



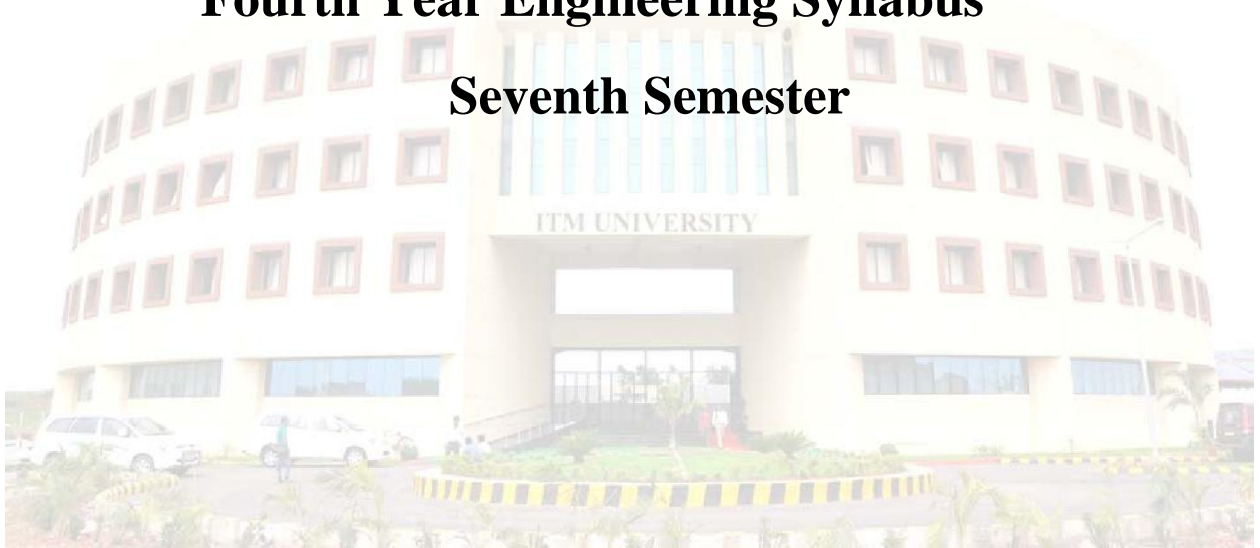
ITM UNIVERSITY

Naya Raipur, Raipur

B.Tech (Bachelor of Technology)

Fourth Year Engineering Syllabus

Seventh Semester



Department of Civil Engineering
2017

Civil Engineering Branch
B. Tech Seventh Semester Syllabus
 Teaching and Examination Scheme

Subject Code	Subject Name	Teaching Scheme		Examination Scheme				
		Th.+Tut	Pr.	Theory Marks		Term	Practical	Total
		(L+T)	(P)	End Sem. Exam	Internal Assessment	Work (Internal)	(External)	
301701	Advance Concrete Structures	04	-	70	30	-	-	100
301702	Irrigation Engineering	04	-	70	30	-	-	100
301703	Structure Analysis-II	04	-	70	30	-	-	100
301704	Maintenance & Rehabilitation of Civil Engineering Structure	04	-	70	30	-	-	100
301705	Elective - I	04	-	70	30	-	-	100
301706	Advance Concrete Structures Lab	-	02	-	-	15	35	050
301707	Irrigation Engineering Lab.	-	02	-	-	15	35	050
301708	Structure Analysis-II Lab.	-	02	-	-	15	35	050
301709	Vocational Training - II	-	02	-	-	15	35	050
301710	General Proficiency-I	04	-	-	-	30	70	100
301711	Project - V	-	04	-	-	50	150	200
		26	12	350	150	140	360	1000

Table – I			
Elective – I			
S.N.	Elective - I	Subject Code	Subject
1		301705 A	Remote Sensing and its Applications
2		301705 B	Earthquake Engineering
3		301705 C	Air pollution and Control Measures
4		301705 D	Advanced Surveying
5		301705 E	Advanced Soil Mechanics



Subject Code: 301701
Lectures: 4 Hrs/Week

Subject Name: Advance Concrete Structure
Theory Exam Duration: 3 Hrs

Detailed Syllabus

Topic	
Unit-I	Limit state of collapse and flexure: Analysis and design of doubly reinforced rectangular, Tee-beam and L- sections. Limit state of collapse in torsion: Concept of interaction of torsion, shear and flexure. Analysis and for torsion shear and flexure. Limit state of serviceability: Deflection calculations for design of rectangular section beams and one-way slabs.
Unit-II	Analysis and design for columns subjected to biaxial moments. Design of long columns. Design of isolated footings for square, rectangular and circular column.
Unit-III	Moment redistribution: Analysis and design of fixed beam, propped cantilever, two-span symmetric continuous beam.
Unit-IV	Analysis and design of portal frames (single bay single story) hinged or fixed at base. Design of hinge and design of foundation. Design of combined footing. Rectangular footing
Unit-V	Design of RCC Two way slab with various end conditions using IS 456-2000 coefficients. Design of RCC cantilever and counter fort retaining walls.

Recommended Books

1. Limit State Design of Reinforced Concrete – B. C. Punmia, A. K. Jain and A. K. Jain (Laxmi Publications)
2. Limit State Theory and Design of Reinforced Concrete (IS:456-2000) – V. L. Shah and S. R. Karve (Structures Publications, Pune)
3. Reinforced Concrete Design – S. U. Pillai and D. Menon (Tata McGraw Hill)



Subject Code: 301702
Lectures: 4 Hrs/Week

Subject Name: Irrigation Engineering
Theory Exam Duration: 3 Hrs

Topics
UNIT –I : General :Necessity and importance of irrigation Engineering; Benefits & ill effects of irrigation; Classification of irrigation; General principles of flow, lift, perennial, inundation irrigation systems; Comparative study of sprinkler and drip irrigation systems. Water requirement crops: Suitability of soils for Irrigation ; Standards of irrigation water; PET- R method of crop water requirements ; Depth & frequency of irrigation ; definitions of field capacity, wilting point, available moisture, duty, delta- base period, outlet factor, capacity factor, time factor, root zone depth: Relation between duty & delta ; Factors affecting duty.
UNIT –II : Reservoir planning:\(Selection of site for Reservoirs: Engineering surveys, Geological and Hydrological investigations; Fixing of LWL, FTL, HFL, TBL; Different storage zones, in reservoirs; Determination of storage capacity by mass curve method. Dams: Classification of Dams as per use, hydraulic design and materials; Factors governing selection of type of Dams.
UNIT –III : Gravity dam: Definition; forces acting on gravity dam; stability requirements; Theoretical & practical profile of Gravity dam; Low & High dam; Galleries. Earthen dams: Types of earthen dam; Description of component parts of earthen dams foundation, cut of trench, rock toe, hearting, central impervious core, pitching and chipping turfing; Seepage through body of earthen dam and drainage arrangements; Failure of earthen dams, plotting of phreatic line for homogeneous earthen dams with horizontal filters; Stability of foundation against shear.
UNIT - IV : Spillways: Types of spillway with there working operations; General principles of design of ogee spillway; Spillway gates –Vertical lift, radial, rolling and drum; Energy dissipation methods d/s of spillways. Diversion head works: Component parts of diversion headworks – Fish ladder, guide wall, devide all, silt excluder and silt ejector;Causes of failure of weirs on permeable foundation; Bligh’s Creep theory; dr.khosla’s theory for design of weirs on permeable foundations.
UNIT - V : Canals: Types of canal; Alignment of canal; Cross section of irrigation canals; balancing depth; Schedule of area statistics; Losses in canals, Canals in alluvial, soils: Kennedy’s silt theory – Design procedure, silt supporting capacity , drawbacks; Lacey’s silt theory- Definition of initial final and permanent regime channels, Lacey’s Regime equation, channel design procedure, drawback’s ; Garret’s diagram for channel design. Lined canals : Design procedures; Types of lining; relative merits and demerits of canal lining; Economics of canal lining.

Recommended Books:

1. Irrigation Engineering and Hydraulic Structures –S.R. Sahastrabudhe
2. Irrigation Engineering and Hydraulic Structures –Santosh Kumar Garg
3. Irrigation Engineering and Water power Engineering –B.C.Punmia
4. Irrigation Engineering and Hydraulic Structures –K.R. Arora
5. Irrigation Engineering –N.N. Basak
6. Irrigation Engineering and Hydraulic Structures –R.K. Sharma
7. Irrigation Engineering –G.L.Asawa

Subject Code: 301703
Lectures: 4 Hrs/Week

Subject Name: Structure Analysis - II
Theory Exam Duration: 3 Hrs

Detailed Syllabus

Topic	
Unit-I	Kani's Method applied to symmetrical frames with sway (Up to Single bay Two storey)
Unit-II	Moment distribution applied to frames with sway (up to single storey two bay)
Unit-III	Approximate method of Structural analysis for multi- storied frames with lateral loads (Portal and Cantilever method).
Unit-IV	Column Analogy method , Application to beams , Calculations of Stiffness factors and carry over factors for non-prismatic method , Analysis of non- prismatic fixed Basic concept, Degree of Freedom, Basic concept of Direct Stiffness Method.
Unit-V	Strain energy method applied to simple composite structures (Simple problems), Introduction to basic theory of elasticity , Concept of stress , strains, strain displacement relationship , equation of equilibrium , boundary conditions , generalized Hooks law , plane stress and plane strain problems.

Recommended Books:

1. C K Wang, 'Intermediate Structural Analysis'
2. S P Timoshenko, 'Theory of Structure'
3. Jain, Jain Krishna, 'Plain & Reinforced Concrete Structures', Vol-I
4. Rally and Dally, 'Experimental Stress Analysis'
5. Theory of structure' by Ramamurtham



Subject Code: 301704

Subject Name: Maintenance & Rehabilitation of Civil Engineering Structure

Lectures: 4 Hrs/Week

Theory Exam Duration: 3 Hrs

Detailed Syllabus

Topic	
Unit-I	Introduction : Necessity, operation, maintenance & repairs of structures, Classification of maintenance, Rehabilitation (restoration), strengthening, retrofitting, Methodical approach to repairs, inspection-annual, emergency, special, repairs-minor, special and renovation.
Unit-II	Causes & detection of damages: Causes of damages, damages due to earthquakes, fire hazards, flood, hazards, dilapidation, List of basic equipment's for investigation, Materials for repairs: Epoxy resin, epoxy mortar, gypsum cement mortar, quick setting, cement mortar, Sort-creting.
Unit-III	Masonry walls: Damp walls, causes effects, remedies, eradication of efflorescence, cracks in walls, remedial & preventive measures bond between old & new brick(concrete) work, reinforced brickwork. Repairs to foundation: Remedies, types & processes of settlement, foundation sinking
Unit-IV	Water proofing: Leaking Basements & roofs, Concept of repairs & strengthening of RCC structures: Concept of repairs of RCC structures, Physical examination of common defects, Structural repairs & strengthening repairs by new developments.
Unit-V	Damage due to fire: Fire resistance, effects of temp. of RCC, Repairs to RCC structures damaged due to fire, Advanced Damage detection techniques: Advanced damage detection techniques, non-destructive testing. Maintenance of life lines: Maintenance of electric supply, water supply leaking pipe joints and sewerage systems, closed drains, sewers

Recommended Books:

1. Building maintenance by Lvor H. Seeley; The Macmillan Press Ltd.
2. Facilities Maintenance and Repair of damaged structures by Karper. A Compilation of technical papers issued by Maharashtra – India Chapter of American Concrete Institute.
3. Building maintenance economics and management, Edited by Alan Speeding, E & F. N. Spon, London.
4. Proceeding of the All India Seminar on Maintenance of Civil Engineering Structures and systems, Nagpur.
5. Common Building Defects, Diagnosis and Remedy, compiled by National Building agency, Construction press, London & New York.



ELECTIVE - I

Subject Code: 301705 A
Lectures: 4 Hrs/Week

Subject Name: Remote Sensing and its Applications
Theory Exam Duration: 3 Hrs

Detailed Syllabus

Topic	
Unit-I	Remote Sensing: Introduction and definition of Remote Sensing terminology, Photogrammetry, Types of Photographs, Geometry of Photographs, Stereo photogrammetry.
Unit-II	Image Processing Systems: Principles of interpretation of aerial and satellite images, equipment's and aids required for interpretation ground truth collection and verification, advantages of multirate and multiband images.
Unit-III	Initial Statistics Extraction: Digital Satellite data products and their characteristics, Histogram and its utility, Enhancement, Different methods of digital satellite data interpretation.
Unit-IV	Radiometric and Geometric Correction in Image Processing: Introduction, radiometric correction of remotely sensed data, correction for sensor system, detector error, spatial intercolation using coordinate transformations, intensity interpolation.
Unit-V	Micro Wave Remote Sensing Introduction, the radar principle, radar removal advantages, synthetic aperture radar (SAR), interpreting SAR images.

Recommended Books:

1. Campbell, J.B., "introduction to Remote Sensing", The Guilford Press, Lond, 1986.
2. Wolf, P.R., "Elements of Photogrammetry", McGraw Hill Book Company, New Delhi, 1986.
3. Curran, P.J., "Principles of Remote Sensing", Longman, London, 1985.
4. Engman, E.T. an Gurney, R.J., "Remote Sensing in Hydrology", (Chapman and Hall, London, 1991.17



Subject Code: 301705 B
Lectures: 4 Hrs/Week

Subject Name: Earthquake Engineering
Theory Exam Duration: 3 Hrs

Topic	
Unit-I	Definitions of basic problems in dynamics, static versus dynamic loads, different types of dynamic loads, undamped vibration of SDof system, natural frequency and period of vibration, damping in structure.
Unit-II	Seismological background, seismicity of a region, earthquake faults and waves, structure of earth, plate tectonics, elastic – rebound theory of earthquake, Richter scale, measurement of ground motion, Seismogram.
Unit-III	Direct determination of frequencies and mode shape, orthogonality principle, approximate methods for determination of frequencies and mode shape model error of forced vibration of MDoF.
Unit-IV	Characterization of ground motion, earthquake response spectra, factors influencing response spectra, design response spectra for elastic system, peak ground acceleration, response spectrum shapes.
Unit-V	Review of damage during past earthquakes and remedial measures, seismic design consideration, ductility demand, reinforcement detailing for member and joints.

Recommended Books:

1. Earthquake Resistant Design of Structures – P. Agrawal & M. Srikhande (Prentice Hall)
2. Earthquake Resistant Design of Structures – S. K. Duggal (Oxford University Press)
3. Dynamics of Structures Theory & Applications to Earthquake Engineering – A. K. Chopra (Pearson Education).
4. Structural Dynamics – Theory & Computation – Mario Paz (CBS Publishers)
5. Basics of Structural Dynamics and Asesismic Design – S. R. Damodarasamy, S. Kavitha (PHI Learning)



Subject Code: 301705 C
Lectures: 4 Hrs/Week

Subject Name: Air pollution and Control Measures
Theory Exam Duration: 3 Hrs

Detailed Syllabus

Topic	
Unit-I	Air Pollution Problem, Definitions, and Classification of pollutants, characteristics and sources. A.P. Monitoring Measurement of stack gases, Sampling methods, Difficulties in sampling, sampling of SPM, stack sampling techniques.
Unit-II	Air pollution meteorology, stability class condition, plume behaviour, topographical effects on air pollution, wind profiles, wind roses. Gaussian plume models, assumptions and limitations of GPM, problem on modelling
Unit-III	SOX sources, ambient concentrations, test methods, SOX control techniques, effects of SOX on human, animal health, plants and on materials. NOX sources, ambient concentrations, test method control techniques, effects of NOX on human health, animal health, plants and on materials. Particulate size distribution, collection and removal mechanics.
Unit-IV	Major air pollution disaster episodes, special diseases caused by air pollution, symptoms of chronic air pollution. Mechanisms of deterioration in polluted atmospheres, effect of air pollution on art treasures in India.
Unit-V	Air quality criteria and emission standards, US and Indian standards, air pollution act, constitution, power and functions of the boards. Global effects of air pollution – Green house effect, acid rains, ozone layer depletion, etc.

Recommended Books:

1. Environmental Engineering – Peavy & Rowe (Tata McGraw Hill, New Delhi). Environmental Science and Engineering – Henry and Heinke (Pearson Education).
2. Air Pollution – Henry C. Perkins, (McGraw Hill Kogakusha Ltd., Tokyo, Japan, 1974)
3. Air Pollution – Stern, Arthur C. (Academic Press, New York, USA, 1977) Introduction to Environmental Science – Y. Anjaneyulu (B.S. Publications).
4. Waste Water Engineering – Metcalf Eddy (Tata McGraw Hill, New Delhi).



Subject Code: 301705 D
Lectures: 4 Hrs/Week

Subject Name: Advanced Surveying
Theory Exam Duration: 3 Hrs

Detailed Syllabus

Topic	
Unit-I	Modern Surveying Equipment: Data and equipment needed for engineering projects. Changing scene in surveying and mapping, map substitutes, use and advantage of modern surveying equipment in project. Modern surveying electronic equipment, their principles, constructions working and use –Electronic Theodolite, E.D.M., Total station.
Unit-II	Global Positioning System: Introduction to navigation and positioning, Geodesy; geospatial reference systems, overview of GPS; GPS segments, 2D and 3D positioning, GPS error sources and handling, GPS applications.
Unit-III	Geographic information system: Geographic Information System (GIS) –Definition of GIS, Geographical concepts and terminology, Components of GIS, Data acquisition, Raster and vector formats, scanners and digitizers. Advantages of GPS and GIS in the storage thematic information extracted from remotely sensed images.
Unit-IV	Photogrammetry: Definition of photogrammetric terms, geometry of aerial and terrestrial photographs, aerial camera and photo theodolite, scales of photographs, tilt and height displacements , stereoscopic version and stereoscopes, height determination from parallax measurements, flight planning , maps and map substitutes and their uses.
Unit-V	Remote sensing: Introduction and definition of remote sensing terms, remote sensing system, principles of remote sensing, Interaction of EMR, Fundamentals of aerial photography, platforms and orbits, sensors, data products, principles of visual interpretation, principles and uses; thermal remote sensing, microwave remote sensing.

Recommended Books:

1. Higher surveying: A.M. Chandra New Age International publishers.
2. Higher surveying: B.C. Punamia, Ashok jain, Arun k. jainLaxmi publications (P), Ltd,
3. Geographic Information Systems and Science, Second Edition: Longley, Paul A., Michael
4. Goodchild, David J. Maguire, David W. Rhind. 2005.. John Wiley & Sons, New York.
5. Modelling Our World: The ESRI Guide to Geodatabase Design: Zeiler, M. 1999,. ESRI Press, Redlands, California
6. GIS, Spatial Analysis, and Modeling: Maguire, D., M. Batty, and M. Goodchild. 2005.
7. Global Positioning System: Signals, Measurements, and Performance, Second Edition
8. Remote Sensing Principles and Interpretation: Floyd, F. Sabins, Jr., Freeman and Co., San Francisco, 1978.



Subject Code: 301705 E

Subject Name: Advanced Soil Mechanics

Lectures: 4 Hrs/Week

Theory Exam Duration: 3 Hrs

Detailed Syllabus

Topic	
Unit-I	Introduction, Soil classification, Special Characteristics of soil.
Unit-II	Advanced field and lab testing; Field CBR and Cyclic Plate Load Test, SPT, Field Vane shear test etc.
Unit-III	Specification and methods of soil improvement, Geotextile reinforcements, Classical method, Computer based method, Reliability based design.
Unit-IV	Embankment construction, Settlement calculation, Stage construction; Earth Retaining Structures: Gravity walls; Stability of Slopes.
Unit-V	Design of slopes in Hilly areas.

Recommended Books:

1. Gulhati S. K. and Datta M., "Geotechnical Engineering", Tata McGraw-Hill Publishing Company Limited, 2005.
2. Terzaghi, K. and Peck B., "Soil Mechanics in Engineering Practice", John Wiley & Sons, New York, 2nd Edition, 1967.
3. Das B. M., "Advanced Soil Mechanics", Taylor & Francis Publishers, 2nd Edition, 1997.
4. Gopal, Ranjan and A.S.R. Rao, "Basic and Applied Soil Mechanics", New Age International Publishers, 2nd Edition, 2000.
5. Lambe and Whitman, "Soil Mechanics", John Wiley & Sons Inc., 1969.
6. Arora, K.R., "Soil Mechanics and Foundation Engineering" Standard Publishers Distributors, 5th ed., 2005.
7. IS 2720 (Part 31): 1969 Field Determination of California Bearing Ratio.
8. IS 1888: 1982 Method of Load Test on Soils. 8. Other Relevant BIS Codes.

PRACTICAL

Subject Code: 301706
Practical: 2 Hrs/Week

Subject Name: Advanced Concrete Structures Lab

Detailed Syllabus

Term Work: The candidate shall submit experiments in the following:

LIST OF EXPERIMENT

- Design assignments with detailed drawing on A-2 size drawing sheets and detailed calculations in journal.
 - (A) Two way slab with various end conditions.
 - (B) Cantilever / Counterfort retaining wall.
 - (C) Combined footing.
 - (D) Portal frame.
- One field visit and its report in the journal.





Subject Code: 301707
Practical: 2 Hrs/Week

Subject Name: Irrigation Engineering Lab.

Detailed Syllabus

Term work: Term work shall consist of record of the experiments out of the following;

List of Experiments:

1. Reservoir Planning –Capacity of reservoir.
2. Life of reservoir.
3. Gravity Dam-Checking of various modes.
4. Earthen Dam –Phreatic Line, checking of foundation against shear
5. Design of canals (Lined and Unlined)
6. Design of Lift Irrigation Scheme.
7. Drawing of various canal structures.
8. *Site visit to irrigation project – Detail report should be submitted.*

Any other experiments with reference to the contents of subject code 301702.



Subject Code: 301708
Practical: 2 Hrs/Week

Subject Name: Structure Analysis-II Lab

Detailed Syllabus

Term Work: The candidate shall submit 10 experiments in the following:

LIST OF EXPERIMENT

1. To find the slope & deflection of continuous beam.
2. To find the value of Flexural rigidity (EI) for a given beams & compare with theoretical value.
3. To determine the moment required to produce a given rotation at one end of a beam when the other end is pinned, fixed.
4. To study the behaviour of different types of struts and to calculate the Euler's buckling load for each case.
5. To verify Maxwell's reciprocal theorem for beam.
6. To measure the strain in the cantilever beams with the help of acoustic strain gauge.
7. Study of various type of strain gauges.
8. Plotting of influence line by making use of Muller – Breslau principle.
9. Determination of deflection of Trusses by WillotMohars Diagram.
10. Determination of material fringe value.
11. To find horizontal thrust and to draw the influence line fort horizontal thrust for two hinge arch.
12. To calculate horizontal deflection at roller end in two hinged arch.
13. To measure the strain in the cantilever beam with the help of electrical resistance strain gauge.
14. To determine horizontal thrust for indeterminate portal frame.

Subject Code: 301709
Practical: 2 Hrs/Week

Subject Name: Vocational Training - II

Detailed Syllabus

Term work: Term work: After Completion of Industrial Training each Group has to submit the Report file in a University Prescribed Format and followed by a Presentation and Viva Voice.

S.NO	Description
1	Report Writing
2	Objective of the Industrial Training
3	Working Methodology / Technology
4	Results and Discussion
5	Conclusion
6	Future Scope
7	Presentation Skills
8	Viva Voice
Total- 50	

Please Note: - Based on the above a power point presentation must be given by the candidate and defended with positive attitude



Subject Code: 301710
Lectures: 2 Hrs/Week

Subject Name: General Proficiency-I
Theory Exam Duration: 3 Hrs

Detailed Syllabus

Topics	
UNIT-I	Personality and its traits: Various theories of personality, Introduction to Personality Development. Management Skills: Introduction to Management, Five aspects of managements and coordination
UNIT-II	Proficiency in English Language-I: Reading and Comprehension Vocabulary: Synonyms, Antonyms, Odd Word, One Word, Jumbled letters, Homophones, Spelling, Contextual meaning, Analogy.
UNIT-III	Proficiency in English Language-II: Writing and Presentation: Writing Business Cases and Presentations, Different formats of Letters in an organization. Types of Presentations and Reports, Use of Audio-visual Aids - Report Writing. Group Discussion and Personal Interview
UNIT-IV	Reasoning Proficiency: Verbal: Number series, Letter & symbol series, Statement and argument, Logical problems, Alphabet test, Passage and conclusions. Non-Verbal: Making series / analogy, Classification, Series test, Odd figures, miscellaneous test, Pattern Perception.
UNIT- V	General Mathematics Proficiency: Number System, HCF, LCM, Profit and Loss, Number Series, Square roots, Compound, Decimal Fractions, cube roots, proportion, Time & distance, Simplification, Pipe & Cistern, Boat and Stream, Surd and indices, Area.,

Recommended Books:

1. Sharma RC & Mohan K – "Business Corresponding and Report Writing", Tata McGraw Hill, New Delhi, 1994.
2. Alok Jain, P S Bhatia & A M Shiekh – "Professional Communication Skills; S. Chand & Company Ltd. 2005.
3. Rajendra Pal and JS Korlahalli – "Essentials of Business Communication", Sultan Chand & Sons, 1997.
4. R.S. Aggarawal, Quantitative Aptitude For Competitive Examinations (English) 7th Edition
5. P.A. Anand, Wiley Quatitative aptitude, Wiley India pvt., ltd. publication, 2015
6. R.S. Aggarawal, A Modern Approach To Verbal & Non-Verbal Reasoning (English) Revised Edition
7. Quantitative aptitude and reasoning by Prveen, R. V. second edition, PHI publications
8. Dr. S. K. Mandal, How to Succeed in Group Discussions & Personal Interviews (English) 1st Edition, Jaico publishing house.

Subject Code: 301711
Practical: 4 Hrs/Week

Subject Name: Project - V

Detailed Syllabus

Term work: Term work shall consist of report / thesis submitted based on the topic of one good Engineering / Research based problem.

1. **Formation of team, selection of topic :** Presentation on different project topics, Team formation including students and guide, Literature review in Library and internet on different project topics, Selection of Project topic and objectives
2. **Site Visits (If required):** Before undertaking the project design, team should visit sites where the project is already implemented and get acquainted with different perspectives. They should meet experienced personalities in the area and take their advice.
3. **Preliminary Design:** After selection of topic, the team should carry out further literature review and then come out with the preliminary design of the project in the form of drawing and explanation.
4. **Semester Project Progress Report:** A semester project progress report should be prepared comprising the work done as said above. The report should be presented before the Department faculty and subject experts.

The Report / Thesis must contain the following:-

1. Well-defined Case – based Problem
2. Motivation to select such problem
3. General approach to solve such problems
4. Methods Applied to Solve such Problems
5. Flowchart and Algorithm to solve Problem
6. Basic Software and Hardware required to solve such problem
7. Practical Applications
8. Final Observations and Conclusions
9. Any help to the Society through the above said Problem.

Please Note: Based on the above work a power point presentation must be given by the candidate and defended with positive attitude. The candidate will be appreciated if he / she present his / her work in a Conference or publish his / her work in a reputed Journal