	Course Title: PROFESSIONAL PRACTICE		
	Scheme (L:T:P) : **0:2:4**	Total Contact Hours: **78**	Course Code: **15CE57P**
	Type of Course: **Tutorial and practice**	Credit **:03**	Core/ Elective: **Core(practice)**
CIE- 25 Marks			SEE- 50 Marks

PREREQUISITES: Basic Computer Skills, Communication Skills in English.

COURSE OBJECTIVES: Students should be able:

1. To develop manual writing skills.
2. To identify and explain the impacts of civil engineering on global, economic, environmental and societal issues.
3. To demonstrate the ability to learn on their own and imbibe the culture of life-long learning.
4. To apply the principles of leadership and attitudes for effectively managing civil engineering projects.
5. To explain key concepts and problem solving processes used in civil engineering management, business, public policy, and public administration including the legal aspects of civil engineering.

Course Outcome		Experiment linked	CL	Linked PO	Teaching Hrs
CO1	Follow student ethics, acquire information from various sources and develop techniques to solve any problem, and engage in, life-long learning for self-development	***1,2,3,4***	***R/U/Ap/ An***	1,2,3,4, 5,7,8,9, 10	**24**
CO2	Practise teambuilding to develop solutions for well-defined problems and inculcate ability to reason critically, to form intelligent opinions, to make good decisions, leadership skills, observations, effective time management	***5,6***	***R/U/Ap/ An/E***	1,2,3,5, 6,7,8,9, 10	**12**
CO3	Acquire information through expert lectures, describe tendering processes, and make effective, professional presentation on identified topics.	***7,8,9***	***R/U/Ap/ An***	1 to 10	**27**
CO4	Create awareness to the society by highlighting the importance of sustainability of natural resources and retain balance of environment and to serve the community and uphold the idea of "Help ever, hurt never" as his motto and contribute his bit to make the world order politically powerful, socially stable, economically efficient and spiritually strong.	***10, 11,12***	***R/U/Ap/ An***	1 to 10	**15**
				Total sessions	**52**

Programme outcome Attainment Matrix

Course	Programme Outcome									
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
	Basic knowledge	Discipline knowledge	Experiments and practice	Engineering Tools	Engineer and society	Environment & Sustainability	Ethics	Individual and Team work	Communication	Life long learning
PROFESSIONAL PRACTICE	3	3	3	3	3	3	3	3	3	3

Level 3- Highly Addressed, Level 2-Moderately Addressed, Level 1-Low Addressed.

Method is to relate the level of PO with the number of hours devoted to the COs which address the given PO.

If ≥40% of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 3

If 25 to 40% of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 2

If 5 to 25% of classroom sessions addressing a particular PO, it is considered that PO is addressed at Level 1

If < 5% of classroom sessions addressing a particular PO, it is considered that PO is considered not-addressed.

UNIT	MAJOR TOPICS		HOURS ALLOTTED	
CO1	Self-Development (Individual practices)	Student ethics & anthems	6	24
		Problem solving technique	9	
		Information, Search, Data collection	3	
		Task Management	6	
CO2	Development in groups (Team work Exercises)	Team building activities	6	12
		Group Discussion	6	
Report evaluations through check list				
CO3	Professional fundamentals	Guest lectures	9	27
		Mock Tendering process	9	
		Seminar Presentation	9	
CO4	Communicate effectively in society	societal moral Activities	6	15
		Life skills	6	
		Modular courses	3	
Consolidated Report evaluations				
		TOTAL		**78**

Note:

1. Due to intensive nature of this course, full attendance is required.
2. The subject teachers are free to design any assignment relevant to the topic.
3. Evaluation check list (Annexure) should be attached to the report for each units.
4. Several suggested topics has been provided at the end of the document.
5. Students should dedicate minimum six hours of outside study, rigorous reading, and intensive writing per week and submit report on time, in both paper and soft copy through e-mails.

DETAILED COURSE CONTENT

Unit1	STUDENT ETHICS AND ANTHEMS	6hours

1. In each and every professional practices class students should attend elegantly in formal dress
2. To organise and attend every national festival in colleges developing national integrity protecting national pride.
3. Keeping classrooms, college premises clean.
4. Give way to lecturers while walking in the corridor.
5. Wish the lecturers
6. Handwriting
7. Communicate in English in every professional practice classes.
8. Do not write anything on the desk, wall etc
9. Behaviour of students should be gentle, polite and respectful with elders,
10. Interpersonal relationship with classmates and helping others
11. Should not destroy Any public property
12. Don't spit anywhere in college, Avoid Sticking chewing gum to benches
13. Students should be kind to animals.
14. Maintain personal health and hygiene- Awareness about Regular habits, keep yourself clean, regularly cut nails, visiting regularly spiritual places, Prayer.
15. Protect the natural resources
16. Practice physical exercise every day –"Sound body sound mind"
17. Reading English newspapers daily and watching news
18. To maintain the discipline in public places, and college events/functions
19. Eating habits-dos and don'ts-avoid over eating.
20. Always speaking truth, being honest.
21. Develop Adaptability to different situations.
22. Love yourself
23. Boost your self-esteem, self-confidence, positive attitude.
24. Always have a tendency to face the Challenges, Never miss an opportunity.
25. To know /aware about the ill effects of smoking, alcohol consumptions.
26. Control in spending money
27. Right use of technology
28. Active participation in co-curricular activities
29. Maintain peace and harmony, avoid groupism
30. Always give way to ambulance, or emergency vehicle.
31. Patience

Guide for conducting & Graded activities preparations

1. Each students should take any of the topic or similar ethical topics above and speak in creative way how one should follow the ethical values.
2. After each student speaking, discussion about the topic involving lecturers and students.
3. Hence forth in each and every classes students should take an oath that they will follow the student ethics

REPORT

Self-appraisal Evaluation check list (Annexure) should be filled by students

All writing assignments are expected to be turned in on within stipulated time to facilitate the writing development process;

Unit2	Problem Solving techniques (Any one technique may be considered)	9hours

Trial and error, SWOT analysis, Brain storming, Lateral thinking, 5W 1H & 5W Analysis

Eg:

1) SWOT analysis:- Analyse yourself with respect to your strength and weaknesses, opportunities and threats.

Following points will be useful for doing SWOT (Personal / Problem).

a) Your past experiences, b) Achievements, c) Failures, d) Feedback from others etc

Guide for conducting & Graded activities preparations

Student should be given brief idea about problem solving technique by Presentation

Example for SWOT : Problem-Low performance of student (xyz) in exams

Conduct complete survey of yourself to attain SWOT

By identifying the swot personally arrive plans/ strategy to solve your problem

Strength	Weakness
S1.Hard working S2.Commitment S3. Good handwriting S4. Good in practical's	W1 Weak in mathematics W2 Think negative in exam W3 Easily get distracted W4 Regular illness.
Opportunity	**Threat**
O1. Library O2. Internet resources O3. Job Placement O4. Intelligent friends	T1. Television & mobile T2. Limited Time T3. Disturbing environment T4. Financial problems

Examples:

1. Converting weakness to strength by available opportunity (S1 &O1)–Plan 1 eg: Hard working by using books in library
2. To minimizing the effect of threat by your strength (S2 & T1)- Commitment for not to use mobile and watch television
3. Minimizing weakness by available Opportunity (W1 & O1)–Plan 2 eg: by Using library books work hard on mathematics

Similar strategies can be prepared for solving problem

1)Increase strength by opportunity (SO). 2) Suppress threat by your strength(ST). 3)Minimize weakness by opportunity (WO). 4) Minimize weakness by threat (WT) 5)Supress weakness by your strength (SW) which leads to TWOS matrix

Each student should practise

Exercise 1: Each student should work out personal SWOT for his development.

Exercise 2: Choose any other problem.

Similar can be done for your project work.

Example for 5W analysis- Problem-I will be late to class

Questioning series of "why" to the problem, it will get you root cause of problem

Why I am late to the class - because vehicle break down

Why vehicle break down- I dint service my vehicle

Why I dint service my vehicle – I woke up late

Why I woke up late-I sleep late

Why I sleep late- I watch television late night – which is the root cause for the problem

REPORT (2 problem) should include STEPS IN PROBLEM SOLVING,

1)Identify and clarify the problem,

2)Information gathering related to problem,

3)Evaluate the evidence,

4)Consider alternative solutions and their implications,

5)Choose and implement the best alternative,

6) Report Review

Evaluation check list (Annexure) should be filled by course coordinator

Word processing document

Unit3	Information Search ,data collection	3hours

1. Collection of data for valuation of old building
2. Collection of details of BOT project under execution.
3. Collection of Data and case study of failure of RCC structure.
4. Collection of information on any topic from journal available in library
5. Collecting an estimate from P.W.D.
6. International Plumbing code and material specifications from market.
7. Collecting market rates for material and labor for building items .
8. Collecting D.S.R. /C.S.R. from PWD and its use for preparing revise estimate.
9. Collection and reading of drawings of buildings from architect / Practicing engineers and listing of various features from the drawings.
10. Market survey for pumps ,pipes and peripherals required for multi storied buildings
11. Non Conventional Energy Sources with focus on solar energy
12. Elevators installation and maintenance

Any other suitable areas (general)

13. Five success Stories of First Generation Entrepreneurs
14. Assessing Entrepreneurial Competencies
15. Business Opportunity Selection and Guidance
16. Planning for completion & Growth
17. Problem solving-An Entrepreneur skill

Guide for conducting & Graded activities preparations

1. Word processing document.
2. Document should include graphicals such as flow-charts, posters, paper cutting, photographs etc on the topic given by your teacher.
3. Arrange an exhibition, & displaying the best of all.
4. Carry out class Oral presentation.
5. Note making based on reading comprehension
6. Follow **SQ3R** method **(Search, Read, Recite, Review)**of reading,
7. techniques on Voice modulation, body language in communication

Evaluation check list (Annexure) should be filled by course coordinator

Evaluvation check list

Unit4	TASK MANAGEMENT	8hours

Any two from the list suggested

1. Collect the complete details of e-tendering, process , live paper advertisement.
2. Write on Mix Proportioning Of Self-Compacting Concrete By Different Mix Procedures
3. Develop a new Technology To Manufacture Common Building Burnt Brick
4. Preparing models using development of surfaces.
5. Collect and study IS code for Engineering Drawing or any other course.
6. Case Study Of Occupational Hazards Of Asbestos Industries : Ramco Industries, Karur
7. Case Study On nearby Building Cracks And Causes And Its Prevention
8. Case study of Ferro-cement and model making technique .
9. Collect the information about Environmental Aspects of LEED for Existing Buildings, and case study of LEED certified building.
10. Design a Roof Top Rainwater Harvesting At your Campus,
11. Auto workshop / Garage layout/ Nearby Petrol Pump Layout
12. Select different materials with specifications for at least 10 different grouts / Admixture and list the important behaviour/ properties desirable.
13. Select 5 different market steels used in civil engineering applications and Collecting information from Market: Nomenclatures and specifications
14. Manufacturing process, properties and applications of following materials – Ceramics, Gypsum board, Epoxy.
15. Develop a plan of Treatment And Reuse Of Automobile Service Station Wastewater For Vegetation.

Guide for conducting & Graded activities preparations

TASK MANAGEMENT

1. Students should be provided with the knowledge of introduction to task management, task identification, task planning, organizing and execution, closing the task.
2. Each student should be given different task to avoid duplication
3. Student should decide any task to be completed in a stipulated time with the help of teacher.
4. write a report considering various steps in task management.
5. And present it Professional way keeping in mind Presentation Skills Body language, Dress, Posture, Gestures, Eye contact and facial expression, Stage fright, Voice and language, Volume, Pitch, Inflection, Speed, Pause, Pronunciation, Articulation, Language, Practice of speech. Correct using Organs of speech, symbols, articulation of speech sounds- stress and intonation, clarrifing doubts.

Documentation Word processing a document

Evaluation check list (Annexure) should be filled by course coordinator

Unit5	 **Team Building and Leadership activity (any one for each group)** 	4hours

1. Ask the participants to get inside a circle so that no one's feet are touching theground outside of the circle. Once everyone has accomplished that task, the facilitator should applaud them and then remove 2-3 of the circles.Those participants who have lost their circle, now must join other circles. Again no feet can touch the ground outside of the circles.The facilitator continues to remove circles until only one is left. At this pointeveryone must try to fit their feet in the remaining circle. The more creative the solution, the better
2. Name of Activity: Balloon Towers-Instructions: Total group divides into smaller groups of 6-8 people. Each group is given 100 balloons and a roll of masking tape.The goal is to make a free standing tower (i.e. cannot attach off of ceiling, prop against wall, etc.)
3. Give each group an identical bag of construction materials. This can include canvas tarp, construction materials, such as pipes and connectors or newspapers, tape and straws, or lots of amusing recycled junk that doesn't necessarily have a name. Divide this equally so both groups will have identical supplies and put the supplies in paper bags. Using these materials each group must build half a bridge that begins on their side of the space and meets in the middle of the space with the other half of the bridge built by the other. Each half of the bridge must mirror the other exactly. Pace a tarp between the groups so they can't see each other's work. Groups must verbally communicate building techniques through the tarp so that they match and meet in the middle. They cannot touch the tarp. When groups think they have accomplished the task, remove the tarp and see how close they are.
4. Name of Activity:See, Run, Do (Materials Needed: A completed poster, Posterboard,Scissors,Glue,Construction paper,Markers/crayons/pencilsPreparation)
   Decide on the concept you want to teach a group (example: 4-H fundraising, communication) Make a poster that represents that concept. Bring all supplies needed to reconstruct the poster and enough for teams of 4-5.Instructions: Post the poster outside the room where no one can see it. Divide the group into teams of 4-5. One person is going to be "seer" – only this person can see the poster and s/he must tell the runner what he sees. Another person is the "runner" must run from the worktable to the seer. The rest of the team are the "doers" – must reconstruct the poster as the runner tells them, based on what the seer tells the runner. The runner can run as many times as necessary to get the correct information.
5. Objects are scattered in an indoor or outdoor place. In pairs, one person verbally guides his/her partner, a blindfolded person, through the minefield.
6. Tie the tire 5-6 feet above the ground. It should be tied off in 3-4 directions sothat it does not move too much. The object of the game is for everyone to pass through the center hole of the tire as quickly as possible without touching the sides of the tire. The group must decide on two people who will be designated as the spotters; they are responsible for helping the first and last persons through the tire. Then the group should decide on a strategy that will get everyone through the tire quickly and safely. If anyone touches the side of the tire the group must start again. The facilitator should be the judge of this.
7. Beforehand, tie two pieces of string around the eraser end of a pencil,Ask everyone to find a 4 members group.Choose one of the groups, and ask the players to stand back to back. Tie the two pieces of string around their waists so that the pencil is hanging down between them. Place the bottle on the floor between them. Challenge them to lower the pencil into the bottle without using their hands
8. Ask participants to stand on top of the sheet. Once all are on the sheet, tell them that they must turn it over without stepping off it. All participants must be standing on the sheet at all times. There can be no stacking or people on top of each other.

Guide for conducting & Graded activities preparations

Write a page how you conducted the activity? What did you learn from this activity?
Photographs of conducting activity with word processing document
Evaluation check list (Annexure) should be filled by course coordinator

Unit6	Group Discussion :	8hours

The topic of group discussions may be selected by the faculty members. (one from civil engineering and one from general topic for each group)

Some of the suggested civil engineering topics are –

1. Role of civil engineer in disaster management.
2. Scope of out sourcing of civil engineering services.
3. Pollution control
4. Recent trends in civil engineering as a service industry.
5. Waterproofing and leakage prevention.
6. Troubleshooting in plumbing system.
7. Causes of failure of road.

Some of the suggested topics are –

1. Education topics.
2. Sports topics.
3. current affairs
4. Social topics.
5. Management topics.
6. Economics and Business topics
7. Political topics.

***Some topics have been provided at the end of the document (Annexure).**

Guide for conducting & Graded activities preparations

The students should discuss in group of six to eight students and write a brief report on the same as a part of term work.

Group discussion technique –Ways to carry out group discussion

1. Introduction to group discussion,
2. Students should be given tips to work effectively in teams.
3. Establish good rapport.
4. Show interest with others and work effectively with them to meet common objective.
5. Working in teams understands and work within the dynamics of a groups.
6. Leadership in teams
7. Handling frustrations in group
8. Tips to provide and accept feedback in a constructive and considerate way ,
9. Initiating and concluding
10. Noting down, agenda and minutes of discussion/meeting.
11. Eye movement, fixations, regression, visual wandering. body language in communication
12. Interview technique necessity, tips for handling common questions.

Documentation

1. Evaluation check lists
2. Word processing document.
3. Prepare minutes of discussion.
4. Write thorough description of the topic discussed
5. Evaluation check list (Annexure) should be filled by course coordinator

Document expected to be turned in on within stipulated time to facilitate the writing development process.

Unit 7	Guest Lectures	12hours

The **Guest Lectures** from field/industry experts, professionals to be arranged (3 Hrs duration), from the following or alike topics and one video watching / listening .

1. HRD and civil engineering projects.
2. Project planning and execution of civil engineering projects.
3. PWD system of accounts
4. Contract Management
5. RCC design and detailing
6. Construction of highway, material of construction ,machinery used and manpower requirement
7. To set up a small scale industry.
8. Planning and design of irrigation project.
9. Construction of Flyovers: Special Features
10. Ready Mix concrete
11. Safety in Construction
12. Computer aided drafting
13. Industrial hygiene.
14. Composite Materials.
15. Ceramics
16. Safety Engineering and Waste elimination
17. Pollution control.
18. Non destructive testing.
19. Acoustics.
20. Illumination / Lighting system.
21. Fire Fighting / Safety Precautions and First aids.
22. Topics related to Social Awareness such as – Traffic Control System,
23. Career opportunities,
24. Communication in Industry,
25. Yoga Meditation,
26. Aids awareness and health awareness.
27. Professional communication

Guide for conducting & Graded activities preparations

Ways to conduct guest lectures

1. Watch and make a report on topic of your Guest Lecture talk.
2. Watch/listen an informative session on social activities or technical aspects.
3. Audio/visual record
4. Opportunity should be provided for Interpretation with experts
5. Should provide the information on method of note taking, actual Listening & Listening skills

Documentation

1. Make a report (2+1) on the programme.
2. The brief two reports to be submitted on the guest lecture by each student as a part of Term work.
3. Make a report on topic of your Video session
4. Any one mandatory hand written document others can be word processing document
5. All writing assignments are expected to be turned in on within stipulated time
6. Duplication of document should be avoided within students
7. Evaluation check list (Annexure) should be filled by course coordinator

Unit 8	Mock Tendering Processfor construction work	9hours

1. Students should be divided into groups each groups should act as a construction company
2. Arrange a guest lecturers from PWD/ZP/RDPR/KRIDL/KHB or lecturers for providing Tutorial or presentation on tendering process
3. Lecturer- act as a Client, All the groups as–Bidders or one of the group can assist lecturer to be a Client

Guide for conducting & Graded activities preparations

STEPS	DESCRIPTION	ROLES AND RESPONSIBILITIES
Tender process is determined	Identifying the work Ex: construction of compound wall, Small building etc. Sample document link **http://ssakarnataka.gov.in/pdfs/ tenders/NewSchBuildConstTender.pdf**	Lecturer/one of the group
Request for tender is prepared	The tenderer shall examine carefully all the tender documents consisting of Tender application form 1. Invitation for tenders 2. Instructions to tenderers 3. Form of tender agreement and qualification information 4. Conditions of contract 5. Contract data 6. Specifications 7. Tender drawings 8. Bill of quantities	Lecturer/one of the group
Launching of tenders	Advertisement of tenders or Tender Invitation	Display in notice board
Application response 1. Reception of bid 2. Opening of bid	Financial against your offered price, stay competitive in your offer by knowing the market rate in construction industry taking different scheduled rates from different districts. QUOTATION OF RATES **Other required/supporting documents :** Completeness of the tender document, Financial against current work load, Similar past experience, Comments from third party on your past and current performance, Current resources that you have (Technical staff, machine, Plant, Equipment and supporting staff.)	All groups
Comments and Discussion should be carried out about the deficiency and appreciation of tender bid given by each group		
Pre-qualification (Scrutiny of tenders) 1. Review of Documents 2. Technical evaluation 3. Financial assessment of best combined offers	Evaluation of bid Comparative statement	Lecturer/one of the group
Awarding contract for best document prepared	**Points to remember on other documents** Signing the agreement, Commencement of work, Period of completion, Liquidated damages, Period and value of running/on account bill, Security deposit, Refund of security deposit, Secured advance, Income tax deduction, WCT / VAT / cess / service tax, Defects liability period, Period of final measurement, Place of arbitration, Insurance.	Whole process and Tender document should be prepared as grade exercise by each student from all groups

Evaluation check list (Annexure) should be filled by course coordinator

Unit9	Seminar Presentation	8hours

1. The students should select a topic for Seminar based on recent developments in civil engineering field, emerging technology etc.
2. Each student shall submit a report of at least 10 pages and deliver a seminar (Presentation time – 10 minutes)

Guide for conducting & Graded activities preparations

1. Working in teams understand and work within the dynamics of a groups.
2. Tips to work effectively in teams, establish good rapport,
3. Interest with others and work effectively with them to meet common objectives,
4. Tips to provide and accept feedback in a constructive and considerate way
5. Leadership in teams,
6. Handling frustrations in group.
7. Body language in communication
8. Presentation techniques

Documentation

Student shoud prepare the slides as per presentation techniques.
Prepare handouts and submit both in paper and e-formats.
Evaluation check list (Annexure) should be filled by course coordinator

Unit 10	Student moral Activities:	8hours

Conduct ANY ONE of the following activities through active participation of students

i) Rally for energy conservation / tree plantation.

ii) Survey for local social problems such as mal nutrition, unemployment, cleanliness, illiteracy etc.

Guide for conducting & Graded activities preparations

The students in a group of 3 to 4 will perform any one of the following activities (others similar activities may be considered)

Activity : Form a group of 5-10 students and do a work for social cause e.g. tree plantation, blood donation, environment protection, camps on awareness like importance of cleanliness in slump area, social activities like giving cloths to poor etc.(One activity per group)

Write report and arrange an exhibition, displaying the social service etc on the topic given by your teacher.
Evaluation check list (Annexure) should be filled by course coordinator

Unit 11	Life skills (any two)	4hours

1. Arrange any one training in the following areas a) Yoga. b) Meditation c) Mudra d) Telephonic etiquettes e) email etiquettes f) Etiquette in Social and office settings. i)Set the goal for personal development. j)Develop good habits to overcome stress. g) Conduct aptitude, general knowledge test, IQ test, Solve Puzzles.

Students in group (5-6) will demonstrate an understanding of, and participate in, use life skills (given below) to achieve and extend personal potential to respond effectively to challenges in his or her own world.

1. Identify safety signs, Demonstrate knowledge of traffic rules and safety Follow traffic rules, Read and understand basic safety procedures, Obey safety rules when walking during the day or at night, obtain a learner's permit, then a driver's license, Obtain car insurance Demonstrate knowledge and ability to evacuate a building in an emergency.
2. Achieving self-awareness -- Identify emotions. Use appropriate methods to cope with

stress. Awareness about never taking action against self when in pain, critical thinking

3. How to Search for a job/ occupational choices. -Apply for a job.-Interview for a job. Obtain special vocational education or job training.
4. Manage a savings and checking account, Maintain a personal budget and keep records, Demonstrate personal finance decision-making skills, Calculate and pay taxes. Use credit responsibly.
5. Demonstrate knowledge of civil rights and responsibilities. Get legal aid. Report a crime. Register with Selective Service at age 18. Vote
6. Perform or arrange for home maintenance, Perform housekeeping tasks, Wash clothing. Iron, mend, and store clothing.
7. Obtain health care, Demonstrate knowledge of common illnesses, prevention and treatment. Maintain physical fitness, nutrition and weight. Avoid substance abuse.
8. Clean food preparation areas, Store food properly, Prepare meals, read labels, and follow recipes. Demonstrate appropriate eating habits. Plan and eat balanced meals.

Guide for conducting & Graded activities preparations

Documentation

1. Current life skills mentioned by each students

✍ Write a paragraph (200words) of experience gained in the activity or views in the form of feedback to the mentor. (Avoid duplication of reports)

3. Create an Individual Career Plan
4. Evaluation check list (Annexure) should be filled by course coordinator

Unit12	**Modular courses**

A course module should be designed in the following areas for max. 12 hrs. Batch size – min. 15 students. Course may be organized internally or with the help of external organizations.

a. Basic computer courses
b. CAD- software/ E-tabs/prime vera.
c. Personality development.
d. Entrepreneurship development. Etc

Guide for conducting & Graded activities preparations

Documentation

Prepare advertising sheets or brochure

Evaluation check list (Annexure) should be filled by course coordinator

Course Delivery:

The course will be delivered through Demonstration, Expert lectures, videos presentations and practices

Questions for CIE and SEE will be designed to evaluate the various educational components (Bloom's taxonomy) such as:

	Bloom's Category	% Weightage
1	Understanding	30
2	Applying the knowledge acquired from the course	25
3	Analysis	25
4	Evaluation& Creating new knowledge	20

Course Assessment and Evaluation Scheme:

	What		To whom	When/Where (Frequency in the course)	Max Marks	Evidence collected	Course outcomes
Direct Assessment meth	CIE	IA	Students	Based on evaluation checklist	25	Consolidated Report Audio/visual record	1,2,3,4
				End of the course	50	Answer scripts at BTE	1,2,3,4
Indirect Assessment	Student Feedback on course		Students	Middle of the course		Feedback forms	1,2 Delivery of course
	End of Course Survey			End of the course		Questionnaires	1,2,3,4 Effectiveness of Delivery of instructions & Assessment Methods

Note to IA verifier*: *The following documents to be verified by CIE verifier at the end of semester

1. Student activities report for 25 marks (Consolidated evaluation checklists –Annexure)
2. Student feedback on course regarding Effectiveness of Delivery of instructions & Assessment Methods.

TEXT BOOKS:

1. An Introduction to Professional English and Soft Skills: by Bikram K. Das, Kalyani Samantray, Cambridge Press.
2. Business correspondence and Report ✍ writing: by R. C. Sharma & Krishna Mohan Developing Communication Skills: by Krishan Mohan & Meera Bannerji
3. Group Discussions by Sudha Publications And Ramesh Publishing House, New Delhi
4. Vocabulary Improvement: Words Made Easy: by Diana Bonet
5. Word Power Made Easy: by Norman Lewis

REFERENCE BOOKS:

1. Communication Skills, Sanjay Kumar and PushpLata, Oxford University Press.
2. Chrissie Wright (Ed.); Handbook of Practical Communication Skills; JAICO Books
3. Effective Communication and soft Skills, NitinBhatnagar and MamtaBhatnagar, Pearson Publication.
4. Communicative English for Engineers and professionals, NitinBhatnagar and MamtaBhatnagar, Pearson Publication.
5. Communication Skills and soft skills- An integrated approach, Kumar, Pearson Publication
6. Communication Skills for Engineers, Mishra, Pearson Publication
7. K.K.Sinha, Business Communication, Galgotia Publishing Company, New Delhi, 1999.
8. R.K.Bansal& J.B. Harrison, spoken English for India, Orient Longman.

Recommended Readings:

1. Business @ The Speed of thought, Bill Gates.
2. My Experiments with Truth, M.K.Ghandhi
3. Wings of Fire, A.P.J. Kalam
4. An Autobiography, JwaharLal Nehru.

Professional Practice

5. ASCE. Civil Engineering Body of Knowledge for the 21st Century. Second Ed. ASCE Press, 2008.
6. Board for Professional Engineers, Land Surveyors, and Geologists. Professional Engineers ACT. Department of Consumer Affairs, 2011.
7. Grigg, N. S., M. E. Criswell, D. G. Fontane, and T. J. Siller. Civil Engineering Practice in the Twenty-First Century. ASCE Press, 2001.

✍ writing, Presentation, and Documentation

8. Choi, Ying-Kit. Principles of Applied Civil Engineering Design. ASCE Press, 2004.
9. Jeter, S. and J. Donnell. ✍ writing Style and Standards in Undergraduate Reports. Second Ed. College Publishing, 2011.
10. Paradis, J. G. and M. L. Zimmerman. The MIT Guide to Science and Engineering Communication. Second Ed. MIT Press, 2002.

Management, Supervision, and Leadership

11. Bittel, L. R. What Every Supervisor Should Know. Sixth Ed. McGraw-Hill, 1992.
12. Martin, S. Managing Without Managers. Sage Publications, 1983.
13. Northouse, P. G. Leadership. Fifth Ed. Sage Publications, 2010.
14. PMI. A Guide to the Project Management Body of Knowledge. Forth Ed. PMI, 2008.
15. IIT Delhi, Modern Technology – the Untold Story
16. English Conversation Practice by Grant Taylor
17. Business correspondence and Report ✍ writing: by R. C. Sharma & Krishna Mohan
18. Chrissie Wright (Ed.); Handbook of Practical Communication Skills; JAICO Books.
19. Veena Kumar, The Sounds of English, Makaav Educational Software, New Delhi.

Scheme of Examination		
1	Verification of consolidated reports and check lists + viva about report	20
2	Write about 50 words how did you conduct mock tendering process or Write about 50 words (Any one out of 12 exercise- Examiner choice)	10
3	Individual Power point Presentation (only six slides) hand-outs should be attached to Answer script	
	Communication skills	10
	Presentation techniques (based on slides)	5
4	1. What can you do for our nation 2. Your strength 3. Long term and short term goals	5
	Total	**50**

List of Equipments and Apparatus.

Sl.No	Name of Equipments and Apparatus	No
1	LCD Projector- White screen	1
2	Computers with Internet facility	10
3	Printers	02
4	UPS	01
5	Speakers	01

Sl.No	Name of Equipments and Apparatus	No
6	Microphone	01
7	Electronic podium	01

ANNEXURE

Evaluation check lists for Units 1 STUDENT ETHICS AND ANTHEMS

Note : Only this checklist should be self evaluated by each students & all the other Units should be evaluated by Course coordinator

* Marks allotment should be given for each performance indicators if Unsatisfactory-0, Satisfactory-1, Good -2, Better-3, Best-4, Excellent-5

For every task, students should bring the respective evaluation checklist of each unit

SL. NO	PERFORMANCE INDICATORS	MARKS*
	Student ethics and anthems (self evaluation by students)	
1	In each and every professional practices class I have/ will always attend elegantly in formal dress	
2	I will organise and attend every national festival in colleges developing national integrity protecting national pride.	
3	I will always Keep classrooms, college premises clean. I will not write anything on the desk, wall etc, Avoid Stick chewing gum to benches. I will not destroy any public property, Always protect natural resources	
4	I will respect & wish the lecturers, Give way to lecturers while walking in the corridor. Don't spit anywhere in college.	
5	I will communicate in English in every professional practice classes.	
6	I will develop Interpersonal relationship with classmates and helping others, My Behaviour will always be gentle, polite and respectful with elders. Always give way to ambulance, or emergency vehicle, I ll be kind to animals.	
7	Maintain personal health and hygiene-Awareness about Regular habits, keep myself clean, regularly cut nails, visiting regularly spiritual places, Prayer. Eating habits-dos and don'ts-avoid over eating.	
8	Reading English newspapers daily and watching news, Practice physical exercise every day –"Sound body sound mind". To know /aware about the ill effects of smoking, alcohol consumptions, Right use of technology, Control in spending money	
9	To maintain the discipline in public places, and college events/functions, Maintain peace and harmony, avoid groupism, Active participation in co-curricular activities	
10	Always speaking truth, being honest, Love myself, Boost my self-esteem, self-confidence, positive attitude, Patience. Develop Adaptability to different situations, Always have a tendency to face the Challenges, Never miss an opportunity.	
		Total

$Marks = \frac{\text{Total (T) X 5}}{\text{No of performance indicator}}$	$Marks = \frac{5(\text{Total})}{10} = \frac{\text{Total (T)}}{2} =$ _____ **out of 25**

Evaluation check lists for Units 2 PROBLEM SOLVING TECHNIQUES

* Marks allotment should be given for each performance indicators if Unsatisfactory-0 , Satisfactory-1, Good -2, Better-3, Best-4, Excellent-5

SL. NO	PERFORMANCE INDICATORS	MARKS
	Problem solving technique	
1	Whether student has attended the session	
2	Dress code	
3	Selection of Problem	
4	Information gathered	
5	Development of solution	
6	Participation	
7	Whether student ask doubt	
8	Report submitted in stipulated time	
9	Elegancy of report	
10	Communication	
	Total	

$Marks = \frac{\text{Total (T) X 5}}{\text{No of performance indicator}}$	$Marks = \frac{5(\text{Total})}{10} = \frac{\text{Total (T)}}{2} =$ _____**out of 25**

Evaluation check lists for Units 3 INFORMATION, SEARCH, DATA COLLECTION

* Marks allotment should be given for each performance indicators if Unsatisfactory-0 , Satisfactory-1, Good -2, Better-3, Best-4, Excellent-5

SL. NO	PERFORMANCE INDICATORS	MARKS
	Information, Search, Data collection	
1	Whether student has attended the session	
2	Whether collected information is related to topic	
3	Dress code	
4	Whether SQ3R method is followed	
5	How neat the document written or presented.	
6	Report quality (Reader friendly, graphical representation included)	
7	Stage fright, voice modulation, Pitch during presentation	
8	Volume, Speed, Gestures during presentation	
9	Pause, Pronunciation, Articulation during presentation	
10	Report completed in stipulated time	
	Total	

$Marks = \frac{\text{Total (T) X 5}}{\text{No of performance indicator}}$	$Marks = \frac{5(\text{Total})}{10} = \frac{\text{Total (T)}}{2} =$ _____ **out of 25**

Evaluation check lists for Units 4 TASK MANAGEMENT

* Marks allotment should be given for each performance indicators if Unsatisfactory-0 , Satisfactory-1, Good -2, Better-3, Best-4, Excellent-5

SL. NO	PERFORMANCE INDICATORS	MARKS
	Task Management	
1	Whether student has attended the session	
2	Identification of task	
3	Apply problem solving skills obtained in unit 2 to this task.	
4	Apply task management techniques -identification, planning, organizing and execution, closing the task done properly and explained neatly in the report.	
5	Depth of knowledge gained in search of information	
6	Positive approach in solving the task	
7	Elegancy of report	
8	Dress code	
9	Communication	
10	Report completed in stipulated time.	
	Total	

$Marks = \frac{\text{Total (T) X 5}}{\text{No of performance indicator}}$	$Marks = \frac{5(\text{Total})}{10} = \frac{\text{Total (T)}}{2} =$ _____ **out of 25**

Evaluation check lists for Units 5 TEAM BUILDING ACTIVITY

* Marks allotment should be given for each performance indicators if Unsatisfactory-0 , Satisfactory-1, Good -2, Better-3, Best-4, Excellent-5

SL. NO	PERFORMANCE INDICATORS	MARKS
	Team building activity	
1	Whether student has attended the session	
2	Whether student has participated in the activity (Photograph as proof of attendance has been attached in the report)	
3	Whether students in groups used to communicate things to one another?	
4	Solve the team building activity in most challenging way	
5	Student work together ? Or Whether student handle frustration in teams	
6	Leadership in teams,	
7	Did the group organize before they started? Student important in preplanning to the success of the activity?	
8	Report submitted in time	
9	Whether student has understood the importance of team building?	
10	Positive Attitude	
	Total	

$Marks = \frac{\text{Total (T) X 5}}{\text{No of performance indicator}}$	$Marks = \frac{5(\text{Total})}{10} = \frac{\text{Total (T)}}{2} =$ _____ **out of 25**

Evaluation check lists for Units 6 Group Discussion

* Marks allotment should be given for each performance indicators if Unsatisfactory-0 , Satisfactory-1, Good -2, Better-3, Best-4, Excellent-5

SL. NO	PERFORMANCE INDICATORS	MARKS
	Group discussion	
1	Whether student handle frustration in groups	
2	Note down the minutes of discussion	
3	Allowing others to speak, initiating and closing topic	
4	Leadership in teams,	
5	Whether discussion is related to topic	
6	Eye movement ,involvement	
7	Clarifying doubts with proofs	
8	Body language in communication, Dress, Posture, Gestures, Eye contact and facial expression.	
9	Stage fright, Voice and language, Volume, Pitch, Pronunciation, Language, clarrifing doubts.	
10	Repot completed in stipulated time	
	Total	

$Marks = \frac{\text{Total (T) X 5}}{\text{No of performance indicator}}$	$Marks = \frac{5(\text{Total})}{10} = \frac{\text{Total (T)}}{2} =$ _____ **out of 25**

Evaluation check lists for Units 7 Guest lectures

* Marks allotment should be given for each performance indicators if Unsatisfactory-0 , Satisfactory-1, Good -2, Better-3, Best-4, Excellent-5

SL. NO	PERFORMANCE INDICATORS	MARKS
	Guest Lectures	
1	Whether student has attended all the session	
2	Whether student was attentive during guest lectures (Interpret and crarify doubts)	
3	Document is as prescribed in syllabus (How neat the document written or presented and related to the lecture or video session)	
4	Comprehend relationships between ideas shared by speaker	
5	Take organized notes on lectures and listening passages	
6	Discuss and respond to content of a lecture or listening passage orally and/or in writing	
7	Whether the student has understood the importance of listening skills	
8	Dress code	
9	If students has done any duplication of report	
10	Report submitted in stipulated time	
	Total	

$Marks = \frac{\text{Total (T) X 5}}{\text{No of performance indicator}}$	$Marks = \frac{5(\text{Total})}{10} = \frac{\text{Total (T)}}{2} =$ _____ **out of 25**

Evaluation check lists for Units 8 MOCK TENDERING PROCESS

* Marks allotment should be given for each performance indicators if Unsatisfactory-0 , Satisfactory-1, Good -2, Better-3, Best-4, Excellent-5

SL. NO	PERFORMANCE INDICATORS	MARKS
	Mock tendering process	
1	Whether student has attended all the session	
2	Active Participation/ Involment	
3	Whether the student has understood the tendering process	
4	Whether the student has understood his role to be played in tendering process	
5	Information gathered about tendering process	
6	Whether students work in teams, Team coordination and equal participation	
7	Creative skills adopted in communicating/ role played in tendering process act	
8	Elegancy of tender document	
9	Dress code	
10	Report submitted in stipulated time	
	Total	

$Marks = \frac{\text{Total (T) X 5}}{\text{No of performance indicator}}$	$Marks = \frac{5(\text{Total})}{10} = \frac{\text{Total (T)}}{2} =$ _____ **out of 25**

Evaluation check lists for Units 9 SEMINAR PRESENTATION

* Marks allotment should be given for each performance indicators if Unsatisfactory-0 , Satisfactory-1, Good -2, Better-3, Best-4, Excellent-5

SL. NO	PERFORMANCE INDICATORS	MARKS
	Seminar presentation	
1	Whether student has participated in the seminar	
2	Whether students work in teams, Team coordination and equal participation	
3	Depth of knowledge about the topic , Information gathered, clarifying doubts.	
4	PPT includes presentation techniques	
5	Body language in communication, Professional Presentation Skills, Dress, Posture, Gestures	
6	Leadership in teams,	
7	Handouts submitted & ppt submitted in electronic format through email	
8	Eye contact and facial expression, Stage fright, Voice and language, Volume, Pitch	
9	Use of aids –OHP,LCD projector,	
10	Inflection, Speed, Pause, Pronunciation, Language, Practice of speech. Correct using Organs of speech, symbols, articulation of speech, sounds- stress and intonation	
	Total	

$Marks = \frac{\text{Total (T) X 5}}{\text{No of performance indicator}}$	$Marks = \frac{5(\text{Total})}{10} = \frac{\text{Total (T)}}{2} =$ _____ **out of 25**

Evaluation check lists for Units 10 Social moral activities

* Marks allotment should be given for each performance indicators if Unsatisfactory-0 , Satisfactory-1, Good -2, Better-3, Best-4, Excellent-5

SL. NO	PERFORMANCE INDICATORS	MARKS
	Social Moral Activities	
1	Whether student was aware of importance of social service.	
2	Identification of Societal problems	
3	What level of interest in national or humanity service of student.	
4	Whether student participate in the social service or any other prescribed event	
5	Creative skills adopted in communicating social service.	
6	Seeks assistance when needed.	
7	Whether student / coordinator satisfied by the action taken	
8	Whether the student has understood the importance of social activities	
9	Dress code	
10	Report completed in stipulated time	
	Total	

$Marks = \frac{\text{Total (T) X 5}}{\text{No of performance indicator}}$	$Marks = \frac{5(\text{Total})}{10} = \frac{\text{Total (T)}}{2} =$ _____ **out of 25**

Evaluation check lists for Units 11 LIFE SKILLS

* Marks allotment should be given for each performance indicators if Unsatisfactory-0 , Satisfactory-1, Good -2, Better-3, Best-4, Excellent-5

SL. NO	PERFORMANCE INDICATORS	MARKS
	Life skill	
1	Your long term and shot term goals defined	
2	Whether student attended the session	
3	Clear awareness of the individual current life skills	
4	Communication skill /creative skill adopted in demonstrating topic of life skills	
5	Whether the student has understood the importance of life skills	
6	Level of interest in practices	
7	Whether Individual Career Plan prepared	
8	Develops and applies strategies for managing personal work	
9	Dress code	
10	Report completed in stipulated time	
	Total	

$Marks = \frac{\text{Total (T) X 5}}{\text{No of performance indicator}}$	$Marks = \frac{5(\text{Total})}{10} = \frac{\text{Total (T)}}{2} =$ _____ **out of 25**

Evaluation check lists for Units 12 MODULAR COURSES

* Marks allotment should be given for each performance indicators if Unsatisfactory-0 , Satisfactory-1, Good -2, Better-3, Best-4, Excellent-5

SL. NO	PERFORMANCE INDICATORS	MARKS
	Modular courses	
1	Whether student attended the session	
2	Content is described appropriately	
3	Usage of additional tools/ aids like pictures, animations etc	
4	Advertisement sheets or brochure sheets is prepared	
5	Creative skill adopted in presenting topic of modular course in brochure sheets	
6	Whether the student has understood the importance of communication.	
7	Accuracy of delivering the ideas (if any errors)	
8	Inputs from lecturer has been incorporated	
9	Dress code	
10	Advertising sheets or brochure completed in stipulated time	
	Total	

$Marks = \frac{\text{Total (T) X 5}}{\text{No of performance indicator}}$	$Marks = \frac{5(\text{Total})}{10} = \frac{\text{Total (T)}}{2} =$ _____**out of 25**

CONSOLIDATED EVALUATION CHECKLIST

CO	**UNITS**		**Marks from respective evaluation sheets**
CO1	Self-Development (Individual practices)	Student ethics & anthems	
		Problem solving technique	
		Information, Search, Data collection	
		Task Management	
CO2	Development in groups (Team work Exercises)	Team building activities	
		Group Discussion	
CO3	Professional fundamentals	Guest lectures	
		Mock Tendering process	
		Seminar Presentation	
CO4	Communicate effectively in society	Social moral Activities	
		Life skills	
		Modular courses	
		TOTAL	

AVERAGE= Total / 12	25

Topic related to civil engineering as emerging trends

Topics on SUSTAINABILITY	Topics on CONCRETE Technology
1. Approaches To Greenbelt Design 2. Design Of Eco-Friendly Home For Conservation Of Energy 3. Eco Friendly Fuels 4. Eco-Friendly Campus 5. Environmental Aspects of LEED for Existing Buildings 6. Roof Top Rainwater Harvesting At your Campus, 7. Green Concrete 8. Noise Control Of Buildings 9. Passive Solar Buildings 10. Production of Biogas From Paddy Straw 11. rain water harvesting 12. Recycling and Reuse of Building Waste In Construction 13. Some Studies On Bamboo Reinforced Stabilized Red Soil Beam Prisms For Flexure 14. Bamboo as a Building Material 15. Ground Improvement Techniques 16. Ground Water Quality Analysis In your Town 17. Interlinking of Indian Rivers 18. Low Cost Liners For Canal 19. Measurement Of Evapotranspiration Using Lysimeter 20. New Techniques Of Waste Water Management 21. Novel Material For Water Treatment 22. Operation of a Bio-Solid Dewatering Facility 23. Planning And Design Of Water Supply Scheme And Peoples Participation In Village 24. Proposed Mini Hydel Project 25. Rain water Diversion 26. rain water harvesting and ground water conservation 27. Rainwater Management And Conjunctive Use 28. Sediment Yield In River Basin or dam Using Gis And Remote Sensing 29. Studies On Infiltration Tube Well System 30. Submerged Floating Tunnel	1. Advancement in Concerte Technology 2. Drability Of High Performance Concrete 3. Concepts Of Shotcrete Technology 4. Concrete Admixtures 5. Construction joint 6. Decorative concretes 7. Design And Estimation Of Ready Mix Concrete Plants 8. Design Of Economical Formworks And Scaffolding For Concrete Structures 9. Determination Of Aggregate Shape Factors Using Universal Thickness-Length Guage 10. Fly Ash Concrete 11. Flyash Concrete Door Shutters 12. Geopolymer Concrete 13. Geopolymer Mortar 14. Heavy Density Concretes For Nuclear Reactors 15. Mineral Admixtures For High Performance Concrete 16. Reactive Powder Concrete 17. Mix Design For Self Compacting Concrete 18. Monolithic Concrete Domes 19. Natural Fibres In Concrete 20. Plastic cracking of concrete 21. Polymer Modified Steel Fibre Reinforced Concrete 22. Preliminary Investigations On Red Soil Cement Stabilised Coconut Shell Blocks 23. Reactive Powder Concrete 24. Recycled Aggregate Concrete 25. Self Compacting Concrete (Scc) 26. prestressed concrete hollow-core units 27. Shotcrete Technology 28. Infrared Thermography In Concrete Engineering 29. Industrial Flooring by Tremix Vacuum System
Topics on Foundation Engineering	**Topics on Highway**
1. Hyperbolic Paraboloid Shell Foundation	1. Concrete Road Repair Solution

2. Design procedure for pile caps 3. Control Of Corrosion On Underwater Piles 4. Deep Foundations Case Histories 5. Design of Shallow Foundations 6. Analysis Of Stability Of existing Slopes 7. Development Of BC Soil Stabilised Building Blocks Using Lime And Flyash 8. DIAGRID 9. Soil Nailing	2. Antistripping Agents In Bituminous Mixes 3. Construction Challenges For Bridges In Hilly Area 4. Design Considerations For Roadside Safety 5. Cbr Value 6. Intelligent Transport System 7. Pavement Design By Using Geotextile 8. Urban Transport Planning Project 9. Road Accident Analysis And Engineering Measurement In your Area 10. Scientific Study Of Road Humps 11. Waste Polyethylene Carry Bags In Road Construction
Topics on Environmental Engineering	**Topics on Some emerging Civil engineering areas**
1. Advanced Wastewater Treatment 2. Air Pollution Studeis 3. Analysis Of Performance Of The Existing Sewage Treatment Plant 4. Biological Wastewater Treatment 5. bio-medical waste management and the strategy 6. Biomimicry 7. Civil/Environmental Engineering Projects Using GPS Information 8. Defluoridation Of Water Using Tamarind Gel 9. Domestic Water Treatment Plant 10. Hazardous Waste Disposal & Managment 11. Low Cost Technology For Fluoride Removal 12. Recycling Of Waste water 13. Treatment Of Sugar Waste Using Anaerobic Filter 14. Alum Recovery By Acidulation of Aluminum Hydroxide Sludge 15. Membrane Technology in Waste Water Management 31. The Sustainable Watershed Development 32. Artificial Recharge Of Ground Water 33. Water Quality Index study for a place 34. Water swing 35. Computer Aided Drought Analysis Of YOUR District And Its Management 36. Conservation By Waste Water Reclamation 37. Watershed Model for a your place 38. Drip Irrigation 39. Electrical Resistivity Survey For Ground Water Exploration	1. Demolition Of Building 2. Design Aspects For Terrorist Resistant Buildings 3. Correlation And Regression Analysis 4. Master Planning For Developing An Underdeveloped Area 5. Optimal Bus Deployment of your City Using GIS 6. Planning & implementing information system 7. Vision 2020 8. Golden Quadrilateral 9. Nort-South East-West coridor 10. Significance Of Nanotechnology In Construction Engineering 11. Skybus Technology 12. Smart Material and Smart Structures. 13. Space Hotel 14. Study Of De-watering Methods For Large Scale Construction Sites 15. Virtual Design and Construction Fundamentals 16. An approach to investigation 17. Fire-Resistant Plasterboard Walls in Fire 18. Bandra-Worli Sea Link 19. IRDP 20. Collapse of World Trade Center 21. Tsunami mitigation strategies 22. Tsunami Warning System 23. Value Engineering 24. DRRWH System - A need of an hour
Topics on Construction of materials	**Topics on Structures**
1. GYPSUM 2. Basalt Rock Fibre (BRF) 3. Low Cost Housing 4. Composite Materials 5. Compressive Strength Characteristics Of Stacked Stabilized Soil Cement Blocks	1. Wrapping Technology 2. Analysis and Design of Sheet Piles 3. Damping of Hysteresis Structures 4. Brick Masonary Building Model With Seismic loads 5. CFST Columns

6. Compressive Strength Of Stabilised Blocks And Masonary Prisms 7. Granite Stone Dust Cement Blocks 8. Design of Light Weight Fills Using EPS Geofoams 9. Brick Masonry Domes 10. Flyash Laterite Bricks 11. Liqueconss Floors And Roofs 12. Brick Masonry Dome 13. Low Cost Bricks Making 14. Low Cost Roofing Tiles 15. Mangalore Tile Waste As Coarse Aggregate In Concrete 16. Operational Research In Building Materials With A Detailed Study On Clay Blocks 17. Plastic As Soil Stabilizer 18. Rice Husk Ash Concrete Blocks 19. Study Of Laterite Particles In Adsorption Of Oil And Grease 20. Waste Plastic Fibre Reinforced Concrete Using Recycled Coarse Aggregate 21. Basalt Rock Fibre 22. biodrgradation plastic 23. Jute Fibre 24. Laminated Floorings	6. Design Of An Multistoried Building Using Staad Pro 7. Development length requirements in seismic force-resisting members 8. Earthquake Resistant Building Construction 9. Earthquake Resistant Design And Construction 10. Earthquake Resistant Structural Design 11. Flexural Behaviour Of Gfrp Wrapped Masonry Beams 12. Inspection of Short Span Bridges 13. Seismic Retrofitting of RC Frames. 14. Rehabilitation of Bridges & Buildings - Using Guniting Techniques 15. Retrofitting Using FRP Laminates 16. Strengthening Of RCC Flexure Members By Epoxy Bonded Steel Plates 17. Stress Ribbon Bridge 18. Wind Loading on Tall Buildings

Some of the suggested General Group discussions Topics are

1. Polythene bags must be banned!
2. Do we really need smart cities?
3. E – books or Printed books – what's your choice?
4. Is Facebook for the attention – seeking and lazy people?
5. Globalization and its impact on Indian Culture.
6. Analytically evaluate the solutions to traffic problems
7. Global warming is caused more by developed countries
8. Rain forests help in maintaining the earths ecosystem
9. English should be made the Official Language
10. Reservation for women would help the society
11. How to deal with terrorism
12. Water resources should be nationalized
13. Daughters are more caring than sons
14. Abortion and Euthanasia - Is it morally right for society?
15. NGOs - Do they serve people's interests?
16. Role of ethics in tobacco industry, liquor industry
17. Universal Disarmament Is a Must
18. Managers are born, not trained
19. Managerial skills learnt in the classroom
20. Women are good managers
21. India's growth rate is bridging gap between rich and poor.
22. 25% seats in private schools should be reserved for poor.
23. Law is the creation of the strong to rule the weak
24. A man with words and no deeds is like a garden full of weeds

25. If you give a man a fish, he eats it once. You teach a man to fish, you lose a business opportunity
26. Nuclear power is a safe source of energy
27. Inflation Impact of Globalization
28. Electronic media vs. print media
29. Corruption is the price we pay for democracy
30. Multinational corporations: Are they devils in disguise?
31. Advertising is a waste of resources.
32. Privatization will lead to less corruption.
33. China market - a threat to Indian market
34. Technology Creates Income Disparities
35. India should be reorganized into smaller states.
36. Rising petrol prices - Govt. can control?
37. Government should give up the control on CBI.
38. Smaller businesses and start-ups have more scope
39. Developing countries need trade, not aid.
40. Business and Ethics do not go together
41. Performance based bonuses for government employees should be welcomed
42. Ditching the Kyoto Protocol
43. Is India's objection on EU justified?.
44. FDI in Retail - Will really affect the farmers of India?
45. EU Zone Crisis - reason for rising value of dollar
46. US Debt Crisis - really has an impact on world market
47. Depreciation of Indian Rupee has only negative impact on the economy
48. Nokia and Microsoft are a planned alliance or desperate move?
49. Gold: Best investment or a bursting bubble?
50. Freedom of press should exist
51. India needs a strong dictator
52. Role of UN in peacekeeping
53. Media is a mixed blessing/How ethical is media?
54. General Interest topics for group discussion
55. Computer viruses are good
56. India should practice "Swadeshi"
57. Food Bill - Is it really something India needs?
58. Will India really be the superpower of 21st century?
59. Quality is a myth in India.
60. China - A threat to India?
61. Indian villages - our strength or our weakness?
62. Mobile phones - requirement of the day.
63. Cursing the weather is bad farming
64. Patience is a bitter plant but bears sweet fruits
65. If you want peace, prepare for war
66. Education is a progressive way of discovering your ignorance.
67. Capital punishment should be banned
68. Beauty contests degrade womanhood
69. If you are not a part of the solution, you are part of the problem
70. Examinations - has it killed education?
71. The medium of teaching in schools should be English
72. A room without books is like a body without soul.
73. Increasing no. of Engg. Colleges is a boon to society
74. Educated Indians lack national commitment.

75. E-Learning is good for the education system and society.
76. Social networking on Internet is a boon.
77. Hard work or Smart work - Which is important?
78. Education industry is a business these days.
79. MGNREGA : A key to increase employment in the country