

A Compendium of
RECOGNITION
LETTERS FOR
AMIE
SECTIONS A & B EXAMINATIONS

Editors

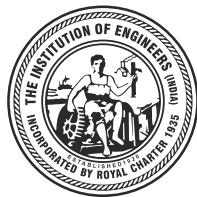
Dr K Gopalakrishnan

Chairman, Research & Development Committee

and

Dr A K Gupta

Director, Education, Examinations and Accreditation



The Institution of Engineers (India)

8, Gokhale Road, Kolkata 700020

FOREWORD



The Institution of Engineers (India) [IEI], established in 1920 and incorporated and is the only professional body in the country bestowed with the Royal Charter in 1935, has grown to become the largest multi-disciplinary professional body of Engineers in the world with a membership of over 7.5 lakhs covering conventional and new disciplines of engineering. It also has the distinction of producing the maximum number of engineers in the core engineering disciplines, thus augmenting the nation-building efforts. The authority vested with the Institution by the Royal Charter is *"To promote the general advancement of engineering and engineering science and their application in India and to facilitate the exchange of information amongst the Members of and persons attached to the Institution and otherwise"*. The Institution conducts its business through 100 Centres within the country and 5 Overseas Chapters. It has promoted a number of important National Bodies such as the Indian Standards Institution, now known as Bureau of Indian Standards (BIS), and has established focused organizations such as the Engineering Staff College of India; the Rural Development Forum; the Water Management Forum; the National Design and Research Forum; the Sustainable Development Forum; and the Safety and Quality Forum to develop solutions, services, and technologies in the selected domains for the advancement of the nation.

It has established bilateral relationships with several International professional bodies in different countries. The IEI is Founder Member of the World Federation of Engineering Organizations (WFEO), Commonwealth Engineers' Council (CEC), World Mining Congress (WMC), World Energy Council (WEC), and other International Professional Organizations. The IEI has been recognized as a Scientific and Industrial Research Organization (SIRO) by the Department of Scientific and Industrial Research, Government of India.

Eminent Members of The Institution have been invited by International Organizations and the Government of India to provide the Engineers' Perspective to address global and national societal challenges. The IEI represents the engineering fraternity in India on various National Committees including the Central Advisory Board of Education (CABE), National Board of Accreditation (NBA), Committees established by various State Governments, Academic Institutions including IITs, NITs, Universities, and other Organizations. It is one of the statutory councils, under the Institutes of National Importance, as per AICTE.

The Royal Charter, which is protected by the Constitution of India, has an entity which empowered, under Clause 2(f), *"To encourage, regulate and elevate the technical and general knowledge of persons engaged in or about to engage in engineering or in any employment manual or otherwise in connection therewith and with a view thereto to provide for the holding of classes and to test by examination or otherwise the competence of such persons and to institute and establish professorships, studentships, scholarships, rewards and other benefactions and to grant certificates of competency whether under any Act of the Government of India or Local Governments regulating the conduct and qualifications of engineers or otherwise howsoever"*.

In consonance with the authority vested with the Institution under the Charter, the Institution has been conducting Sections A & B Examinations (popularly known as AMIE Examination) in different engineering disciplines since 1928. As per the gazette notification and other circulars issued by MHRD, UPSC and UGC, passing of these examinations was recognized at par with degree in related field of engineering awarded by the statutory universities in the country for employment and pursuing higher education.

It is a matter of record that the Institution has been conducting AMIE Examinations in different engineering disciplines 19 years prior to independence and 22 years prior to becoming a Republic. It is the flagship programme through which IEI delivers significant value to the engineering profession. The uniqueness of this programme is that AMIEs are immediately employable in the Indian industry as the contextualized curriculum integrates concepts, application and practice of engineering. It blends theory with practice as students are already employed while they are pursuing the programme. This is a time-tested programme with more than 90,000 students availing this opportunity every year to excel in the engineering profession in India and abroad. They have successfully executed major projects and handled administrative responsibilities in the State Governments and the Central Government, apart from various public and private sector organizations. The curriculum is being periodically revised to ensure quality and relevance to the changing paradigm, including laboratory training and project work under the guidance of a professional engineer.

IEI is serving the interest of a large number of poor and downtrodden aspiring working professionals enrolled with the Institution across the country to upgrade their professional skills and career enrichment. Many such professionals cannot afford current high tuition fees, other education related expenditures and inability to opt for full-time four year course in engineering but are confident to make it from this non-formal channel with their determination, merit and hard-work.

AMIE Section A & B program has been assessed by UK Government Department of Education, Work & Skills for National Recognition Information Centre (NARIC) and it was found that each subject of AMIE was assessed comparable to 300 hours of academic study at University including 120 hours of taught lectures. Total number of credit was assessed to be exceeding the British Standard set to 360 credits for B Eng (Honours) Degree in Engineering based on 20 credits for each subject. Due to the above assessment AMIE Sec A & B was approved by NARIC, UK on behalf of Department of Education, Work and Skills, UK as comparable to British Bachelor Honours Degree in Engineering. There are similar courses in UK, Australia, USA in non-formal mode or work based B Engg/M.Sc. Degree in Engineering and Accreditation Board of Engineering and Technology (ABET)- USA, Washington Accord completely recognizes such programme. Find inclusion of the recent copy of NARIC acceptance of AMIE in this Compendium.

Our country is moving forward to become a world class hub for engineering excellence. It is, therefore, high time to promote such a highly rewarding non-formal channel of professional education and training in engineering being imparted by this Institution especially for working professionals from not so well endowed section of the society. It may be noted that the need has been felt for bringing in industry-institute interaction and internship for the students of engineering colleges receiving degrees from technical and other universities, however which is organic to the AMIE programme right from its inception.

The Institution of Engineers (India) is a Member of the International Professional Engineers' Agreement (IPEA), an International Body earlier known as the Engineers' Mobility Forum (EMF). At present, there are many work-based engineering degree programmes in developed countries such as the USA, UK, Australia, which are fully recognised under Washington Accord and IPEA.

IEI is publishing a Compendium of Letters of Recognition received from the Government and various other establishments in India and abroad to impress upon the all concerned that non-formal mode of engineering education as offered by The IEI through the AMIE Programme has been successful in delivering eminent engineering professionals who have contributed significantly to the success of engineering projects in India and abroad.



Kolkata
10 Jun 2015

Dr L V Muralikrishna Reddy
President

PREFACE

The Institution of Engineers (India), IEI, was established in 1920 based on the Report of the Industrial Commission, Government of India, 1916-18. The Institution received the Royal Charter in 1935 from the King Emperor George V as the first body which had its origin and functions in India. It bestows statutory authority and responsibilities for promotion of science, practice and business of engineering in all disciplines. The Institution has spread its wings at 105 important capital cities and towns of industrial and academic importance across the country apart from its overseas chapters at Abu Dhabi, Doha, Kuwait, Bahrain and Dubai. The IEI has full membership with 31 Engineering/Professional bodies across the globe on behalf of India and having bilateral agreements with them.

Role of IEI as Professional Body of Engineers

The Institution is responsible for professional growth and development of their members as well as of the profession. It is, therefore, necessary to attract good quality school leavers to opt engineering as their prospective career; to help engineering institutions identify major educational and training requirements for the profession, including development of proper attitudes for teamwork, honesty and integrity; to assist graduate and postgraduate students in gaining experience in real life engineering situations and become a working professional; and to organise continuing education programmes for working professionals to learn emerging technologies to ensure their continuous improvement through life long learning opportunities and in developing their professional and managerial skills continuously. Hence, IEI plays a pivotal role in defining excellence and setting up benchmarks for quality assessment of the educational process. A good quality assurance system can help identify weaknesses, develop strategies to remove them, and assist in creation of an academic environment which encourages originality, creativity and innovative ability. The IEI was the only Accreditation Body in the country before formation of AICTE in 1987 and NBA in 1994. IEI continues its journey successfully as a qualifying body and learned society for the last more than 95 years.

Relevance of Graduateship Examination being Conducted by IEI

In India, there is a large-scale expansion of degree-level education in engineering and technology, particularly through privately funded-managed institutions, the growing obsolescence of teaching, training equipment, and methodologies. Therefore, setting quality standards for the educational process has become utmost important. Standardization should not mean discouragement to innovative educational methodologies or curbing of individual institutional initiatives, but setting up required benchmark by all institutions in time-bound manner to attain desired quality standards.

In spite of influx of approximately 4000 engineering institutions in the country churning out around 14 lakh engineers annually, out of whom only 15-18% is employable, the enrolment of students with the Institution to acquire higher degree in relevant field of engineering is consistently growing.

Major contributing factors of this achievement are:

- It is the first professional body of engineers to start non-formal engineering education programme in the country.
- To meet with the objective of Royal Charter, the Institution started conducting Sections A & B examinations, in non-formal mode, in core engineering disciplines as far back as in 1928, offering as Grad IE, after passing Sections A & B Examinations, which is duly approved by the Ministry of Human Resource Development, Government of India, and Gazette notification thereof, as equivalent to bachelor's degree in appropriate branch of engineering from recognised Indian universities.
- Most of the members registered for the examination are either already employed or get employment (temporary or otherwise) during the process of passing the examination and pursuing their study as a passion with his/her sustained enthusiasm and self motivation.
- Access to attend guidance classes through a network of 105 State/Local Centres.
- Study at his/her own pace and time available.

- Access of study materials of Section A/Section B Examinations.
- Facility to complete compulsory project work, during Section B examination, under the supervision of a corporate member having minimum 8 years of professional experience in academic/industry.
- Facility for laboratory experiments in an engineering college duly recognised by the Institution, under the supervision of the senior faculty members.
- Fixed time limit to complete Section A/Section B examination.
- Access for admission to postgraduate course being conducted by IITs, Central Universities, State Universities, and other institutions of higher learning in India and Abroad.
- Career enrichment in a systematic and progressive manner along with professional experience at real life working environment of various industries.

OUTCOMES

Graduates of IEI distinguished themselves in the following:

- Ability to acquire and apply knowledge of science and engineering fundamentals.
- Acquire in-depth technical competence in a specific engineering discipline.
- Ability to undertake problem identification, formulation and solution.
- Ability to utilize systems approach to design and evaluate operational performance.
- Understanding principles of sustainable design and development.
- Understanding professional and social responsibilities.
- Ability to communicate with fellow engineers as well as with the community at large.
- Ability to function effectively, both independently as well as in a group, to be a team leader/manager.

With this backdrop, an effort has been made to publish a Compendium, containing the scores of letters received from various establishments regarding recognition of passing AMIE Sections A & B examinations of IEI as equivalent to degree in engineering/technology of recognised universities in India and abroad for employment as well as for higher studies.

Kolkata
10 Jun 2015

Dr K Gopalakrishnan
Chairman, Research and Development Committee
and
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Source:

*Reference Book on Recognition (of The Institution, its Examinations, Membership etc.)
Compiled by Mr. B.C. Thakurta, AMIE, Technical Officer, IEI*