not mean only traditional lecture method, but different types of teaching methods may be adopted to develop the outcomes.
2. Arrange visits to nearby power plants, receiving stations and substations to give brief information about the electrical power generation.
3. Show Video/animation films to explain functioning of various machines
4. Encourage collaborative (Group Learning) Learning in the class
5. Ask at least three HOTS (Higher order Thinking) questions in the class, which promotes critical thinking
6. Adopt Problem Based Learning (PBL), which fosters students Analytical skills, develop thinking skills such as the ability to evaluate, generalize, and analyze information rather than simply recall it.
7. Topics will be introduced in a multiple representation.
8. Show the different ways to solve the same problem and encourage the students to come up with their own creative ways to solve them.
9. Discuss how every concept can be applied to the real world - and when that's possible, it helps improve the students' understanding.
10. Individual teachers can devise innovative pedagogy to improve teaching-learning.

Module-1

Introduction to Rural Development
Meaning, nature and scope of development; Nature of rural society in India; Hierarchy of settlements; Social, economic and ecological constraints for rural development.

Pedagogy	Chalk and talk method, Power Point Presentation

Module-2

Roots of Rural Development in India
Rural reconstruction and Sarvodaya programme before independence; Impact of voluntary effort and Sarvodaya Movement on rural development; Constitutional direction, directive principles; Panchayat Raj - beginning of planning and community development; National extension services.

Pedagogy	Chalk and talk method, Power Point Presentation

Module-3

	Post-Independence Rural Development
	Balwant Rai Mehta Committee - three tier system of rural local Government; Need and scope for people's participation and Panchayat Raj; Ashok Mehta Committee - linkage between Panchayat Raj, participation and rural development; Five Year Plans and Rural Development; 73rd Constitution Amendment Act, including – XI Schedule, devolution of powers, functions and its implications; Critical appraisal of government initiatives and their implementation.
Pedagogy	Chalk and talk method, Power Point Presentation

Module-4	
	Planning for Rural Areas
	Planning process at National, State, Regional and District levels; Planning, development, implementing and monitoring organizations and agencies; Urban and rural interface - integrated approach and local plans; Development initiatives and their convergence; Special component plan and sub-plan for the weaker section; Micro-eco zones; Data base for local planning; decentralized planning; Sustainable rural development.
Pedagogy	Chalk and talk method, Power Point Presentation

Module-5	
	Infrastructural Intervention & Rural Economy
	Community driven rights-based development; Rural marketing and mobility: the last mile distribution; Development of market and warehouse; Rural housing and sanitation. Rural Economy Rural livelihood and its diversification; Profiling rural economy; Increasing shift to rural nonfarm Sector; Developmental challenges.
Pedagogy	Chalk and talk method, Power Point Presentation

Course outcome (Course Skill Set)

At the end of the course the student will be able to :

- To develop knowledge about rural development and management with a particular focus on the evolution of the idea of rural development.
- To demonstrate knowledge about how rural areas were planned from 1947 to 2020.
- To show knowledge about how institutions and organizations of local self-government developed after 1992.

Assessment Details (both CIE and SEE)

(methods of CIE need to be define topic wise i.e.- MCQ, Quizzes, Open book test, Seminar or micro project)
The weightage of Continuous Internal Evaluation (CIE) is 50% and for Semester End Exam (SEE) is 50%. The student has to obtain a minimum of 40% marks of maximum marks in CIE and minimum 35% marks of maximum marks in SEE to pass, and a minimum of 40% (40 marks out of 100) in the sum total of the CIE (Continuous Internal Evaluation) and SEE (Semester End Examination) taken together. Theory Semester End Exam (SEE) is conducted for 100 marks (3 hours' duration) and scaled down to 50 marks. Based on this grading will be awarded.

Continuous Internal Evaluation:
1. Methods suggested: Test, Open Book test, Written Quiz, Seminar, report writing etc.
2. The class teacher has to decide the topic for closed book test, open book test, Written Quiz and Seminar. In the beginning only teacher has to announce the methods of CIE for the subject.

Semester End Examination:
Theory SEE will be conducted by University as per scheduled time table, with common question papers for subject
1. The question paper will have ten questions. Each question is set for 20 marks.
2. There will be 2 questions from each module. Each of the two questions under a module (with a maximum of 3 sub questions), should have a mix of topics under that module.
3. The students have to answer 5 full questions, selecting one full question from each module

Suggested Learning Resources:
Books

1. Gandhi, F.V. (2018) A Rural Manifesto: Realizing India's Future through her Villages, Rupa, New Delhi.
2. Gupta, K.R. (2010) Rural Development in India, Atlantic Publishers, New Delhi. Volume 4.
3. Jodhka, S.S. (2018) A Handbook of Rural India, (Readings on the Economy, Polity and Society), Orient Black

Swan, New Delhi.
4. Jodhka, S.S. and Simpson, E. (2019) India's Villages in the 21st Century: Revisits and Revisions, Oxford University Press, New Delhi.
5. Ministry of Rural Development (2017) Sustainable Rural Development, Ministry of Rural Development, Government of India.
6. Paul, S.K. (2015) Rural Development: Concept and Recent Approaches, Concept Publishing Company Private Limited, New Delhi.
7. Singh, K. and Shishodia, A. (2019) Rural Development: Principles, Policies, and Management, Fourth Edition, Sage, New Delhi.

Web links and Video Lectures (e-Resources):

- https://www.panchayat.gov.in/spatial-planning
- https://niti.gov.in/planningcommission.gov.in/docs/sectors/rural.php?sectors=rural
- http://dpal.kar.nic.in/11%20of%201963%20(E).pdf

Activity Based Learning (Suggested Activities in Class)/ Practical Based learning
- A site visit to a nearby village to understand the economy, the culture, the development pattern.

INNOVATION and DESIGN THINKING			
Course Code	**21IDT19/29**	CIE Marks	50
Teaching Hours/Week (L: T:P: S)	1:0:0	SEE Marks	50
Total Hours of Pedagogy	25	Total Marks	100
Credits	01	Exam Hours	**01**

Course Category: Foundation

Preamble: This course provides an introduction to the basic concepts and techniques of engineering and reverses engineering, the process of design, analytical thinking and ideas, basics and development of engineering drawing, application of engineering drawing with computer aide.

Course objectives:
- To explain the concept of design thinking for product and service development
- To explain the fundamental concept of innovation and design thinking
- To discuss the methods of implementing design thinking in the real world.

Teaching-Learning Process (General Instructions)

These are sample Strategies; which teachers can use to accelerate the attainment of the various course outcomes.

1. Lecturer method (L) does not mean only the traditional lecture method, but a different type of teaching method may be adopted to develop the outcomes.
2. Show Video/animation films to explain concepts
3. Encourage collaborative (Group Learning) Learning in the class
4. Ask at least three HOTS (Higher-order Thinking) questions in the class, which promotes critical thinking
5. Adopt Problem Based Learning (PBL), which fosters students' Analytical skills, develops thinking skills such as the ability to evaluate, generalize, and analyze information rather than simply recall it.
6. Topics will be introduced in multiple representations.
7. Show the different ways to solve the same problem and encourage the students to come up with their own creative ways to solve them.
8. Discuss how every concept can be applied to the real world - and when that's possible, it helps improve the students' understanding.

Module-1

PROCESS OF DESIGN
Understanding Design thinking
Shared model in team-based design – Theory and practice in Design thinking – Explore presentation signers across globe – MVP or Prototyping

Teaching-Learning Process	Introduction about the design thinking: Chalk and Talk method
	Theory and practice through presentation
	MVP and Prototyping through live examples and videos

Module-2

Tools for Design Thinking
Real-Time design interaction capture and analysis – Enabling efficient collaboration in digital space – Empathy for design – Collaboration in distributed Design

Teaching-Learning Process	Case studies on design thinking for real-time interaction and analysis
	Simulation exercises for collaborated enabled design thinking
	Live examples on the success of collaborated design thinking

Module-3

Design Thinking in IT

Design Thinking to Business Process modelling – Agile in Virtual collaboration environment – Scenario based Prototyping

Teaching-Learning Process	Case studies on design thinking and business acceptance of the design
	Simulation on the role of virtual eco-system for collaborated prototyping

Module-4

DT For strategic innovations

Growth – Story telling representation – Strategic Foresight - Change – Sense Making - Maintenance Relevance – Value redefinition - Extreme Competition – experience design - Standardization – Humanization - Creative Culture – Rapid prototyping, Strategy and Organization – Business Model design.

Teaching-Learning Process	Business model examples of successful designs
	Presentation by the students on the success of design
	Live project on design thinking in a group of 4 students

Module-5

Design thinking workshop

Design Thinking Work shop Empathize, Design, Ideate, Prototype and Test

Teaching-Learning Process	8 hours design thinking workshop from the expect and then presentation by the students on the learning from the workshop

Course Outcomes:

Upon the successful completion of the course, students will be able to:

CO Nos.	Course Outcomes	Knowledge Level (Based on revised Bloom's Taxonomy)
CO1	Appreciate various design process procedure	K2
CO2	Generate and develop design ideas through different technique	K2
CO3	Identify the significance of reverse Engineering toUnderstand products	K2
CO4	Draw technical drawing for design ideas	K3

Assessment Details (both CIE and SEE)

 methods of CIE need to be defined topic wise i.e.- Tests, MCQ, Quizzes, Seminar or micro project/Course Project, Term Paper)

The weightage of Continuous Internal Evaluation (CIE) is 50% and for Semester End Exam (SEE) is 50%. The student has to obtain a minimum of 35% of maximum marks in SEE and a minimum of 40% of maximum marks in CIE. Semester End Exam (SEE) is conducted for 100 marks (3 hours' duration) and scaled down to 50 marks. Based on this grading will be awarded.

The student has to score a minimum of 40% (40 marks out of 100) in the sum total of the CIE (Continuous Internal Evaluation) and SEE (Semester End Examination) taken together.

Continuous Internal Evaluation:

Three Unit Tests each of **20 Marks (duration 01 hour**)

1. First test at the end of 5th week of the semester
2. Second test at the end of the 10th week of the semester
3. Third test at the end of the 15th week of the semester

(Preferred pattern of the all test are similar to the SEE pattern, however; teacher may follow the CIE test pattern of other engineering courses)

Two assignments each of **10 Marks**

4. First assignment at the end of 4th week of the semester
5. Second assignment at the end of 9th week of the semester

Report writing /Group discussion/Seminar any one of three suitably planned to attain the COs and POs for **20 Marks** (**duration 01 hours**)

6. At the end of the 13th week of the semester

The sum of three tests, two assignments, and quiz/seminar/group discussion will be out of 100 marks and will be **scaled down to 50 marks**

CIE methods /question paper is designed to attain the different levels of Bloom's taxonomy as per the outcome defined for the course.

Semester End Examination:

Theory SEE will be conducted by University as per the scheduled timetable, with common question papers for subject

SEE paper will be set for 50 questions of each of 01 marks. The pattern of the question paper is MCQ. The time allotted for SEE is **01 hours**

Suggested Learning Resources:

Text Books :

1. John.R.Karsnitz, Stephen O'Brien and John P. Hutchinson, "Engineering Design",Cengage learning (International edition) Second Edition, 2013.
2. Roger Martin, "The Design of Business: Why Design Thinking is the Next Competitive Advantage", Harvard Business Press , 2009.
3. Hasso Plattner, Christoph Meinel and Larry Leifer (eds), "Design Thinking: Understand – Improve – Apply", Springer, 2011
4. Idris Mootee, "Design Thinking for Strategic Innovation: What They Can't Teach You at Business or Design School", John Wiley & Sons 2013.

References:
5. Yousef Haik and Tamer M.Shahin, "Engineering Design Process", CengageLearning, Second

Edition, 2011.

6. Book - Solving Problems with Design Thinking - Ten Stories of What Works (Columbia Business School Publishing) Hardcover – 20 Sep 2013 by Jeanne Liedtka (Author), Andrew King (Author), Kevin Bennett (Author).

Web links and Video Lectures (e-Resources):

1. www.tutor2u.net/business/presentations/. /**productlifecycle**/default.html
2. https://docs.oracle.com/cd/E11108_02/otn/pdf/. /E11087_01.pdf
3. www.bizfilings.com › Home › Marketing › Product Developmen
4. https://www.mindtools.com/brainstm.html
5. https://www.quicksprout.com/. /how-to-**reverse**-**engineer**-your-competit
6. www.vertabelo.com/blog/documentation/**reverse**-**engineering**
   https://support.microsoft.com/en-us/kb/273814
7. https://support.google.com/docs/answer/179740?hl=en
8. https://www.youtube.com/watch?v=2mjSDIBaUlM
   thevirtualinstructor.com/foreshortening.html

https://dschool.stanford.edu/…/designresources/…/ModeGuideBOOTCAMP2010L.pdf
https://dschool.stanford.edu/use-our-methods/ 6. https://www.interaction-design.org/literature/article/5-stages-in-the-design-thinking-process 7. http://www.creativityatwork.com/design-thinking-strategy-for-innovation/ 49 8. https://www.nngroup.com/articles/design-thinking/ 9. https://designthinkingforeducators.com/design-thinking/ 10. www.designthinkingformobility.org/wp-content/…/10/NapkinPitch_Worksheet.pdf

Activity Based Learning (Suggested Activities in Class)/ Practical Based learning

- http://dschool.stanford.edu/dgift/

Communicative English

Course Code	**21EGH18**	CIE Marks	50
Teaching Hours/Week (L:T:P: S)	2:0:0 Hours	SEE Marks	50
Total Hours of Pedagogy	02 Hours/Week	Total Marks	100
Credits	02	Exam Hours	02 hours

Course objectives:

The course (21EGH18) will enable the students,

- To know about Fundamentals of Communicative English and Communication Skills in general.
- To train to identifythenuancesof phonetics, intonation and enhance pronunciation skills for better communication skills.

- To impart basic English grammar and essentials ofimportant language skills.
- To enhance English vocabulary and language proficiency for better communication skills.
- To learn about Techniques of Information Transfer through presentation.

Language Lab : To augment LSRW, grammar, and Vocabulary skills (Listening, Speaking, Reading, Writing and Grammar, Vocabulary) through tests, activities, exercises etc., comprehensive web-based learning and assessment systems can be referred as per the AICTE /VTU guidelines.

Teaching-Learning Process (General Instructions)

These are sample Strategies, which teacher can use to accelerate the attainment of the various course outcomes.

1. Teachers shall adopt suitable pedagogy for effective teaching - learning process. The pedagogy shall involve the combination of different methodologies which suit modern technological tools and software's to meet the present requirements of the Global employment market.
   - (i) Direct instructional method (Low /Old Technology),
   - (ii) Flipped classrooms (High/advanced Technological tools),
   - (iii) Blended learning (combination of both),
   - (iv) Enquiry and evaluation based learning,
   - (v) Personalized learning,
   - (vi) Problems based learning through discussion,
   - (vii) Following the method of expeditionary learning Tools and techniques,
   - (viii) Use of audio visual methods through language Labs in teaching of of LSRW skills.
2. Apart from conventional lecture methods, various types of innovative teaching techniques through videos, animation films may be adapted so that the delivered lesson can progress the students In theoretical applied and practical skills in teaching of communicative skills in general.

Module-1

Introduction to Communicative English:

Introduction, Language as a Tool, Fundamentals of Communicative English, Process of Communication, Barriers to Effective Communicative English, Different styles and levels in Communicative English (Communication Channels). Interpersonal and Intrapersonal Communication Skills, How to improve and Develop Interpersonal and Intrapersonal Communication Skills.

Teaching-Learning Process	Chalk and talk method, Videos, PowerPoint presentation to teach Communication skills (LSRW Skills), Creating real time stations in classroom discussions, Giving activities and assignments (Connecting Campus & community with companies real time situations).

Module-2	
Introduction to Phonetics : Introduction, Phonetic Transcription, English Pronunciation, Pronunciation Guidelines Related to consonants and vowels, Sounds Mispronounced, Silent and Non-silentLetters, Syllables and Structure, Word Accent and Stress Shift, – Rules for Word Accent, Intonation – purposes of intonation, Spelling Rules and Words often Misspelt – Exercises on it.Common Errors in Pronunciation.	
Teaching-Learning Process	Chalk and talk method, Videos, PowerPoint presentation and Animation videos to teach phonetics in Practical method, creating real time stations in classroom discussions, Giving activities and assignments (Connecting Campus & community with companies real time situations).

Module-3	
Basic English Communicative Grammar and Vocabulary PART - I : Grammar: Basic English Grammar and Parts of Speech - Nouns, Pronouns, Adjectives, Verbs, Adverbs, Conjunctions, Articles and Preposition. Preposition, kinds of Preposition and Prepositions often Confused. Articles: Use of Articles – Indefinite and Definite Articles, Pronunciation of '*The*', words ending '*age'*, some plural forms. Introduction to Vocabulary, All Types of Vocabulary –Exercises on it.	
Teaching-Learning Process	Chalk and talk method, Videos, PowerPoint presentation to teach Grammar, Animation videos on communication and language skills, creating real-time stations in classroom discussions, Giving activities and assignments (Connecting Campus & community with companies real time situations).

Module-4	
Basic English Communicative Grammar and Vocabulary PART - II: Question Tags, Question Tags for Assertive Sentences (Statements) – Some Exceptions in Question Tags and Exercises, One Word Substitutes and Exercises. Strong and Weak forms of words, Words formation - Prefixes and Suffixes (Vocabulary), Contractions and Abbreviations. Word Pairs (Minimal Pairs) – Exercises, Tense and Types of tenses, The Sequence of Tenses (Rules in use of Tenses) and Exercises on it.	
Teaching-Learning Process	Chalk and talk method, PowerPoint presentation to teach Grammar and phonetics, Animation videos on communication and language skills, creating real time stations in classroom discussions, Giving activities and assignments (Connecting Campus & community with companies real time situations).

Module-5	
Communication Skills for Employment: Information Transfer: Oral Presentation - Examples and Practice. Extempore / Public Speaking, Difference between Extempore / Public Speaking, Communication Guidelines for Practice.Mother Tongue Influence (MTI) – South Indian Speakers, Various Techniques for Neutralization of Mother Tongue Influence – Exercises.Reading and Listening Comprehensions – Exercises.	
Teaching-Learning Process	Chalk and talk method, Videos, PowerPoint presentation to teach Grammar and phonetics, Animation videos on communication and language skills, creating real time stations in classroom discussions, Giving activities and assignments (Connecting Campus & community with companies real time situations).

Course outcome (Course Skill Set)

At the end of the course(21EGH18) the student will be able to :

1. Understand and apply the Fundamentals of Communication Skills in their communication skills.
2. Identify the nuances of phonetics, intonation and enhance pronunciation skills.
3. To impart basic English grammar and essentials of language skills as per present requirement.
4. Understand and useall types of English vocabulary and language proficiency.

5. AdopttheTechniques of Information Transfer through presentation.

Assessment Details (both CIE and SEE)
(methods of CIE need to be defined topic wise i.e.- MCQ, Quizzes, written test, Reports writing, Seminar and activities). Continuous internal evaluation (CIE) needs to be conducted for 50 marks like Engineering courses. The weight age of Continuous Internal Evaluation (CIE) is 50% and for Semester End Exam (SEE) is 50%. The student has to obtain a minimum of 40% of maximum marks in CIE and 35% of maximum marks in SEE to pass. MCQ. Overall a student has to secure 40% of the maximum marks of course (CIE+SEE).   The pattern (Multiple Choice Questions) Semester End Exam (SEE) is conducted for 50 marks (120 minutes duration). Based on this grading will be awarded.

Continuous Internal Evaluation (CIE) :
Three Unit Tests each of **20 Marks (duration 01 hour**)
   7. First test at the end of 5th week of the semester
   8. Second test at the end of the 10th week of the semester
   9. Third test at the end of the 15th week of the semester
All the tests are preferred similar to SEE pattern; however, teacher may follow test pattern similar to other theory courses of Engineering
Two assignments each of **10 Marks**
   10. First assignment at the end of 4th week of the semester
   11. Second assignment at the end of 9th week of the semester
Report writing /Group discussion/Seminar any one of three suitably planned to attain the COs and POs for **20 Marks** (**duration 01 hours**)
   12. At the end of the 13th week of the semester
The sum of three tests, two assignments, and quiz/seminar/group discussion will be out of 100 marks and will be **scaled down to 50 marks**
 CIE methods /question paper is designed to attain the different levels of Bloom's taxonomy as per the outcome defined for the course.

Semester End Examination (SEE) :
SEE paper will be set for 100 questions of each of 01 marks. The pattern of the question paper is MCQ. The time allotted for SEE is 120 minutes**.** Marks scored are scaled down to 50 Marks. *(Time duration may be made 90 minutes to train the students for engineering / non-engineering competitive examination)*

   1. Communicative English has become a very important component in all engineering and non-engineering competitive examinations. In exams like GRE, TOEFL, IELTS and GATE exam, all state and Central Government recruitment examinations, placement tests and other Examinations, so the pattern of question paper, in general, will be in a multiple-choice question (MCQ) Pattern. So, to meet the relevance of the recruitment requirement of our Engineering students "Communicative English" Semester end examination (SEE) will be conducted in a multiple choice question (MCQ) pattern.
   2. MCQ Pattern (Multiple Choice Questions) Semester End Exam (SEE) is conducted for 50 marks (120 minutes duration).

Suggested Learning Resources:

1) **Communication Skills** by Sanjay Kumar and Pushp Lata, Oxford University Press - 2019.
2) **English for Engineers** by N.P.Sudharshana and C.Savitha, Cambridge University Press – 2018.
3) **A Textbook of English Language Communication Skills,** Infinite Learning Solutions–(Revised Edition) 2021.
4) **A Course in Technical English–D Praveen Sam, KN Shoba,** Cambridge University Press – 2020.
5) **Technical Communication** by Gajendra Singh Chauhan and Et al, Cengage learning India Pvt Limited [Latest Revised Edition] - 2019.
6) **English Language Communication Skills – Lab Manual cum Workbook,** Cengage learning India Pvt Limited [Latest Revised Edition] – 2019.
7) **Practical English Usage** by Michael Swan, Oxford University Press – 2016.
8) **Technical Communication** – Principles and Practice, Third Edition by Meenakshi Raman and Sangeetha Sharma, Oxford University Press 2017.

Activity Based Learning (Suggested Activities in Class)/ Practical Based learning
- ✓ Contents related activities (Activity-based discussions)
- ✓ For active participation of students instruct the students to prepare Flowcharts and Handouts
- ✓ Organising Group wise discussions Connecting to placement activities
- ✓ Quizzes and Discussions
- ✓ Seminars and assignments

PLANNING STUDIO – II: VILLAGE PLANNING AND URBAN NEIGHBOURHOOD PLANNING			
Course Code	**21PLN21**	CIE Marks	50
Teaching Hours/Week (L:T:P: S)	0:0:10:0	SEE Marks	50
Total Hours of Pedagogy	160	Total Marks	100
Credits	6	Exam Hours	-

Course objectives:
- This studio intends to develop vocabulary in planning and develop an ability to observe, record and present data in meaningful ways with the purpose of understanding planning issues.

Pedagogy (General Instructions)
These are sample Strategies, which teachers can use to accelerate the attainment of the various course outcomes.
- Classification of land and exposing the students to the Planning guidelines (URDPFI)
- Innovative lecture methodologies to be adapted to improve the teaching and learning process
- Short videos for better understanding
- Encourage collaborative (Group Learning) learning in the class
- Ask at least three HOT (Higher order Thinking) questions in the class, which promotes critical thinking
- Adopt Problem Based Learning (PBL), which fosters students Analytical skills, develop thinking skills such as the ability to evaluate, generalize, and analyse information rather than simply recall it
- Discussion in class to elevate thinking level and different problem solving levels

Course   Contents
Neighbourhood
Study
- This component is divided in two parts. In the first part students undertake a study of different land uses other than the residential land use. Through land use case studies, students are expected to develop understanding of basic principles of land use planning such as categorization, hierarchy, permissibility, compatibility, etc. and supporting infrastructure required for various land uses.
- Second part of this component focuses on residential land use. Building on the understanding of residential neighbourhood developed in the previous semester, students would also develop an understanding of typologies of residential development with respect to built form, evolution, ownership, etc. and requirements of facilities and infrastructure in residential areas.
- Students are expected to apply data collection methods learnt in Planning Techniques class including primary surveys to understand different activities, socio-economic conditions, and infrastructure availability.

Village study
- Village study would involve an analysis of a rural settlement by comprehending social, economic, physical and political aspects. This exercise would also focus on the understanding of the history of a village and its people, basis of spatial organisation of a village and its transformations over the years.
- This would further include understanding of land between abadi area and revenue boundary of a village. Lastly, a study of government schemes for the entire village would be undertaken. Students would be expected to develop sensitivity to development issues in a rural settlement.

Pedagogy
Through site visits and site studies from both physical study as well as literature study, the studio should focus on the development of various conceptual models and ideas of the students into Plans

Course outcome (Course Skill Set)

At the end of the course the student will be able to :
- To explain the basic terminologies in planning. To apply data collection methods in field surveys. To identify ways in which we observe, record and present data in meaningful ways. To demonstrate familiarity with the functioning of a neighbourhood and a village through processes of experiential learning.

Assessment Details (both CIE and SEE)

(methods of CIE need to be define topic wise i.e.- MCQ, Quizzes, Open book test, Seminar or micro project)

The weightage of Continuous Internal Evaluation (CIE) is 50% and for Semester End Exam (SEE) is 50%. The student has to obtain a minimum of 40% marks of maximum marks in CIE and minimum 35% marks of maximum marks in SEE to pass, and a minimum of 40% (40 marks out of 100) in the sum total of the CIE (Continuous Internal Evaluation) and SEE (Semester End Examination) taken together. Theory Semester End Exam (SEE) is conducted for 100 marks and scaled down to 50 marks. Based on this grading will be awarded.

Continuous Internal Evaluation:
- Continuous Internal Evaluation (CIE): The CIE marks awarded in case of Studio shall be based on the weekly evaluation of progress of the studio works after the conduction of every Presentation

Semester End Examination:
- Planning Studio SEE will be conducted by the University as per scheduled time table, in a batch wise with External examiner and Internal Examiner reviewing the works of the students through viva voice.

Suggested Learning Resources:

Books

Text Books and References:

1. Berke, P. and Goodschalk, D.A., (2006) Urban Land Use Planning, University of Illinois Press, Champaign, Illinois.

2. Jodhka, S.S. (ed.) (2012) Village Society, Orient Blackswan, Hyderabad.

3. Talen, E. (2012) City Rules: How regulations affect urban form, Island Press, Washington.

4. Stevens, N.J., Salmon, M.P., Walker, H.G., and Stanton, A.N. (2008) Human Factors in Land Use Planning and Design, CRC Press, New York.

5. Sheth, A., and Panchal, N. and Patel, S.B. (2007) Urban Layouts, Densities and the Quality of Urban Life, Economic and Political Weekly Vol. 42, No. 26, pp. 2725-2736.

6. Vidyarthi, S. (2015) One Idea Many Plans: An American City Design Concept in Independent India, Routledge, New York.

Web links and Video Lectures (e-Resources):

- http://mohua.gov.in/link/urdpfi-guidelines.php
- https://www.youtube.com/watch?v=mrcCagx8M1w
- https://www.youtube.com/watch?v=nSOBTRKUmQQ
- https://rural.nic.in/departments/departments-of-mord/department-rural-development
- https://rural.nic.in/sites/default/files/Guidelines_Evaluation_Impact_Assessment_Research_Studies_Econ omic_Monitoring_Wing.pdf

Activity Based Learning (Suggested Activities in Class)/ Practical Based learning
- Physical site visits and case studies to enhance the knowledge of the students, field studies to be based on the Village Planning and Urban Neighbourhood Planning
- Literature study ppts and class discussions

II Semester

CITIES IN HISTORY			
Course Code	**21PLN22**	CIE Marks	50
Teaching Hours/Week (L:T:P: S)	2:0:0:0	SEE Marks	50
Total Hours of Pedagogy	32	Total Marks	100
Credits	2	Exam Hours	3

Course objectives:
- History informs the present in various ways. The chief objective of this subject is to understand historical processes of human settlements and development of different patterns. Second, to understand common characteristics of settlements in different time periods, and to appreciate influences of political, economic, technological, social and cultural factors in shaping the city and its role in shaping these societal
processes.

Pedagogy (General Instructions)
These are sample Strategies, which teachers can use to accelerate the attainment of the various course outcomes.
- Innovative lecture methodologies to be adapted to improve the teaching and learning process
- Short videos for better understanding of ancient cities in history
- Various forms of Art. Various ideologies of Aristotle and Plato
- Encourage collaborative (Group Learning) learning in the class
- Ask at least three HOT (Higher order Thinking) questions in the class, which promotes critical thinking
- Adapt Problem Based Learning (PBL), which fosters students Analytical skills, develop thinking skills such as the ability to evaluate, generalize, and analyse information rather than simply recall it
- Discussion in class to elevate thinking level and different problem solving levels

Module-1

History and Historical Processes
Significance of studying historical processes; Interpreting history for planning purposes; Concept of time as a dimension of built form; Human settlements as a material expression of civilizational development.

Pedagogy	Taught through ppts, pdf materials and discussions

Module-2

Settlements in History
Cities in India from medieval to colonial era; Medieval planning in India and their common and distinct elements; Colonial history, built form and town planning; Colonialism and the modernist city in India.

Pedagogy	Taught through ppts, pdf materials and discussions

Module-3

Urban Processes
Criteria of location and development of towns in Asian history; Political, economic, technological, social and cultural factors shaping settlements through history; Indian city typologies and study of urban growth, decline, renewal in different cities based on functions, locations, etc.

Pedagogy	Taught through ppts, pdf materials and discussions

Module-4

History of Cities in South Asia
Evolution of cities in South Asia, Urban patterns and trends, similarities and differences from Indian cities; Historical challenges and interventions in Asian cities; Examples and case studies from South Asia.

Pedagogy	Taught through group ppts, pdf materials and discussions

Module-5

Definition and symbols of culture
Concepts of beauty and ugliness; Classical theories of aesthetics; Relationship of aesthetics with other cultural values; Concepts of scale, space, form and structure. Concept of time as dimension of the built form; concept of space and scale as followed through different cultures; the elements of the town, the house, the street, the chowk; social and cultural criteria of location of towns and activities within it

Pedagogy	Taught through group ppts, pdf materials and discussions

Course outcome (Course Skill Set)

At the end of the course the student will be able to :

- Upon the completion of this course, the students would be able: To analyse historical processes for overview of urban settlements and their various urban patterns. To identify common elements for categorization of urban patterns based on different parameters. To demonstrate familiarity with chronological evolution of different cities and their functional and spatial characteristics in different time periods. To develop understanding about various urban processes and different parameters affecting the functioning of a city in terms of its character and pattern.

Assessment Details (both CIE and SEE)

(methods of CIE need to be define topic wise i.e.- MCQ, Quizzes, Open book test, Seminar or micro project)

The weightage of Continuous Internal Evaluation (CIE) is 50% and for Semester End Exam (SEE) is 50%. The student has to obtain a minimum of 40% marks of maximum marks in CIE and minimum 35% marks of maximum marks in SEE to pass, and a minimum of 40% (40 marks out of 100) in the sum total of the CIE (Continuous Internal Evaluation) and SEE (Semester End Examination) taken together. Theory Semester End Exam (SEE) is conducted for 100 marks (3 hours' duration) and scaled down to 50 marks. Based on this grading will be awarded.

Continuous Internal Evaluation:

5. Methods suggested: Test, Open Book test, Written Quiz, Seminar, report writing etc.
6. The class teacher has to decide the topic for closed book test, open book test, Written Quiz and Seminar. In the beginning only the teacher has to announce the methods of CIE for the subject.

Semester End Examination:

Theory SEE will be conducted by University as per scheduled time table, with common question papers for subject

7. The question paper will have ten questions. Each question is set for 20 marks.
8. There will be 2 questions from each module. Each of the two questions under a module (with a maximum of 3 sub questions), should have a mix of topics under that module.
9. The students have to answer 5 full questions, selecting one full question from each module

Suggested Learning Resources:

Books

1. Banga, I. (1991) The City in Indian History, Manohar Publishers and Distributors, New Delhi.
2. Beverley, E. (2011) Colonial Urbanism and South Asian Cities, Social History, Vol. 36, No. 4, pp. 482–497.
3. Bosselmann, P. (2008) Urban Transformation, Island Press, Washington, D.C.
4. Chandavarkar, R. (2009) History, Culture, and the Indian City, Cambridge University Press, New Delhi.
5. Geddes, P. (1915) Cities in Evolution, Williams and Norgate, London.
6. Gallion, A.B. (1950) The Urban Pattern, John Wiley and Sons, London.
Gooptu, N. (2001) The Politics of the Urban Poor in Early Twentieth-Century India, Cambridge University Press, Cambridge.
8. Heitzman, J. (2008) The City in South Asia, Routledge, London.
9. Kenoyer, J. (1998) Ancient Cities of the Indus Valley Civilization, Oxford University Press, New Delhi.
10. King, A. (1976) Colonial Urban Development: Culture, Social Power, and Environment, Routledge and Kegan Paul, New York.
11. Kostof, S. (1993) The City Shaped: Urban Patterns and Meanings through History, Bullfinch Publishing, Stockholm.
12. Mumford, L. (1961) The City in History: Its Origins, Its Transformations, and Its Prospects, Mariner Books, New York.
13. Richards, J. (1993) The Mughal Empire, Cambridge University Press, New Delhi.
14. Sharma, Y. and Malekandathil, P. (2014) Cities in Medieval India, Primus Books, New Delhi.
15. Smith, M.L. (2003) The Social Construction of Ancient Cities, Smithsonian Books, Washington, D.C.

Web links and Video Lectures (e-Resources):

- https://www.my-mooc.com/en/categorie/urban-planning
- https://www.youtube.com/watch?v=H1jHdnZ2U3o

Activity Based Learning (Suggested Activities in Class)/ Practical Based learning
● Group presentations and discussions on the topics from the modules

II Semester

SPATIAL DATA INFRASTRUCTURE FOR PLANNING – I			
Course Code	**21 PLN23**	CIE Marks	50
Teaching Hours/Week (L:T:P: S)	1:0:0:2	SEE Marks	50
Total Hours of Pedagogy	48	Total Marks	100
Credits	2	Exam Hours	3

Course objectives:
- To expose students to the modern techniques of remote sensing and photo interpretation required for planning. To provide exposure to the students to the available spatial data and organizations involved in providing planning information and also to impart skills for the use of this planning information.

Pedagogy (General Instructions)
These are sample Strategies, which teachers can use to accelerate the attainment of the various course outcomes.
- Innovative lecture methodologies to be adapted to improve the teaching and learning process
- Short videos for better understanding, introduction to practical hands on experience the softwares
- Encourage collaborative (Group Learning) learning in the class
- Ask at least three HOT (Higher order Thinking) questions in the class, which promotes critical thinking
- Adapt Problem Based Learning (PBL), which fosters students Analytical skills, develop thinking skills such as the ability to evaluate, generalize, and analyze information rather than simply recall it
- Discussion in class to elevate thinking level and different problem solving levels

Module-1	
Remote Sensing and Photo Interpretation Remote Sensing: Definition, aerial and satellite remote sensing; Aerial photo interpretation, qualitative and quantitative elements of photo-interpretation; Satellite remote sensing, geo-stationary and sun-synchronous satellites, principles of electromagnetic radiations, resolutions; Introduction to digital image processing; salient features of popular remote sensing satellites; Applications in planning along with laboratory exercises	
Pedagogy	Taught through ppts and pdf materials

Module-2	
Photogrammetry Limitations of traditional surveys in planning; Photogrammetry as an alternative tool for surveying; Aerial photographs, and their classification; Principles of stereoscopic vision; Basic instruments like Stereopair, Pocket and Mirror Stereoscopes, Parallax Bars; Principles of photogrammetry, Measurement of heights and depths; Introduction to digital photogrammetry	
Pedagogy	Taught through ppts and pdf materials

Module-3	
Planning Information Systems Systems approach to planning as basis for planning information systems; Systems, hierarchy, types; Data and information, value of information, information flows and loops; Information sharing and security; Information systems, types, limitations; New sources of data such as big data and real data.	
Pedagogy	Taught through group ppts, pdf materials and group discussions

Module-4	
Human Settlements and Planning Information Systems Information needs, scales and levels of human settlements; Preconditions for using planning information systems; Introduction to various planning information systems	
Pedagogy	Taught through group ppts, pdf materials and group discussions

Module-5
Introduction to spatial data infrastructure; Planning information systems in India: NNRMS, NUIS, National Urban Observatory, Municipal information systems, land information systems, cadastre systems; Tools for spatial data handling; Introduction to GIS;
BHUVAN; Agencies responsible for generating spatial data.

Pedagogy	Taught through group ppts, pdf materials, group discussions, laboratory introduction to softwares

Course outcome (Course Skill Set)

At the end of the course the student will be able to :
- Upon the completion of this course, the students would be able: To demonstrate skills about the use of remote sensing and photointerpretation for the preparation of land use and land cover maps. To show the ability to use planning information for making planning decisions.

Assessment Details (both CIE and SEE)

(methods of CIE need to be define topic wise i.e.- MCQ, Quizzes, Open book test, Seminar or micro project)

TThe weightage of Continuous Internal Evaluation (CIE) is 50% and for Semester End Exam (SEE) is 50%. The student has to obtain a minimum of 40% marks of maximum marks in CIE and minimum 35% marks of maximum marks in SEE to pass, and a minimum of 40% (40 marks out of 100) in the sum total of the CIE (Continuous Internal Evaluation) and SEE (Semester End Examination) taken together. Theory Semester End Exam (SEE) is conducted for 100 marks (3 hours' duration) and scaled down to 50 marks. Based on this grading will be awarded.

Continuous Internal Evaluation:
1. Methods suggested: Test, Open Book test, Written Quiz, Seminar, report writing etc.
2. The class teacher has to decide the topic for closed book test, open book test, Written Quiz and Seminar. In the beginning only the teacher has to announce the methods of CIE for the subject.

Semester End Examination:
1. Theory SEE will be conducted by University as per scheduled time table, with common question papers for subject
2. The question paper will have ten questions. Each question is set for 20 marks.
3. There will be 2 questions from each module. Each of the two questions under a module (with a maximum of 3 sub questions), should have a mix of topics under that module.
4. The students have to answer 5 full questions, selecting one full question from each module

Suggested Learning Resources:

Books
1. Lillesand, T., Kiefer, R.W., and Chipman, J. (2011) Remote Sensing and Image Interpretation, Wiley, London.

2. Weilberg M. (ed.) (2016) Photogrammetry and Remote Sensing, Syrawood Publishing House, New York.

3. Ralph, M.S., George, W. R. (2016) Fundamentals of Information Systems, Cengage Learning, Boston.

4. Herold, M. and Gamba, P. (2009) Global Mapping of Human Settlement: Experiences, Datasets, and Prospects, CRC Press, Taylor and Francis, Boca Raton, Florida.

Web links and Video Lectures (e-Resources):

- https://www.youtube.com/watch?v=-5dfbW57EwE
- https://www.youtube.com/watch?v=vJAQHA5XQWI&list=PL3MO67NH2XxLAFn3jc7gOhXLD9YFx - oew
- https://www.youtube.com/watch?v=WVC3sKCp6IM

Activity Based Learning (Suggested Activities in Class)/ Practical Based learning
- Theoretical discussions on various topics from the modules
- Research based activities

PLANNING COMMUNICATION II			
Course Code	**21 PLN24**	CIE Marks	50
Teaching Hours/Week (L:T:P: S)	1:2:0:0	SEE Marks	50
Total Hours of Pedagogy	48	Total Marks	100
Credits	2	Exam Hours	3

Course objectives:
- The primary objective of this course is to develop verbal, visual and interpersonal communication skills.

Pedagogy (General Instructions)
These are sample Strategies, which teachers can use to accelerate the attainment of the various course outcomes.
- Innovative lecture methodologies to be adapted to improve the teaching and learning process
- Short videos, model making and activity based methods to be adapted for better understanding
- Encourage collaborative (Group Learning) learning in the class
- Ask at least three HOT (Higher order Thinking) questions in the class, which promotes critical thinking
- Adapt Problem Based Learning (PBL), which fosters students Analytical skills, develop thinking skills such as the ability to evaluate, generalize, and analyse information rather than simply recall it
- Discussions on grammar and other language and software oriented technical topics

Module-1

Written communication
Language and communication, differences between speech and writing, distinct features of speech, distinct features of writing, Reading Skills to find out particular information and get the gist through notes, letters, articles, reports. English comprehension, paraphrasing, summarising and editing.

Pedagogy	Taught through teaching aid, discussion, chalk and talk method, group activities

Module-2

Undertaking Literature Review
Identification of credible journals, books, reports, etc.; How to read literature; Styles of referencing such as Harvard Style of Referencing, APA, etc., Understanding an argument, developing your own interpretations What is an argument, validity and strength of arguments, common fallacies of reasoning, use and abuse of language in reasoning

Pedagogy	Taught through teaching aid, discussion, chalk and talk method, group activities

Module-3

Format and Elements of Reports
Type; Types of reports, difference between technical, scientific, legal and other types of communication; specific characteristics of writing technical reports. Preliminaries: contents, preface, acknowledgements, list of tables and figures; Key words and indexing, Body: introduction, sections and subsections, or chapters, conclusions and recommendations; Appendices; References; knowledge of indexing and available reference materials

Pedagogy	Taught through teaching aid, chalk and talk method, group/individual works discussion, group activities

Module-4

Writing a Report
Developing a coherent structure for a term paper and report; Introductory, developmental, transitional and concluding paragraphs, linguistic unity, coherence and cohesion, descriptive, narrative, expository and argumentative writing. Report writing,

Pedagogy	Taught through teaching aid, chalk and talk method, group/individual works discussion, group activities

Module-5

Leadership
Meaning, Nature and Functions, Leadership styles in organization, Decision Making Decision making; definition, features, factors, essentials and hindrances in sound decision-making; structure of decisions and types of decisions; approaches to study leadership; trait-approach, behavioural approach and situational approach; Leadership in Teams, Meaning and Nature, Types Of power, Relevance in organization and Society. This unit could be covered in workshop format.

Pedagogy	Taught through teaching aid, chalk and talk method, group/individual works discussion, group activities

Course outcome (Course Skill Set)

At the end of the course the student will be able to :
- To show ability to lead
- To demonstrate the ability to prepare base maps at different scales.
- To demonstrate the ability to prepare a report.
- To identify and name feelings and become aware of patterns of communication of the self.
- To demonstrate the ability to undertake literature review.
- To demonstrate written communication skills in English.
- To show knowledge about the elements of a report and correct ways of citing sources.
- To show knowledge and ability of structuring a report.

Assessment Details (both CIE and SEE)

(methods of CIE need to be define topic wise i.e.- MCQ, Quizzes, Open book test, Seminar or micro project)

The weightage of Continuous Internal Evaluation (CIE) is 50% and for Semester End Exam (SEE) is 50%. The student has to obtain a minimum of 40% marks of maximum marks in CIE and minimum 35% marks of maximum marks in SEE to pass, and a minimum of 40% (40 marks out of 100) in the sum total of the CIE (Continuous Internal Evaluation) and SEE (Semester End Examination) taken together. Theory Semester End Exam (SEE) is conducted for 100 marks (3 hours' duration) and scaled down to 50 marks. Based on this grading will be awarded.

Continuous Internal Evaluation:
7. Methods suggested: Test, Open Book test, Written Quiz, Seminar, report writing etc.
8. The class teacher has to decide the topic for closed book test, open book test, Written Quiz and Seminar. In the beginning only teacher has to announce the methods of CIE for the subject.

Semester End Examination:

Theory SEE will be conducted by University as per scheduled time table, with common question papers for subject
10. The question paper will have ten questions. Each question is set for 20 marks.
11. There will be 2 questions from each module. Each of the two questions under a module (with a maximum of 3 sub questions), should have a mix of topics under that module.
12. The students have to answer 5 full questions, selecting one full question from each module

Suggested Learning Resources:
Books

1. Sontang, S. (2014) On Photography, Penguin, Delhi.

2. Jardin, V. (2017) Street Photography: Creative Vision behind the Lens, Routledge, New York.

3. Goleman, D. (2009) Emotional Intelligence, Bloomsbury, New York.

4. Zakia, R.D. and Page, D. (2010) Photographic Composition: A Visual Guide, Focal Press, Massachusetts.

5. Field, K. (2018) Cartography, ESRI Press, California.

6. Hashimoto, A. and Clayton, M. (2009) Visual Design Fundamentals: A Digital Approach, Charles River Media, Needham Heights, M.A.

Web links and Video Lectures (e-Resources):
- https://www.inc.com/encyclopedia/written-communication.html
- https://www.teamwork.com/blog/10-ways-leaders-teams/
- https://slcbmooc.org/

Activity Based Learning (Suggested Activities in Class)/ Practical Based learning
- Various activities related to leadership
- Group ppts, group activities, group discussions, debates
- writing skills enhancing activities and assignments

II Semester

SITE AND LAND DEVELOPMENT			
Course Code	**21PLN25**	CIE Marks	50
Teaching Hours/Week (L:T:P: S)	2:2:0:0	SEE Marks	50
Total Hours of Pedagogy	48	Total Marks	100
Credits	3	Exam Hours	3

Course objectives:
- To develop basic understanding about land development with a particular focus on surveys, geology and hydrology.

Pedagogy (General Instructions)
These are sample Strategies, which teachers can use to accelerate the attainment of the various course outcomes.
- Innovative lecture methodologies to be adapted to improve the teaching and learning process
- Short videos for better understanding, introduction to practical hands on experience of the software's
- Encourage collaborative (Group Learning) learning in the class
- Ask at least three HOT (Higher order Thinking) questions in the class, which promotes critical thinking
- Adapt Problem Based Learning (PBL), which fosters students Analytical skills, develop thinking skills such as the ability to evaluate, generalize, and analyse information rather than simply recall it
- Discussion in class to elevate thinking level and different problem solving levels
- Site visits for surveying etc

Module-1	
Fundamentals of Surveying	
Principles of surveying, types of surveying, classification of surveys and maps; Plan versus map, accuracy versus precision, sources and kinds of errors; Least squares adjustments and applications; Key principles of land surveying, basics of chain surveying, basics of levelling; Modern methods and instruments, accessories, operations, EDM without reflecting prisms; Total Station: types, instrument description, field techniques, traversing, motorized total stations, field procedures for total stations in topographic surveys.	
Pedagogy	Taught through chalk and talk method, ppts and pdf materials

Module-2	
Topographical Surveying	
Concepts and Techniques and GPS Definitions and procedure for topographic surveying, uses of topographical maps; Relief, methods of representing relief, contours and contour intervals, characteristics of contours, methods of locating contours and interpolation of contours; Dam surveys; Various satellites used by GPS: Differential GPS, Fundamentals of GPS, Application of GPS: GPS Receivers, Hand held GPS Receiver – Function – Field procedure	
Pedagogy	Taught through chalk and talk method, ppts and pdf materials

Module-3	
Geology	
Geological structure, land forms, weathering, landslides and mass wasting; Instability of hill slopes; Land and terrain suitability for various types of development; Earthquakes, seismic zoning, disaster prevention and other planning considerations	
Pedagogy	Taught through chalk and talk method, ppts and pdf materials

Module-4	

Ground Water
Concept and role in urban and regional planning in different types of terrains; Hydrologic cycle; Groundwater bearing properties of different lithological formations, surface water, reservoirs and springs; Artificial recharge and groundwater mound; Hydrological features in relation of seepage, fluctuation of water table and hydrographs, geological structure and underground passages for water supply; Hydrology and its links with planning; Implications on site selection and development.

Pedagogy	Taught through chalk and talk method, ppts and pdf materials

Module-5

Fundamentals of Geomorphology
Geomorphic classification and Evolution of landforms; Geomorphic cycle and their interpretation; Evolution of typical geomorphic features of India; Description and classification of folds, faults, joints, unconformities, fault planes; Landform types; Landslides, instability of hill slopes and its prevention

Pedagogy	Taught through chalk and talk method, ppts and pdf materials, group discussions

Course outcome (Course Skill Set)

At the end of the course the student will be able to :
- To show knowledge and skills about land surveys by actually conducting land surveys by using a range of methods and technologies.
- To demonstrate knowledge and skills about geological and hydrological aspects of land development.

Assessment Details (both CIE and SEE)

(methods of CIE need to be define topic wise i.e.- MCQ, Quizzes, Open book test, Seminar or micro project)
The weightage of Continuous Internal Evaluation (CIE) is 50% and for Semester End Exam (SEE) is 50%. The student has to obtain a minimum of 40% marks of maximum marks in CIE and minimum 35% marks of maximum marks in SEE to pass, and a minimum of 40% (40 marks out of 100) in the sum total of the CIE (Continuous Internal Evaluation) and SEE (Semester End Examination) taken together. Theory Semester End Exam (SEE) is conducted for 100 marks (3 hours' duration) and scaled down to 50 marks. Based on this grading will be awarded.

Continuous Internal Evaluation:
9. Methods suggested: Test, Open Book test, Written Quiz, Seminar, report writing etc.
10. The class teacher has to decide the topic for closed book test, open book test, Written Quiz and Seminar. In the beginning only teacher has to announce the methods of CIE for the subject.

Semester End Examination:
Theory SEE will be conducted by University as per scheduled time table, with common question papers for subject
13. The question paper will have ten questions. Each question is set for 20 marks.
14. There will be 2 questions from each module. Each of the two questions under a module (with a maximum of 3 sub questions), should have a mix of topics under that module.
15. The students have to answer 5 full questions, selecting one full question from each module

Suggested Learning Resources:
Books
1. Beer, A.R. and Higgins, C. (2000) Environment Planning for Site Development: A manual for sustainable local planning and design, Second Edition, E and FN Spon, London.

2. Dewberry, S.O. (2008) Land Development Handbook: Planning, Engineering, and Surveying, Third Edition, McGraw Hill, New York.

3. Syms, P. (2010) Land Development and Design, Wiley, Oxford.

Web links and Video Lectures (e-Resources):

- https://www.youtube.com/watch?v=qaEUB_G75dY
- https://www.youtube.com/watch?v=6COT986SYTQ
- https://prs3.com/site-land-planning/#:~:text=An%20important%20precursor%20of%20any,will%20work%20in%20the%20space .

Activity Based Learning (Suggested Activities in Class)/ Practical Based learning

- Group discussions and group ppts
- Surveying a site, principles and methodology
- Usage of lab equipment

II Semester

ECONOMICS FOR PLANNERS				
Course Code	**21PLN26**	CIE Marks	50
Teaching Hours/Week (L:T:P: S)	2:0:0:0	SEE Marks	50
Total Hours of Pedagogy	32	Total Marks	100
Credits	2	Exam Hours	3

Course objectives:
- Formal planning activity is focussed on master plan making and policy implementation. This results in the distribution of critical resources such as land and built environment. Therefore, it is imperative that planners have a good knowledge of macro-economic aspects. Keeping this in view, the main objective of this course is to comprehend and analyse the significance of economic aspects for planning cities
and regions.

Pedagogy (General Instructions)
These are sample Strategies, which teachers can use to accelerate the attainment of the various course outcomes.
- Innovative lecture methodologies to be adapted to improve the teaching and learning process
- Various concepts, models in economics for urban and regional planning
- Visits to concerned site studies, if need be
- Short videos for better understanding
- Encourage collaborative (Group Learning) learning in the class
- Ask at least three HOT (Higher order Thinking) questions in the class, which promotes critical thinking
- Adapt Problem Based Learning (PBL), which fosters students Analytical skills, develop thinking skills such as the ability to evaluate, generalize, and analyse information rather than simply recall it
- Discussion in class to elevate thinking and different methodologies of problem solving

Module-1	
Definition and Scope of Economics in Planning Central problems of economics; Micro and macro-economic decisions, and use of economics in planning; Basic economic concepts relevant to urban and regional planning and related sectors; Relationship between economic forces and planning.	
Pedagogy	Ppts preparation, case studies, pdf materials

Module-2	
Theory of Demand and Supply Laws of demand and supply; Elasticity of demand and supply, and its uses in urban and regional planning	
Pedagogy	Ppts preparation, case studies, pdf materials, problem solving

Module-3	
Theory of Firm Production Perfect and imperfect markets, and market demand and supply; Pricing under different market conditions; Theory of production, factors of production, costs, scale of production; Economies of scale; Economies of agglomeration.	
Pedagogy	Ppts preparation, case studies, pdf materials

Module-4	

	Concepts of Income, Employment and Money
	Classical and modern approaches; Growth and development indicators; Measures of national income; Defining development and under development through various approaches.
Pedagogy	Ppts preparation, case studies, pdf materials, problem solving

	Module-5
	Introduction to Urban and Regional Economics
	Use of economic concepts in urban planning, housing, transport, taxes, land use, location, etc.; use of economic concepts in regional planning; location, disparities in development, input output techniques, sectoral
	development etc. Economic Analysis. Economic Planning in India National and Urban level.
Pedagogy	Ppts preparation, case studies, pdf materials

Course outcome (Course Skill Set)

At the end of the course the student will be able to :

- Upon the completion of this course, the students would be able: To demonstrate the basic knowledge about macro-economic aspects of the Indian economy and its relationship with urban and regional planning.

Assessment Details (both CIE and SEE)

(methods of CIE need to be define topic wise i.e.- MCQ, Quizzes, Open book test, Seminar or micro project)

The weightage of Continuous Internal Evaluation (CIE) is 50% and for Semester End Exam (SEE) is 50%. The student has to obtain a minimum of 40% marks of maximum marks in CIE and minimum 35% marks of maximum marks in SEE to pass, and a minimum of 40% (40 marks out of 100) in the sum total of the CIE (Continuous Internal Evaluation) and SEE (Semester End Examination) taken together. Theory Semester End Exam (SEE) is conducted for 100 marks (3 hours' duration) and scaled down to 50 marks. Based on this grading will be awarded.

Continuous Internal Evaluation:

1. Methods suggested: Test, Open Book test, Written Quiz, Seminar, report writing etc.
2. The class teacher has to decide the topic for closed book test, open book test, Written Quiz and Seminar. In the beginning only teacher has to announce the methods of CIE for the subject.

Semester End Examination:

Theory SEE will be conducted by University as per scheduled time table, with common question papers for subject

1. The question paper will have ten questions. Each question is set for 20 marks.
2. There will be 2 questions from each module. Each of the two questions under a module (with a maximum of 3 sub questions), should have a mix of topics under that module.
3. The students have to answer 5 full questions, selecting one full question from each module

Suggested Learning Resources:
Books

1. Basu, K. and Maertens, A. (eds.) (2011) The Concise Oxford Companion to Economics in India, Oxford University Press, New Delhi.

2. Bertaud, A. (2018) Order without Design: How Markets Shape Cities, MIT Press, Massachusetts.

3. Behrman, J. and Srinivasan, T.N. (1995) Handbook of Development Economics, Volumes I-III, Elsevier Science, Amsterdam

4. Clark, G.L., Feldman, M.P., Gertler, M.S., Wójcik, D. and Kaiser, A. (eds.) (2018) The New Oxford Handbook of Economic Geography, Oxford University Press, Oxford.

5. Duranton, G., Henderson, J.V., and Strange, W.C. (2015) Handbook of Regional and Urban Economics, Volume 5, Elsevier, Amsterdam.

6. Feldman, M.M.A. (1987) What Kind of Economics for What Kind of Planning? Journal of the American Planning Association, Vol. 53, Issue 4, pp. 427-429.

7. Jacobs, J. (1970) The Economy of Cities, Random House, New York.

8. Jenkins, R., Kennedy, L., Mukhopadhyay, P., & Pradhan, K. (2015) Special Economic Zones in India: Interrogating the Nexus of Land, Development and Urbanization, Environment and Urbanization Asia, Vol. 6, No. 1, pp. 1–17.

9. Klosterman, R.E. (1985) Arguments for and against planning, Town Planning Review, Vol. 56, No. 1, pp. 5-20.

10. Mayer, P. (1993) An Economist's Work in a City Planning Department, Business Economics, Vol. 28, No. 2, pp. 55-58

11. Mohanty, P. (2019) Planning and Economics of Cities: Shaping India's Form and Future, Sage, New Delhi.

12. Windsor, D. (1986) Why planners need economics, Journal of the American Planning Association, Vol. 52, Issue 3, pp. 260-261.

Web links and Video Lectures (e-Resources):
- https://www.worldbank.org/en/research/brief/economic-monitoring
- https://documents1.worldbank.org/curated/en/212581468764694501/pdf/multi0page.pdf
- https://www.youtube.com/watch?v=DQq-zJPSf4U
- https://www.youtube.com/watch?v=hwAr1zbRWLs
- https://www.youtube.com/watch?v=LwLh6ax0zTE

Activity Based Learning (Suggested Activities in Class)/ Practical Based learning
- Activities which include applications of economic concepts on regional planning
- Case analysis from each module and problem solving from module 2 & 4

II SEMESTER

Professional Writing Skills in English

Course Code	**21EGH28**	CIE Marks	50
Teaching Hours/Week (L:T:P: S)	1:1:1	SEE Marks	50
Total Hours of Pedagogy	03 Hours/Week	Total Marks	100
Credits	02	Exam Hours	2 hour

Course objectives:

The course (21EGH28) will enable the students ,
- To Identify the Common Errors in Writing and Speaking of English.
- To Achieve better Technical writing and Presentation skillsfor employment.
- To read Technical proposals properly and make them to Write good technical reports.
- Acquire Employment and Workplace communication skills.
- To learn about Tequniqes of Information Transfer through presentation in different level.

Language Lab : To augment LSRW, grammar and Vocabulary skills (Listening, Speaking, Reading,

Writing and Grammar, Vocabulary) through tests, activities, exercises etc., comprehensive web-based learning and

assessment systems can be referred as per the AICTE /VTU guidelines.

Teaching-Learning Process (General Instructions)

These are sample Strategies, which teacher can use to accelerate the attainment of the various course outcomes.
- ✓ Teachers shall adopt suitable pedagogy for effective teaching - learning process. The pedagogy shall involve the combination of different methodologies which suit modern technological tools and software's to meet the present requirements of the Global employment market.
    - (i) Direct instructional method (Low /Old Technology),
    - (ii) Flipped classrooms (High/advanced Technological tools),
    - (iii) Blended learning (combination of both),
    - (iv) Enquiry and evaluation based learning,
    - (v) Personalized learning,
    - (vi) Problems based learning through discussion,
    - (vii) Following the method of expeditionary learning Tools and techniques,
    - (viii) Use of audio visual methods through language Labs in teaching of of LSRW skills.

✓	Apart from conventional lecture methods, various types of innovative teaching techniques through videos, animation films may be adapted so that the delivered lesson can progress the students In theoretical applied and practical skills in teaching of communicative skills in general.

Module-1

Identifying Common Errors in Writing and Speaking English :
- Advanced English Grammar for Professionals with exercises, Common errors identification in parts of speech, Use of verbs and phrasal verbs, Auxiliary verbs and their forms,Subject Verb Agreement (Concord Rules with Exercises).
- Common errors in Subject-verb agreement, Noun-pronoun agreement, Sequence of Tenses and errors identification in Tenses.Advanced English Vocabulary and its types with exercises – Verbal Analogies, Words Confused/Misused.

Teaching-Learning Process	Chalk and talk method, PowerPoint presentation to teach Communication skills (LSRW Skills), Creating real time stations in classroom discussions, Giving activities and assignments (Connecting Campus & community with companies real time situations).

Module-2

Nature and Style of sensible writing :
- Organizing Principles of Paragraphs in Documents, Writing Introduction and Conclusion, Importance of Proper Punctuation, The Art of Condensation (Precise writing) and Techniques in Essay writing, Common Errors due to Indianism in English Communication, Creating Coherence and Cohesion, Sentence arrangements exercises, Practice of Sentence Corrections activities.Importance of Summarising and Paraphrasing.
- Misplaced modifiers, Contractions, Collocations, Word Order, Errors due to the Confusion of words, Common errors in the use of Idioms and phrases, Gender, Singular & Plural. Redundancies & Clichés.

Teaching-Learning Process	Chalk and talk method, PowerPoint presentation and Animation videos to teach phonetics in Practical method, creating real time stations in classroom discussions, Giving activities and assignments (Connecting Campus & community with companies real time situations).

Module-3

Technical Reading and Writing Practices :
- Reading Process and Reading Strategies, Introduction to Technical writing process, Understanding of writing process, Effective Technical Reading and Writing Practices, Introduction to Technical Reports writing, Significance of Reports, Types of Reports.
- Introduction to Technical Proposals Writing, Types of Technical Proposals, Characteristics of Technical Proposals. Scientific Writing Process.
- Grammar – Voice and Speech (Active and Passive Voices) and Reported Speech, Spotting Error Exercises, Sentence Improvement Exercises, Cloze Test and Theme Detection Exercises.

Teaching-Learning Process	Chalk and talk method, PowerPoint presentation to teach Grammar, Animation videos on communication and language skills, creating real time stations in classroom discussions, Giving activities and assignments (Connecting Campus & community with companies real time situations).

Module-4

	Professional Communication for Employment :
	- The Listening Comprehension, Importance of Listening Comprehension, Types of Listening, Understanding and Interpreting, Listening Barriers, Improving Listening Skills. Attributes of a good and poor listener. - Reading Skills and Reading Comprehension, Active and Passive Reading, Tips for effective reading. - Preparing for Job Application, Components of a Formal Letter, Formats and Types of official, employment, Business Letters, Resume vs Bio Data, Profile, CV and others, Types of resume, Writing effective resume for employment, Model Letter of Application (Cover Letter) with Resume, Emails, Blog Writing, Memos (Types of Memos) and other recent communication types.
Teaching-Learning Process	Chalk and talk method, PowerPoint presentation to teach Grammar and phonetics, Animation videos on communication and language skills, creating real time stations in classroom discussions, Giving activities and assignments (Connecting Campus & community with companies real time situations).

Module-5

	Professional Communication at Workplace:
	- Group Discussions – Importance, Characteristics, Strategies of a Group Discussions. Group Discussions is a Tool for Selection. Employment/ Job Interviews - Importance, Characteristics, Strategies of aEmployment/ Job Interviews. Intra and Interpersonal Communication Skills - Importance, Characteristics, Strategies of aIntra and Interpersonal Communication Skills. Non-Verbal Communication Skills (Body Language) and its importance in GD and PI/JI/EI. - Presentation skills and Formal Presentations by Students - Importance, Characteristics, Strategies of Presentation Skills. Dialogues in Various Situations (Activity based Practical Sessions in class by Students).
Teaching-Learning Process	Chalk and talk method, PowerPoint presentation to teach Grammar and phonetics, Animation videos on communication and language skills, creating real time stations in classroom discussions, Giving activities and assignments (Connecting Campus & community with companies real time situations).

Course outcome (Course Skill Set)

At the end of the course(21EGH28) the student will be able :

1. To understand andidentify the Common Errors in Writing and Speaking.
2. To Achieve better Technical writing and Presentation skills.
3. To read Technical proposals properly and make them to Write good technical reports.
4. Acquire Employment and Workplace communication skills.
5. To learn about Techniques of Information Transfer through presentation in different level.

Assessment Details (both CIE and SEE)

Continuous internal evaluation (CIE) needs to be conducted for 50 marks like Engineering courses. The weight age of Continuous Internal Evaluation (CIE) is 50% and for Semester End Exam (SEE) is 50%. The student has to obtain a minimum of 40% of maximum marks in CIE and 35% of maximum marks in SEE to pass. MCQ Pattern (Multiple Choice Questions) Semester End Exam (SEE) is conducted for 50 marks (120 minutes duration). Based on this grading will be awarded.

Continuous Internal Evaluation (CIE) :

Three Unit Tests each of **20 Marks (duration 01 hour**)

13. First test at the end of 5th week of the semester
14. Second test at the end of the 10th week of the semester
15. Third test at the end of the 15th week of the semester

All the tests are preferred similar to SEE pattern; however, the teacher may follow test pattern similar to other theory courses of Engineering

Two assignments each of **10 Marks**

1. First assignment at the end of 4th week of the semester
2. Second assignment at the end of 9th week of the semester
3. Report writing /Group discussion/Seminar any one of three suitably planned to attain the COs and POs for **20 Marks**(**duration 01 hours**)
4. At the end of the 13th week of the semester

The sum of three tests, two assignments, and quiz/seminar/group discussion will be out of 100 marks and will be **scaled down to 50 marks**

CIE methods /question paper is designed to attain the different levels of Bloom's taxonomy as per the outcome defined for the course.

Semester End Examination (SEE) :

SEE paper will be set for 100 questions of each of 01 marks. The pattern of the question paper is MCQ. The time allotted for SEE is 120 minutes**.** Marks scored are scaled down to 50 Marks. *(Time duration may be made 90 minutes to train the students for engineering / non-engineering competitive examination)*

3. Professional Writing Skills in English has become a very important component in allengineering and non-engineering competitive examinations. In exams like GRE, TOEFL, IELTS and GATE exam, all state and Central Government recruitment examinations, placement tests and other Examinations, so the pattern of question paper, in general, will be in multiple-choice question (MCQ) Pattern. So, to meet the relevance of the recruitment requirement of our Engineering students "Professional writing skill in English" Semester end examination (SEE) will be conducted in a multiple choice question (MCQ) pattern.
4. MCQ Pattern (Multiple Choice Questions) Semester End Exam (SEE) is conducted for 50 marks (120 minutes duration).

Suggested Learning Resources:

1. **A Course in Technical English,** Cambridge University Press – 2020.
2. **Functional English** (**As per AICTE 2018 Model Curriculam**) Cengage learning India Pvt Limited [Latest Revised Edition] - 2020.
3. **Communication Skills** by Sanjay Kumar and Pushp Lata, Oxford University Press - 2018. **Refer it's workbook** for activities and exercises –"Communication Skills – I (A Workbook)" published by Oxford University Press – 2018.
4. **Professional Writing Skills in English,** Infinite Learning Solutions – (Revised Edition) 2021.
5. **Technical Communication** – Principles and Practice, Third Edition by Meenakshi Raman and Sangeetha Sharma, Oxford University Press 2017.
6. **High School English Grammar & Composition** by Wren and Martin, S Chandh & Company Ltd – 2015.
7. **Effective Technical Communication** – Second Edition by M Ashraf Rizvi, McGraw Hill Education (India) Private Limited – 2018.
8. **Intermediate Grammar, Usage and Composition** by M.L.Tichoo, A.L.Subramanian, P.R.Subramanian, Orient Black Swan – 2016.

Activity Based Learning (Suggested Activities in Class)/ Practical Based learning

- ✓ Contents related activities (Activity-based discussions)
- ✓ For active participation of students instruct the students to prepare Flowcharts and Handouts
- ✓ Organising Group wise discussions Connecting to placement activities
- ✓ Quizzes and Discussions, Seminars and assignments

II SEMESTER

Scientific Foundations of Health

Course Code	**21SFH19/29**	CIE Marks	50
Teaching Hours/Week (L:T:P: S)	1:0:0	SEE Marks	50
Total Hours of Pedagogy	02 Hours/Week	Total Marks	100
Credits	01	Exam Hours	60 Minutes / 01 Hour

Course objectives:

The course 21**SFH29** will enable the students:

- To know about Health and wellness (and its Beliefs)
- To acquire Good Health & It's balance for positive mind-set
- To Build the healthy lifestyles for good health for their better future
- To Create of Healthy and caring relationships to meet the requirements of MNC and LPG world
- To learn about Avoiding risks and harmful habits in their campus and outside the campus for their bright future
- To Prevent and fight against harmful diseases for good health through positive mindset

Teaching-Learning Process (General Instructions)

These are sample Strategies, which teacher can use to accelerate the attainment of the various course outcomes.

- ✓ Teachers shall adopt suitable pedagogy for effective teaching - learning process. The pedagogy shall involve the combination of different methodologies which suit modern technological tools and software's to meet the present requirements of the Global employment market.
  - (i) Direct instructional method (Low /Old Technology),
  - (ii) Flipped classrooms (High/advanced Technological tools),

(iii) Blended learning (combination of both),

(iv) Enquiry and evaluation based learning,

(v) Personalized learning,

(vi) Problems based learning through discussion,

(vii) Following the method of expeditionary learning Tools and techniques,

✓ Apart from conventional lecture methods, various types of innovative teaching techniques through videos, animation films may be adapted so that the delivered lesson can progress the students In theoretical applied and practical skills in teaching of the concepts of Health and Wellness in general.

Module-1

Good Health and It's balance for positive mindset:

What is Health, Why Health is very important Now? – What influences your Health?, Health and Behaviour, Health beliefs and advertisements, Advantages of good health (Short term and long term benefits), Health and Society, Health and family,   Health and Personality - Profession. Health and behaviour, Disparities of health in different vulnerable groups. Health and psychology, Methods to improve good psychological health. Psychological disorders (Stress and Health - Stress management), how to maintain good health, Mindfulness for Spiritual and Intellectual health, Changing health habits for good health. Health and personality.

Teaching-Learning Process	Chalk and talk method, Power Point presentation and YouTube videos, Animation videos methods. creating real time stations in classroom discussions. Giving activities &assignments.

Module-2

Building of healthy lifestyles for better future:

Developing a healthy diet for good health, Food and health, Nutritional guidelines for good health and well beingness, Obesity and overweight disorders and its management, Eating disorders - proper exercises for its maintenance (Physical activities for health), Fitness components for health, Wellness and physical function,

Teaching-Learning Process	Chalk and talk method, PowerPoint presentation and YouTube videos, Animation videos methods. creating real time stations in classroom discussions. Giving activities &assignments.

Module-3

Creation of Healthy and caring relationships :

Building communication skills (Listening and speaking), Friends and friendship - education, the value of relationships and communication, Relationships for Better or worsening of life, understanding of basic instincts of life (more than a biology), Changing health behaviours through social engineering,

Teaching-Learning Process	Chalk and talk method, PowerPoint presentation and Animation videos methods. creating real time stations in classroom discussions. Giving activities and assignments.

Module-4

Avoiding risks and harmful habits :

Characteristics of health compromising behaviors, Recognizing and avoiding of addictions, How addiction develops and addictive behaviors, Types of addictions, influencing factors for addictions, Differences between addictive people and non addictive people and their behavior with society, Effects and health hazards from addictions Such as..., how to recovery from addictions.

Teaching-Learning Process	Chalk and talk method, PowerPoint presentation and Animation videos methods. creating real time stations in classroom discussions. Giving activities and assignments.

Module-5

Preventing and fighting against diseases for good health :	

> Process of infections and reasons for it, How to protect from different types of transmitted infections such as....,
> Current trends of socio economic impact of reducing your risk of disease, How to reduce risks for good health,
> Reducing risks and coping with chronic conditions, Management of chronic illness for Quality of life,
> Health and Wellness of youth : a challenge for the upcoming future Measuring of health and wealth status.

Teaching-Learning Process	Chalk and talk method, PowerPoint presentation and YouTube videos, Animation videos methods. creating real time stations in classroom discussions. Giving activities & assignments.

Course outcome (Course Skill Set)

At the end of the course the student will be able :

CO 1: To understand Health and wellness (and its Beliefs)

CO 2: To acquire Good Health & It's balance for positive mindset

CO 3: To inculcate and develop the healthy lifestyle habits for good health.

CO 4: To Create of Healthy and caring relationships to meet the requirements of MNC and LPG world

CO 5: To adopt the innovative & positive methods to avoid risks from harmful habits in their campus & outside the campus.

CO 6: To positively fight against harmful diseases for good health through positive mindset.

Assessment Details (both CIE and SEE)

 methods of CIE need to be defined topic wise i.e.- Tests, MCQ, Quizzes, Seminar or micro project/Course Project, Term Paper)

The weightage of Continuous Internal Evaluation (CIE) is 50% and for Semester End Exam (SEE) is 50%. The student has to obtain a minimum of 35% of maximum marks in SEE and a minimum of 40% of maximum marks in CIE. Semester End Exam (SEE) is conducted for 50 marks (hours' duration). Based on this grading will be awarded.

The student has to score a minimum of 40% (40 marks out of 100) in the sum total of the CIE (Continuous Internal Evaluation) and SEE (Semester End Examination) taken together.

Continuous Internal Evaluation:

Three Unit Tests each of **20 Marks (duration 01 hour**)

16. First test at the end of 5th week of the semester
17. Second test at the end of the 10th week of the semester
18. Third test at the end of the 15th week of the semester

(All tests are similar to the SEE pattern i.e question paper pattern is MCQ)

Two assignments each of **10 Marks**

19. First assignment at the end of 4th week of the semester
20. Second assignment at the end of 9th week of the semester

Report writing /Group discussion/Seminar any one of three suitably planned to attain the COs and POs for **20 Marks(duration 01 hours**)

21. At the end of the 13th week of the semester

The sum of three tests, two assignments, and quiz/seminar/group discussion will be out of 100 marks and will be **scaled down to 50 marks**

CIE methods /question paper is designed to attain the different levels of Bloom's taxonomy as per the outcome defined for the course.

Semester End Examination:

Theory SEE will be conducted by University as per the scheduled timetable, with common question

papers for subject

SEE paper will be set for 50 questions of each of 01 marks. The pattern of the question paper is MCQ. The time allotted for SEE is **01 hours**

Suggested Learning Resources:

1. **Health Psychology** (Second edition) by Charles Abraham, Mark Conner, Fiona Jones and Daryl O'Connor – Published by Routledge 711 Third Avenue, New York, NY 10017.
2. **Health Psychology - A Textbook,** FOURTH EDITION by Jane Ogden McGraw Hill Education (India) Private Limited - Open University Press
3. **HEALTH PSYCHOLOGY (Ninth Edition)** by SHELLEY E. TAYLOR - University of California, Los Angeles, McGraw Hill Education (India) Private Limited - Open University Press
4. **Scientific Foundations of Health (Health & Welness) - General Books** published for university and colleges references by popular authors and published by the reputed publisher.
9) **SWAYAM / NPTL/ MOOCS/ We blinks/ Internet sources/ YouTube videos** and other materials / notes

Activity Based Learning (Suggested Activities in Class)/ Practical Based learning
- ✓ Contents related activities (Activity-based discussions)
- ✓ For active participation of students, instruct the students to prepare Flowcharts and Handouts
- ✓ Organizing Group wise discussions and Health issues based activities
- ✓ Quizzes and Discussions
- ✓ Seminars and assignments

Students' Induction Program (General Guidelines)

In the first year 21 days of the course, an induction training program is proposed, before the start of 1st and 2nd semesters formal classes, to orient the students towards planning aptitude, education, and career. Induction training should also include the introduction of faculty members, discussion with faculty members, visits to various spaces in the department/school, such as climatology lab, computer center, material museum, construction yard, students' works exhibition, etc. Subjects such as Environmental Science, Indian Constitution, Value Education, Moral Science, and essence of traditional Indian culture and knowledge may also be included in induction training.

Induction Program

Students entering an institution have diverse thoughts, backgrounds, and preparations. It is important to help them adjust to the new environment and inculcate in them the ethos of the an institution with a sense of larger purpose.

In this context, at the beginning of the first semester, a 21 days long induction program are proposed for the students. Regular classes would start after the completion of the induction program. Its purpose is to make the students feel comfortable in their new environment, open them up, set a healthy daily routine, create bonding in the batch as well as between faculty and students, develop awareness, sensitivity, and understanding of the self, people around them, society at large, and nature. The Induction Program is also used to rectify some critical lacuna, like a deficiency in comprehension of the English language by many students. The following are the activities under the induction program in which the student would be fully engaged throughout the day for the entire duration of the program.

Physical Activity

This would involve a daily routine of physical activity with games and sports. It would start with all students coming to the field for light physical exercise or yoga in the morning. There would also be games in the evening or at other suitable times according to the local climate. These would help develop teamwork. Each student should pick one game and learn it for three weeks. There could also be gardening or other suitably designed activity where labor yields fruits from nature.

Creative Arts

Every student would choose one skill related to the arts whether visual arts or performing arts. Examples are painting, sculpture, pottery, music, dance, etc. The student would pursue it every day for the duration of the program. These would allow for creative expression. It would develop a sense of aesthetics and also enhance creativity which would, hopefully, flow into the planning design later.

Universal Human Values

It gets the student to explore oneself and allows one to experience the joy of learning, stand up to peer pressure, take decisions with courage, be aware of relationships with colleagues and supporting staff in the hostel and department, be sensitive to others, etc. The need for character building has been underlined earlier. A module in Universal Human Values provides the base.

The methodology of teaching this content is extremely important. It must not be through do's and don'ts, but by getting students to explore and think and by engaging them in a dialogue. It is best learned through group discussions and real-life activities rather than lecturing. The role of group discussions, however, with the clarity of thought of the teachers cannot be overemphasized. It is essential for giving exposure, guiding thoughts, and realizing values. The teachers must be from within the institute and also from outside of the Institute.

Discussions would be conducted in small groups of about 20 students with a faculty mentor each. It is to open thinking towards the self. Universal Human Values discussions and activities could even continue for the rest of the semester, and not stop with the induction program. Besides drawing the attention of the student to larger issues of life, it would build relationships between teachers and students which last for their entire 5-year stay and possibly beyond.

Literary

The literary activity would encompass reading, writing, and possibly debating, enacting a play, etc.

Proficiency Modules

This period can be used to overcome some critical lacunas that students might have, for example, English, computer familiarity, etc. These should run like crash courses so that when normal courses start after the induction program, the student has overcome the lacunas substantially.

Lectures by Eminent People

Lectures by eminent people say, once a week would give the students exposure to people who are socially active or are in public life. They could be from any field well known for their integrity.

Visits to Local Area

A couple of visits to the landmarks of the city, or a hospital or orphanage could be organized. This would familiarize the students with their city as well as expose them to the world of the underprivileged.

Familiarization

The students should be told about different methods of teaching and learning being used in the institute and how it is different as compared to school education or coaching. They should also be shown the laboratories, workshops & other facilities and also be introduced to the faculty, administrative staff, etc. and whom they should approach for a specific need or issue. They should be told about what becoming a planner means and the importance of the role of the planner in society, and in nation-building.

Extracurricular Activities:

The new students should be introduced to the extra-curricular activities at the college/ university. They should be shown the facilities and informed about activities related to different clubs etc. This is when selected senior students involved in or leading these activities can give presentations. Various other activities which could be included are role-playing/street play, alumni/industry interaction, etc.