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Q: Minimum cut-off limit for joining engineering courses is 45%. Do you think there is a need to raise the minimum cut-off limit?

Ans. There is an urgent need to raise the minimum cut-off limit for Engineering courses, which at present is 45% in PCM, which is inadequately low & results in poor quality students joining the programs.

Due to poor knowledgebase, the graduates are unable to render appropriate services to the Industry and are either under-employed or un-employed. On the other hand, the industry is unable to get quality manpower, and is forced to engage under-qualified individuals and delivering erroneous or bad quality products.

A well structured knowledge base in the area being studied, is necessary. In other words surface approaches can never lead to deep understanding of the subject. Fundamentals of Physics, Chemistry & Mathematics are base of an engineer. Engineers/Technologists have a major role in economic development. They are expected to prepare and implement projects on which major investment are made and also operate the industry and infrastructure. For this purpose, it is essential to develop young technical professionals with required proficiency and skills to meet the needs of industry and infrastructure development.

Q. What is the need of National Proficiency Evaluation Test ?

Ans. It is necessary to have a Proficiency Evaluation Test of technical personnel, to evaluate the efficacy of their post-qualification performance. This shall help students assess their readiness to the industry.

With the large number of technical personnel graduating every year, it is necessary to test their suitability for their role in industry and infrastructure. Construction Industry Development Council (CIDC), a member association of ECI, in September'2009, launched National proficiency evaluation test (NPET), which is an independent assessment of proficiencies of young engineering graduates, diploma holders, supervisors as well as construction workers. NPET also aims to evaluate Bachelor/ Master's in Management and Architecture. Under NPET, proficiency grading based on Academic achievements and work experience (for experienced professionals), is being undertaken. Based on this evaluation, a nationwide merit list of candidates is developed. It is made available to the prospective employer organization to select and employ bright and promising candidates.

NITI Aayog has also endorsed the need to widen the scope of such a National Proficiency Evaluation Test to cover various engineering disciplines and the large number of technical personnel by conducting the test online. This test will assist candidates in determining their appropriate career path and assist employer organisations in identifying suitable & appropriate candidates.

Q. What is the need to introduce a mandatory provision of engagement of apprentices & the Professional Engineers?

Ans. To improve the standards of technical education and to provide competent technical manpower to the nation, All India Council of Technical Education (AICTE), under the auspices of Ministry of HRD has made the "Internship" component mandatory for graduating engineers & management students from session 2017-18, to obtain their degrees.

This step is taken keeping in mind the skills gap present between the industry requirement and the academia which is a major cause of increasing un-employability of Engineering and Management students in the nation. A conscious effort to tackle the current situation & converting this into demographic dividend and effective contribution in National Economy.

To facilitate internships to the students, AICTE has been identifying organizations/ institutes both in India & abroad and has signed an MoU with Engineering Council of India (ECI) to implement this initiative.

To get exposure to the real-time operations, these Interns needs to work at the offices and/or project sites. Without the whole hearted support by the industry (small / large) this task would not be achievable therefore, all the industry owners should welcome this initiative of AICTE **and help in the professional and career development of these young personnel, who are future of our Nation. It is therefore need of the hour to introduce a mandatory provision of engagement of Apprentices.**

ECI is engaged in standardizing various major engineering disciplines, professional practices in India and setting competency standards of practicing professionals. ECI is preparing a National Register of Professional Engineers who are adequately trained and meet the quality standards. Such registration recognizes their skill sets and enables them to enhance their careers, besides giving the employers the comfort of having certified personnel who are continuously developing. **There is a need to introduce a mandatory clause that contractor shall, at all stages of work, deploy engineers including Diploma holders, Degree holders and higher levels who are qualified and registered as Professional Engineers.**

NITI Aayog has endorsed that such proactive actions as may help in developing and preparing engineers/technologists for their role in industry