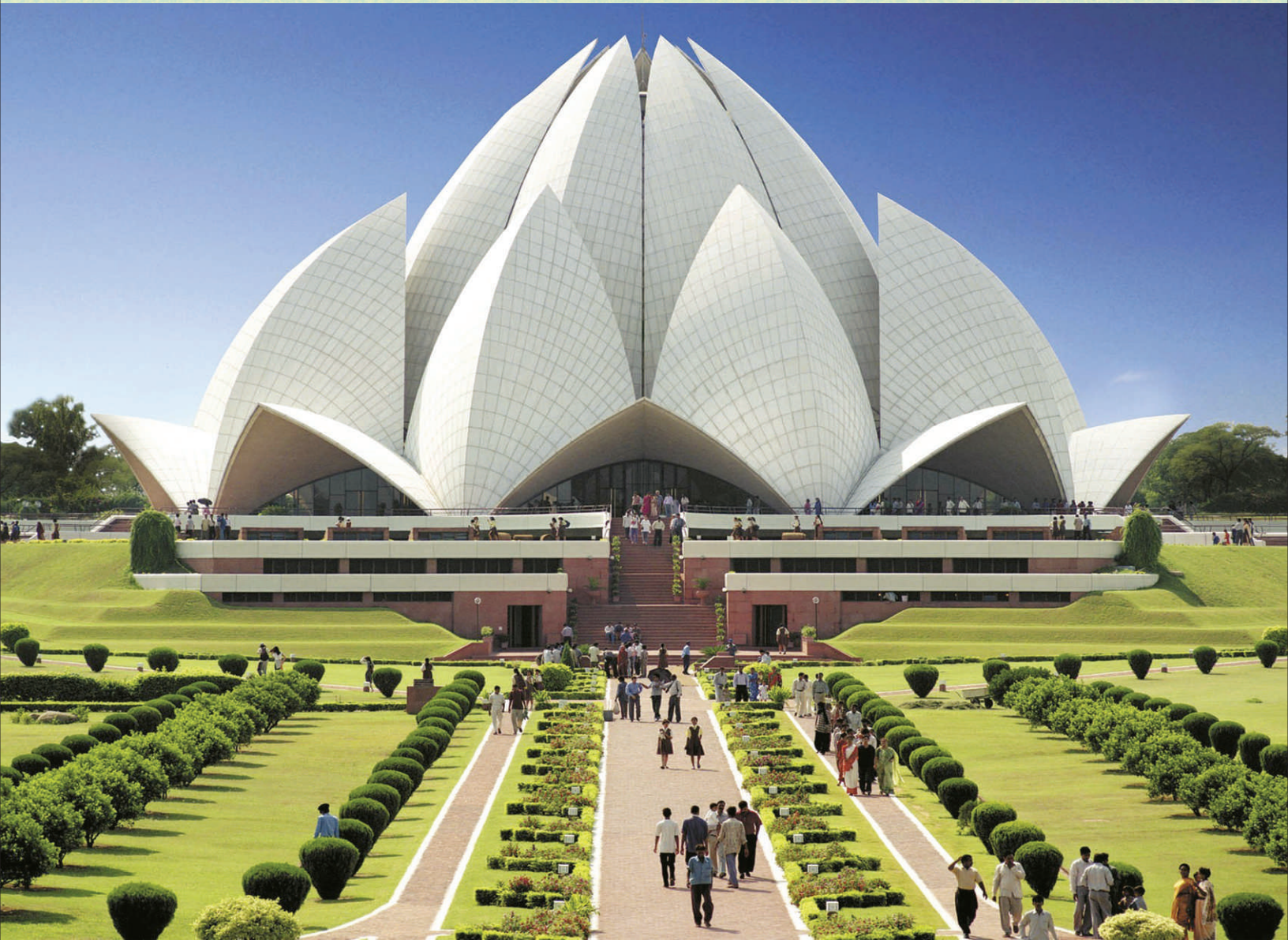


THE CIVIL ENGINEER

NEWSLETTER

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The Institution of Civil Engineers (India)

The Civil Engineer

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Chairman of the Institution
Er. S. L. Swamy

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From the Editor-in-Chief's Desk

The second issue of the Civil Engineers News Letter is in your hands. This News Letter covers the normal features which are contained in our News Letters. There are three articles in this issue dealing with various subjects of interest. The first article deals with "India's Contribution to the Civil Engineering and Architecture". In this article the technological innovations, discoveries and contributions made by India that paved the path for the progress and prosperity of the entire human civilization in the centuries to follow. The unique and grand style of architecture, town planning and building construction that started to develop in ancient India contributed many wonderful architectural marvels to the world. This article gives insight into this aspect.

The other article is again important to the Engineering Students "Benefits of Using AutoCAD Civil 3D". AutoCAD is a computer program that allows the candidates to draw models and render designs. Newer versions of the program also allow the user to render models in a three-dimensional plane allowing for a more depth representation of the design. Keeping in view the importance of the AutoCAD training, ICE (I) has kept it as a compulsory component for the candidates of both Civil and Architecture disciplines.

The last article is "Air Pollution –which is a Major Concern". This has been defined as the presence of materials in the air which are harmful to the living beings when they cross their threshold concentration levels. The article deals with the Sources of air pollution, effect of air pollution and particularly the disastrous effects that need to be curbed. In order to accomplish this task Government, Scientists, and environmentalists are using variety of methods aimed at reducing pollution. The article makes an interesting reading.

The Winter Examinations of ICE (I) will start from 3rd December, 2012 and will be held throughout the Country. I am sure the candidates prepared well for the examination and must have attempted the papers with confidence and shall be able to secure good marks. I take this opportunity to wish you success in the examination. I am sure the pass outs shall be able to have a rise in their life by securing promotions or placement wherever they are placed.

ICE (I) is a member of the Engineering Council of India, FICCI & ASOCHAM at the National level and Asian Civil Engineering Coordinating Council (ACECC) at the International level. Our endeavor has always been to attend the various programs organized by these organizations and gain from the input through these programmes. Some of the details of the various programmes are indicated in the "Snippets" and the photo gallery which is a normal feature of this News Letter.

Wishing you all success in life.

You have all my good wishes & Seasons Greeting.

Er. S.L. Swamy
Chairman

*Work is not a curse, it is the prerogative of
intelligence, the only means to manhood and
the measure of civilization*



From the Editor's Pen

ICE (I) is marching ahead to achieve its goal and mission. We are moving and if we look around, we will find that everything is moving around us in this planet and the earth planet itself is also moving. There is repetitiveness of the things everywhere. Everyday appears after seven days, so also are the months which are moving from January to December to make a year. Seconds, minutes and hours make the day. Similarly day and nights are repetitive. Moon and Sun are also moving as per schedule. Everything appears similar in movements except the speed. Events take place as ordained which make the day or that period good or bad. Any individual getting the job/promotion, or life partner, entry of a new member in the family etc. are all joyous moments which make the day. But any loss, illness, accidents, tragedy death etc mar the day. Days are similar but their colour changes from happiness to sorrow or vice-versa as per the happenings.

These things are not in our hands and whatever happens it happens as is destined. Can we accept joys and sorrows alike? Probably not, as we are human beings and are deeply affected by happenings around us. Surely a saint or a beast accepts both these things alike and they are not affected by the happenings around them loaded with happiness or sorrows and they accept everything as it comes as per the will of God. It is good to nurture and practice that type of feeling. But it requires strength to bear the unbearable. Let us at least strive in this direction to get inner strength to face the unpredictable, unseen and unimaginable events which give birth to joys & sorrows.

Dear Candidates your result is out and surely those who have secured good marks are happy as compared to others. Similarly those who have registered for Winter Session are happy to rekindle the light of education for a better career and future. These are happy occasions and to keep them happy you have to work hard so that there is recurrence of joyous moments in your life.

My best wishes to you all, once again.

Prithipal Singh
Secretary General

Real success is finding your lifework in the work that you love.

India's Contribution to the Civil Engineering and Architecture

Since thousands of years, the magical and sacred land of India has been the site for a multitude of significant historical and philosophical developments along with several facets of scientific and technological activities. India's contribution to the world in the field of science and technology ranges from the discovery of zero and decimal point system in Mathematics, Ayurveda and Surgery to significant contributions in the fields of Shipbuilding and Navigation as well as Civil Engineering. In this article, we shall focus on the technological innovations, discoveries and contributions made by India that paved the path for the progress and prosperity of the entire human civilization in the centuries to follow.

Civil Engineering and Architecture

Geological evidence in the form of prominent pre-historic sites such as Lothal (Gujarat), Harappa and Mohenjodero (currently located in Pakistan) has suggested that the concepts of town planning, hydraulic engineering, air cooling architecture, planned and interlinked underground drainage systems and the technique of using burnt bricks to build building structures existed in India more than 5000 years ago. Urban planned townships like the Indus Valley civilization has started to flourish in India at a time when most of Europe and the world were still relatively primitive in terms of town planning and building structures. The grassroot knowledge of building structure and technical developments in

civil engineering led the way to the creation of many magnificent structures in the form of palaces, temples and forts.

Shining examples of India's famous architectural wonders, which are well known around the world, are:

- The Khajuraho temples in Madhya Pradesh, built between 950-1050
- The Mahabalipuram Temples situated in Tamil Nadu, near Chennai consist of temples carved out of the rock and are excellent examples of Pallava art, the ruling dynasty at that time. They mostly consist of cave temples, chariots or rathas and structural temples and were built around the 7th century BC. The important and famous among these structures are the five huge chariots named after the five Pandavas- Yudhisthira, Bhima, Arjuna, Nakula and Sahadeva.
- The Mahabodhi temple at Bodh Gaya built by Emperor Ashoka around 250 BC. Bodh Gaya is the place where Lord Buddha is believed to have attained enlightenment and there is a Vajrasana (diamond throne) in the temple at the exact spot where Lord Buddha gained Universal knowledge or Brahmagyana.
- The Brihadisvara Shiva Temple in Thanjavur, Tamil Nadu built by the great

Chola ruler King Rajaraja Chola I in 10th century CE (common ere). This temple ranks as one of the grandest temples in India with breathtaking architecture and exquisite carvings found throughout the temple structure. It is the tallest temple structure in the world with a height of 70 m (approx. 230 feet) and the Shivalinga inside the temple is the largest in the world and is also considered to be the grandest. The temple Shikhar is very large and weighs 81.25 tonnes and is fine example of the advanced engineering knowledge possessed by the Indian craftsmen at that time. This heavy Shikhar is carved of two huge stones and is believed to have been carried by elephants walking and estimated distance of 11 km on an inclined sand plane to reach to the height of 70 m, the top of the temple.

- The Konark Sun Temple in Orissa built in black granite rock around the 13th century period by King Narasimhadeva of the Ganga dynasty.
- Such innovative ideas and pioneering architectural style had far reaching influence and led to the spread of Indian style of architecture and engineering to other regions like Baluchistan, Afghanistan, Sri Lanka, Indonesia, Malaysia, Vietnam, Laos, Cambodia, Thailand, Burma, China, Korea and Japan. Some of the famous examples of the architectural marvels built by Indian kings outside India or influenced by the Indian style of architecture include the Angkor Vat in Cambodia, the Buddhist

temples of East Asia and the Buddhas of Bamiyan in Afghanistan.

AUTOCAD CIVIL 3D SOFTWARE

1. CAD and Design standards are an important component of a project, but setting up, maintaining, and enforcing them can be time consuming. AutoCAD Civil 3D 2009 ships with an extensive library of country-specific CAD styles to control virtually every aspect of drawing display. And if these don't fit your needs, you can customize your own styles and standards to meet the specific needs of your organization. The CAD, design styles, and standards functionality in Civil 3D can save you time and minimize costly rework. In AutoCAD: Styles functionality is not included so it is the responsibility of individual users to ensure they are following company CAD standards. This often leads to inconsistency of deliverables and the creation of additional layers that do not comply with company standards.

Both the AutoCAD based and stand-alone Striker Systems products provide an enhanced user interface that will be immediately recognizable to individuals familiar with AutoCAD. They will readily adapt to the Striker environment thereby minimizing the learning curve. And for organizations that use AutoCAD as their engineering solution, it is not necessary for employees to learn multiple operating environments as they would with separate CAD and CAM solutions.

Projects created with AutoCAD Civil 3D use a dynamic engineering model that links design and production drafting. As a result, a change to one part of the design propagates throughout the entire project, greatly reducing drafting errors as well as the time it takes to implement design changes and evaluate multiple what-if scenarios.

2. Increase value to client by delivering more design alternatives in less time. The AutoCAD Civil 3D dynamic engineering model enables you to explore conceptual proposals and complete final designs much faster.
3. Take full advantage of existing AutoCAD skills to get up to speed quickly. Because AutoCAD Civil 3D is built on AutoCAD software, experienced AutoCAD users can work in a familiar environment with tools and processes they already know, while taking advantage of highly tuned engineering, surveying, and industry-specific drafting tools native to Civil 3D.
4. Clearly communicate design intent and complete final proposals with realistic 3D rendering. AutoCAD Civil 3D inherits all of the rendering capabilities of AutoCAD® software, which helps you quickly communicate your design proposal. For example, corridor elements can be preceded with specific materials so that they automatically

render properly.

5. Be sure that production drafting is always in synchronized with your design. AutoCAD Civil 3D dynamically links drafting elements, such as alignment or parcel labels and tables, with the engineering model so that a change to any part of the model produces updated annotation automatically. These intelligent labels and tables also keep track of the drawing scale and view orientation.

The Advantage of AutoCAD

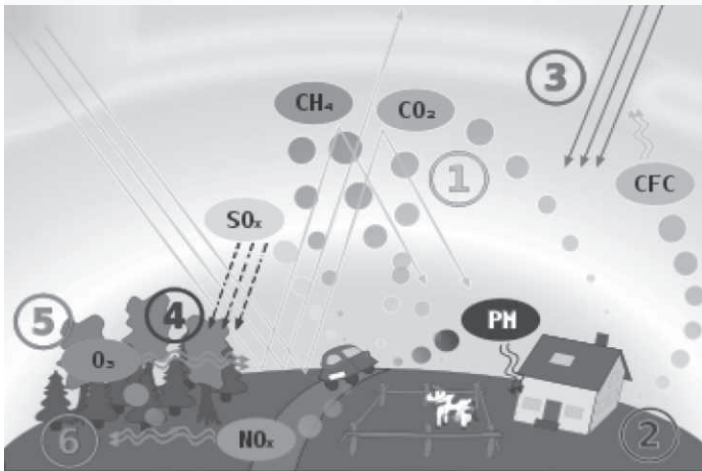
As many of you know, more and more employers now require their applicants to be able to work with a couple of specific features such as Microsoft Office, Adobe Photoshop, and other programs. One such program that may be required from you is AutoCAD. AutoCAD is a computer program that allows you to draw models and render designs. Newer versions of the program also allow the user to render models in a three-dimensional plane, allowing for a more in-depth representation of the design. Widely used by company's EXPERT command of this program may be required for certain positions. If you are uneducated and inexperienced in using AutoCAD, you might want to attend an AutoCAD training to get you up to speed in using this software.

AutoCAD may seem easy to learn as all it has for commands are different lines and shapes. However, if you are to learn the use of the program extensively through AutoCAD training, then you will be able to utilize the program to its maximum potential. You will be able to design and model houses, as well as detail the piping job for buildings and homes. You will even be able to create and edit your own .DWG (FORMAT) files. With AutoCAD training, you will know how to use each tool to perfect your designs and what tools are best used to create certain shapes.

As touched on above, newer versions of the AutoCAD program allows one to render three-dimensional models. Attending AutoCAD training will allow you to create three-dimensional rendering your models through the use of the program. This can be used in designing homes or buildings. Aside from three-dimensional rendering, AutoCAD training will allow you to learn from the very basics of the program up to the more intricate aspects of it. As the years progressed, so did AutoCAD. The latest release of the software has introduced surface modeling, surface analysis, and object transparency in order to produce more detailed designs.

AIR POLLUTION – A MAJOR CONCERN

The air pollution is also known as the atmospheric pollution. The W.H.O defined it as the presence of materials in the air which are harmful to the living beings when they cross their threshold concentration levels. Air pollution includes all contaminants found in the atmosphere. These dangerous substances can be either in the form of gases or particles. Air pollution can be found both outdoors and indoors. Pollutants can be trapped inside buildings, causing indoor pollution that lasts for a long time. There are multiple causes of the air pollution.



The sources of air pollution are both natural and human-based. Humans contribute substantially more to the air pollution problem. There are many different chemical substances that contribute to air pollution. These chemicals come from a variety of sources. In the refineries, paper mills, ceramics, fertilizers, clay and in the glass manufacturing industries the important pollutants involved are the fluorides, vapors, sulphur dioxide and hydrogen sulphide. The important pollutants involved in crop spraying to control pest and weeds are the lead, arsenic, hydrocarbons and organophosphates. The burning of fuel in the domestic and power plants the important pollutants involved are the sulphur and nitrogen oxides. The important pollutants involved

are the lead and zinc fumes along with the radioactive fallout in the metallurgical plants and the refineries, steel plants and bomb explosions. The crushing, grinding and screening for ore preparation and transportation by car, trucks and railways, the important pollutants involved are the uranium, iodine, argon, CO, NO, lead and smoke. In waste recovery involving the scrap metals and rendering plants the important pollutants involved are the smoke, soot, vapors and metal fumes.

The natural causes of air pollution are the pollutants which occur naturally like the pollen dispersal, spores, marsh, volcanic eruptions, forest fires, wind erosion, evaporation of organic compounds, and natural radioactivity. Usually, natural air pollution does not occur in abundance in particular locations. The pollution is spread around throughout the world, and as a result, poses little threat to the health of people and ecosystem.

Though some pollution comes from these natural sources, most pollution is the result of human activity. The biggest causes are the operation of fossil fuel – burning power plants and automobiles that combust fuel.

The sources of air pollution are multiple. They can be mobile, stationary or industrial. In the stationary combustion sources like the burning of fuels is involved. The mobile combustion sources involve the automobiles, locomotives and aircrafts. The industrial sources involve the crushing, mixing and grinding.

As it is located in the atmosphere, air pollution is able to travel easily. As a result, air pollution is a global problem and has been the the subject of global cooperation and conflict. Some areas now suffer more than others from air pollution. Cities with large numbers of automobiles or those that use great quantities of coal often suffer most severely from problems of air pollution.

The effects of air pollution are diverse and numerous. Every day, the average person inhales about 20,000 liters of air. Every time we breathe, we risk inhaling dangerous chemicals that have found their way into



the air. Air pollution can have serious consequences for the health of human beings, and also severely affects natural ecosystem. Air pollution is responsible for major health effects. Every year, the health of countless people is ruined or endangered by air pollution.

Many different chemicals in the air affect the human body in negative ways. How people will get sick depends on what chemicals they are exposed to, in what concentrations, and for how long. Older people are highly vulnerable to diseases induced by air pollution. Those with heart or lung disorders are under additional risk. Children and infants are also at serious risk. Because people are exposed to so many potentially dangerous pollutants, it is often hard to know exactly which pollutants are responsible for causing sickness. Also, because a mixture of different pollutants can intensify sickness, it is often difficult to isolate those pollutants that are at fault. Many diseases could be caused by air pollution without their becoming apparent for a long time. Diseases such as bronchitis, lung cancer, and heart disease may all eventually appear in people exposed to air pollution.

Air pollutants such as ozone, nitrogen oxides, and sulfur dioxide also have harmful effects on natural ecosystem. They can kill plants and trees by destroying their leaves, and can kill animals, especially fish in highly polluted rivers.

Air pollution has many disastrous effects that need to be curbed. In order to accomplish this, governments, scientists and environmentalists are using or testing a variety of methods aimed at reducing pollution. There are two main types of pollution control, input control and output control.

Input control involves preventing a problem before it occurs, or at least limiting the effects the process will produce. The major input control methods are restrict population growth, use less energy, improve energy efficiency, reduce waste, and move to non-polluting renewable forms of energy sources. Also, automobile-produced pollution can be decreased with highly beneficial results.

Output control, the opposite method, seeks to fix the problems caused by air pollution. This usually means cleaning up an area that has been damaged by pollution. Input controls are usually more effective than output controls. Output controls are also more expensive making them less desirable.

Current air pollution control efforts are not all highly effective. In wealthier countries, industries are often able to shift to methods that decrease air pollution. In developed countries air pollution control laws have been successful in stopping air pollution levels from rising. However, in developing countries and even in countries where pollution is strictly regulated, much more needs to be done.

Contributed by
Ms. Sonali Saxena,
HOD (Civil) ICE (I)

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Orissa Engineering College, Nabajyoti Vihar, Nijigarh Kurki, P.O.-Harirajpur, Jatni, Bhubaneswar-752050, Orissa	✓ Uttar Pradesh Bundelkhand Institute of Engineering & Technology, Kanpur Road, Jhansi - 284128, Uttar Pradesh
Suddhananda Engineering & Research Centre, At-Nachhipur, P.O. : Bhatapatana, Bhubaneswar, Dist : Khurda, Orissa -752115	Radha Govind Engineering College, Anuyogipuram Near Medical College Garh Road, Meerut - 250004, Uttar Pradesh
Raja Kishore Chandra Academy of Technology (Polytechnic), At/Po : Nilgiri, Dist : Balasore, Balasore-756040, Orissa	Gandhi Polytechnic, Muzaffarnagar, Uttar Pradesh
✓ Punjab Lovely Institute of Technology (Architecture), Jalandhar-Ludhiana, G.T.Road, Near Chehru Railway Bridge, Phagwara, Kapurthala-144402, Punjab	Hewett Polytechnic, Lucknow, Mahanagar, Lucknow, Uttar Pradesh
Desh Bhagat Engineering College, Amloh Road, Mandi Gobingarh, Punjab	Lucknow Polytechnic Lucknow, Abhyantrik Upnivesh, Krishna Nagar Kanpur Road, Lucknow, Uttar Pradesh
Guru Nanak Dev Engineering College, Gill Road, Ludhiana, Punjab	Sevdie Institute of Management & Technology, (S.I.M.T), Chinchat Deva Road, Lucknow, Uttar Pradesh
✓ Rajasthan Sri Balaji College of Engineering & Technology, Benad Road (Dadi Ka Phatak), Jaipur - 302013, Rajasthan	North India Institute of Technology 7th km Bundki Road, Najibabad Dist. Bijnor, Bijnor-246763, Uttar Pradesh
College of Engineering and Technology, Bikaner, Kani Industrial Area, Pugal Road, Bikaner-334005, Rajasthan	Devprayag Institute of Technical Studies, Devprayag Technical Campus, Phaphamau, Allahabad, Uttar Pradesh
Aayojan School of Architecture ISI-4, RIICO Institutional Block Sitapura, Goner Road Jaipur-302022, Rajasthan	Jaswant Singh Bhadauria Institute of Technology Kosi Khurd Bharatpur Road Mathura- 281005, Uttar Pradesh
Aryabhata College of Engineering and Research Centre Ajmer- 305001, Rajasthan	Sunderdeep College of Architecture NH-24, Sunder Deep Nagar Delhi-Hapur Road Dasna Ghaziabad-201001, Uttar Pradesh
Saraf Institute of Engineering & Technology Tibbi Road- Extension, Hanumangarh Town, Rajasthan-335513	Goel Institute of Technology & Management Lucknow -Faizabad Road, Near Indira Canal, Lucknow-227105, Uttar Pradesh
Siddhi Vinayak Engineering & Management College E-I, B-1, M.1.A., Institution Area, Alwar-301001, Rajasthan	M G Institute of Management & Technology 8th Km. Mile Stone from Amausi Airport, Lucknow-Kanpur Highway, Banthara, Lucknow-227101, Uttar Pradesh

✓ West Bengal North Calcutta Polytechnic, 15, G.M. Lane, Kolkata-700002, West Bengal
Camellia School of Engineering & Technology, Nadibhag, P.O.-Kajipara, Barasat, Kolkata-700124, West Bengal
JIS College of Engineering, Block "A" Phase-III, Kalyani, Nadia, West Bengal-741235
Rajmati Prichand Bothra Memorial Jiaganj College of Engineering & Technology (RPBM) At - Hatibhjan, P.O.: Jiagan, Dist.: Murshidabad-742123, West Bengal
Narula Institute of Technology 81, Nilgunj Road, Agarpara, Kolkata-700109 West Bengal
Sanaka Educational Trust's Group of Institutions B-150, Columbia Street, Bidhan Nagar, P.O. Malandighi, P.S. Kanksa, Burdwan, Durgapur-713212
The New Horizons Institute of Technology Phase-II, City Centre, South G.T. Road Durgapur-713208, District.- Burdwan, West Bengal.
Ideal Institute of Engineering Kalyani Shilpanchal, P.O. & P.S. Kalyani, Dist.- Nadia West Bengal-741235
IMPS College of Engineering & Technology Malda,
SSN Polytechnic College Tirur -676105 Kerala

ABSTRACT		
S.No.	State	No. of MoUs
1.	Andhra Pradesh	9
2.	Assam	2
3.	Bihar	2
4.	Chhattisgarh	2
5.	Delhi	1
6.	Gujarat	4
7.	Haryana	6
8.	Himachal Pradesh	3
9.	Jammu and Kashmir	5
10.	Jharkhand	4
11.	Karnataka	2
12.	Kerala	3
13.	Madhya Pradesh	8
14.	Maharashtra	6
15.	Orissa	9
16.	Punjab	3
17.	Rajasthan	7
18.	Uttarakhand	2
19.	Uttar Pradesh	12
20.	West Bengal	10
	Total	100

Add to Your Vocabulary

- **Pointing**

The compacting of the mortar in the outermost portion of a joint and the troweling of its exposed surface to secure water tightness or desired architectural effect.

- **Quoins**

Stone or other building materials set in the corners of masonry sections of a house for appearance.

- **Reinforced Masonry**

Masonry units, reinforcing steel, grout and /or mortar combined to act together to strengthen the masonry structure.

- **Rubble**

Field stone or rough stones of irregular shapes and sizes; generally not laid in courses.

- **Sill**

The lowest member of the frame of a structure, resting on the foundation and supporting the floor joists or the uprights of the wall. The member forming the lower side of an opening, as a door sill, window sill, etc.

- **Stretcher Course**

A row of masonry in a wall with the long side of the units exposed to the exterior.

- **Topography**

Usually refers to site characteristics such as contour of the land, trees, or other natural features.

- **Troweling**

The finishing operation which produces a smooth, hard surface on concrete slab.

- **Uplift**

A negative reaction or a force tending to lift a beam, truss, pile, or any other bridge element upwards

- **Vertical Curve**

A sag or crest in the profile of a roadway

- **Winder**

Stair tread that is wider at one end than the other, allowing the stairs to change direction.

- **Workability**

The ease with which a given set of materials can be mixed into concrete and subsequently handled, transported, placed and finished with a minimum loss of homogeneity.

Professional Vistas

- **Recognition by Govt. of India, Ministry of Human Resource Development, Department of Higher Education** vide Gazette Notification No. F.24/1/2007-TS.III Dated 06.11.2007.
- **Recognition by Association of Indian Universities (AIU)** vide letter No. EV/III (366)/2008/71 Dated 11.04.2008.
- **Recognition by All India Council for Technical Education (AICTE)** vide letter No. Eqvi./AB/Gen.Corr./2008-09 Dated 16.09.2008.
- **Recognition by Union Public Service Commission (UPSC)** vide letter No. F.2/1/2007-EIB Dated 30.06.2009.
- **Recognition for GATE by National Coordinating Board-Gate, Deptt. of Education, MHRD, GoI.**
- **Recognition by Government of Goa** vide letter No.12/11/87-PER/Vol.II Dated 06.03.2008.
- **Recognition by Directorate of Technical Education, Haryana** vide letter No.351-53/Dev. Dated 13.06.2008.
- **Recognition by Government of Kerala** vide letter No.3946/GI/08/H. Edn Dated 08.07.2008
- **Recognition by RITES Limited** vide letter No. RITES/RI/RCED/Misc/2008 Dated 14.07.2008.
- **Recognition by Delhi Development Authority (DDA)** vide letter No.F.7(98)2008/PBI/2399 Dated. 20.08.2008.
- **Recognition by Government of Meghalaya** vide letter No. FDN.156/2001/249-A Dated 21.08.2008.
- **Recognition by IRCON INTERNATIONAL LIMITED** vide letter No. IRCON/HRM/31/28/728 Dated 01.09.2008.
- **Recognition by Directorate General Border Roads** vide letter No. 13616/Gen/Rect /DGBR/97/E1A Dated 21.10.2008.
- **Recognition by Government of National Capital Territory of Delhi** vide letter No.1(1)/2008-DD/SB/1520/5609 Dated 29.10.2008.
- **Recognition by Shapoorji Pallonji & Co. Ltd.** vide letter No. Nil Dated 30.10.2008.
- **Recognition by Government of Andhra Pradesh** vide letter No. 10232/EC.2/2008-02 Dated 05.11.2008.
- **Recognition by Administration of Daman & Diu (UT)** vide letter No. 10.2 (PART-IV) EST-GP/2008-09/797 Dated 11.11.2008.
- **Recognition by CPWD- Central Public Works Department, Government of India** vide letter No.A-12021/1/2006-EC VI/74-75 Dated 19.01.2009.
- **Recognition by Visvesvaraya Technological University, Karnataka** vide letter No. VTU/Aca/OS-GC/2009-10/2118 Dated 04.06.2009
- **Recognition by Government of Nagaland** vide letter No. IT/10-1/04 Dated 30.07.2009
- **Recognition by Government of Uttarakhand, PWD, Pauri Garhwal** vide letter No.1011/20(15) E.A.-Parv./09-10 Dated 06.09.2009.
- **Recognition by Government of Chhattisgarh, Department of Technical Education, Manpower Planning, Science & Technology, Mantralaya, D.K.S Bhavan, Raipur** vide letter No.F-14/07/42 Dated 11.05.2010.
- **Recognition by Government of Punjab, Technical Education and Industrial Training, Punjab Chandigarh.** vide letter No.1362 Dated 24.06.2010.
- **Rural Electrification Corporation Limited (A Government of India Enterprises)** vide letter No. REC/ED(HR)/Trg./2010-11/ Dated 10.08.2010
- **Cement Corporation of India Ltd. (A Government of India Enterprises)** vide letter No. PD/HRD/6/6/2010/6119 Dated 12.08.2010
- **Recognition by Delhi Metro Rail Corporation Ltd.** vide letter No DMRC/O&M/HR/2010 Dated 20.08.2010
- **Recognition by Oil and Natural Gas Corporation Ltd. Rectt. Section, Tel Bhawan, Dehradun** vide letter No. 7(2)/PR-Rectt./2010 Dated 26.08.2010

- Recognition by Anna University Chennai, Chennai-600025 vide letter No.2664/AU/DD1-DAC/2011/F21 Dated 07.01.2011

- Recognition by Government of West Bengal, Directorate of Technical Education & Training, Kolkata vide letter No.728 TET Dated 28.03.2011

- Recognition by Government of Karnataka Vide Govt. order No. ED 21 UTV 2012 Dated 09.03.2012

[TO BE PUBLISHED IN PART-1 SECTION -I OF GAZETTE OF INDIA]

Government of India
Ministry of Human Resource Development
Department of Higher Education

Shastri Bhawan, New Delhi,
the 6th November, 2007

NOTIFICATION

No.F.24 – 1 / 2007 – TS.III. On the recommendations of the High Level Committee for recognition of Educational Qualifications in its meeting held on 22nd May 2007, the Government of India has decided to give recognition to the Section A & B of Associate Membership course, equivalent to Degree and Part – I & II of Technician Engineers (T) equivalent to Diploma in Civil Engineering and Architecture Engineering Courses conducted by the Institution of Civil Engineers (India), Ludhiana (Punjab) as per syllabus approved by All India Council for Technical Education (AICTE) w.e.f. the academic session 2007 – 2008 for the purpose of employment to the posts and services under Central Government in the appropriate field. It is subject to the conditions that the total number of candidates who can be admitted for the said examination would not exceed the authorized strength of the concerned Institutions with which Institution of Civil Engineers (India), Ludhiana (Punjab) has entered into Memorandum of Understanding (MOUs). A review in respect of recognition of educational qualifications shall be made by Ministry of Human Resource Development after one year through All India Council for Technical Education (AICTE).


(RAVI MATHUR)
Joint Secretary to the Government of India
Tel: 2338 1097

To

The Manager,
Government of India Press,
Faridabad.

..contd./

(भारत के राजपत्र के भाग-1 खण्ड-1 में प्रकाशन के लिए)

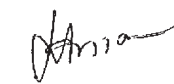
भारत सरकार
मानव संसाधन विकास मंत्रालय
उच्चतर शिक्षा विभाग

शास्त्री भवन, नई दिल्ली

6 नवम्बर, 2007

अधिसूचना

सं.एफ. 24-1/2007-टी.एस.111 शैक्षणिक योग्यताओं को मान्यता प्रदान करने के लिए उच्च स्तरीय समिति की दिनांक 22 मई, 2007 की बैठक में की गई सिफारिशों के आधार पर भारत सरकार ने उपर्युक्त क्षेत्र में केन्द्रीय सरकार की सेवाओं तथा पदों पर रोजगार देने के उद्देश्य से शैक्षणिक सत्र, 2007-08 से सिविल इंजीनियरी संस्थान (भारत), लुधियाना (पंजाब) के अखिल भारतीय तकनीकी शिक्षा परिषद द्वारा अनुमोदित पाठ्यचर्या अनुसार संचालित सिविल इंजीनियरी और वास्तुकला इंजीनियरी पाठ्यक्रमों में एसोशिएट सदस्यता पाठ्यक्रम की धारा (क) और (ख) को डिग्री के समकक्ष और तकनीकी इंजीनियरों (त) के भाग 1 और 11 को डिप्लोमा के समकक्ष मान्यता प्रदान करने का निर्णय लिया है। यह मान्यता इस शर्त के अधीन होगा कि अभ्यर्थियों की कुल संख्या उक्त परीक्षा के लिए सम्बन्धित संस्थान की अधिकृत दाखिला क्षमता से अधिक नहीं हो जिसके साथ सिविल इंजीनियरी संस्थान (भारत), लुधियाना (पंजाब) ने संगम ज्ञापन किया है। मानव संसाधन विकास मंत्रालय एक वर्ष के बाद अखिल भारतीय तकनीकी शिक्षा परिषद के माध्यम से शैक्षणिक योग्यताओं की मान्यता की पुनरीक्षा करेगा।


(रवि माथुर)

संयुक्त सचिव, भारत सरकार

दूरभाष: 23381097

सेवा में,

प्रबंधक

भारत सरकार प्रैस

फरीदाबाद।

Please visit ICE (I) Notification at MHRD Website direct link
http://mhrd.gov.in/sites/upload_files/mhrd/files/RecoEduQualfs.pdf

The Institution of Civil Engineers (India)

Date Sheet for Winter -2012 Examination

Date & Day Forenoon Session (10.00 AM to 1.00 PM)			Afternoon Session (2.00 PM to 5.00 PM)		
03-Dec-12 Monday	TC 1.1	Basic Civil Engineering	TC 2.7	Construction Technology	
	TA 1.1	Basic Architectural Engineering	TA 2.1	History of Architecture	
	TC 2.1	Surveying	AC 1.1	Advanced Engineering Mathematics	
	TA 2.7	Surveying and Levelling	AA 1.1	Advanced Engineering Mathematics	
	BC 2.1	Applied Hydraulics and Fluid Machines	BCO 3.14	Pollution and Control Engineering	
	BA 2.1	Professional Practice and Arch. Engg.	BAO 3.2	Rehabilitation of Structures	
	BCO 3.1	Advanced Design of Reinforced Concrete Structures			
04-Dec-12 Tuesday	TC 1.2	Technical Writing	TC 2.8	Estimation, Costing and Specifications	
	TA 1.2	Technical Writing	TA 2.8	Architectural Design and Graphics	
	TC 2.2	Fluid Mechanics and Machinery	AC 1.2	Advanced Strength of Materials	
	TA 2.2	Free Hand Drawing and Painting	AA 1.2	Advanced Strength of Materials	
	BC 2.2	Machine Foundations	BCO 3.21	Ground Water Hydrology	
	BA 2.2	Finishes, Materials and Specifications	BAO 3.3	Advanced Architectural Design	
	BCO 3.2	Advanced Design of Steel Structures			
05-Dec-12 Wednesday	TC 1.3	Engineering Physics and Applied Mechanics	TC 2.9	Civil Engineering Designs	
	TA 1.3	Engineering Physics and Applied Mechanics	TA 2.9	Building Material and Science	
	TC 2.3	Soil Mechanics	AC 1.3	Computer Programming and Numerical Methods	
	TA 2.3	Building Construction	AA 1.3	Computer Programming and Numerical Methods	
	BC 2.3	Advanced Reinforced Concrete Design	BCO 3.24	Water Resource Management	
	BA 2.3	Building Services	BAO 3.4	Interior Design	
	BCO 3.3	Prestressed Concrete Structures			
06-Dec-12 Thursday	TC 1.4	Engineering Mathematics	TC 2.4	Mechanics of Solids	
	TA 1.4	Engineering Mathematics	TA 2.4	Structural Mechanics	
	TC 2.11	Fundamentals of Civil Engineering	AC 1.4	Foundation Engineering	
			AA 1.4	Foundation Engineering	

Date & Day Forenoon Session (10.00 AM to 1.00 PM)			Afternoon Session (2.00 PM to 5.00 PM)		
	TA 2.12	Fundamentals of Arch. Engineering	BCO 3.12	Bridge Engineering	
	BC 2.4	Optimization in Structural Design	BAO 3.5	Landscape Architecture	
	BA 2.4	Advanced Structural Design			
07-Dec-12 Friday	TC 1.5	Engineering Drawing	TC 2.5	Basic Structural Design	
	TA 1.5	Engineering Drawing	TA 2.5	Theory of Structures	
	TC 2.10	Engineering Graphics & Design	AC 1.5	Reinforced Concrete Structures and Advanced Concrete Technology	
	TA 2.11	Engineering Graphics & Design	AA 1.5	Reinforced Concrete Structures and Advanced Concrete Technology	
	BC 2.5	Environmental Engineering	BCO 3.9	Traffic Engineering	
	BA 2.5	Environmental Engineering	BAO 3.6	Disaster Management for Buildings	
08-Dec-12 Saturday	TC 1.6	Engineering Chemistry	AC 1.6	Design of Steel Structures	
	TA 1.6	Engineering Chemistry	AA 1.6	Design of Steel Structures	
	TC 2.6	Environmental Engineering	BAO 3.7	Advanced Comp. Application for Arch.	
	TA 2.10	Environmental Engineering	BAO 3.8	Climatology and Architecture	
	BCO 3.7	Building Science	TA 2.6	Estimation and Costing	
	BAO 3.1	Elements of Town Planning and Architecture	BCO 3.10	Highways and Railways Engineering	

Notes: -

- ICE (I) has the right to change the schedule of paper/s on account of unavoidable circumstances.
- Candidates must ensure that they receive their admit card at least 15 days before the commencement of the examination.
- Candidates must carry the Membership Card & Admit Card to seek entry to the Examination Hall.
- The Examination Hall will be opened 15 minutes before the time specified for the commencement of the Examination.
- Candidates can be allowed entry to the Exam Hall within 30 minutes of the start of the Exam.
- Candidate is not allowed to leave the Examination Hall before the expiry of 60 minutes of the start of the Exam.
- Candidates using unfair means shall be dealt with as per rules of ICE(I) in this behalf.
- Candidates are required to bring their own drawing board/instrument box for Engineering Graphics & Design paper.
- Only Non-Programmable Calculators and **ORIGINAL** Standard, Design-Data Books, Log Tables are permitted in the Examination Hall.
- Candidate should not carry any material printed or otherwise related to the concerned Examination in the Examination Hall.
- Candidate is not allowed to carry mobile phones in the Examination Hall.

TC : T. Engg. (Civil)	AC : AMICE(Civil) Section A	BC : AMICE(Civil) Section B	BCO :AMICE(Civil) Section B (Optional)
TA : T. Engg. (Arch.)	AA : AMICE(Arch.) Section A	BA : AMICE(Arch.) Section B	BAO :AMICE(Arch) Section B (Optional)