Chapter 13

“Theory of IRE with \((\alpha, \beta, \gamma)\) Norm”: An Engineering Model for Higher Education Management (HEM) & Policy Administration in India

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ABSTRACT

This chapter introduces a new theory called by “Theory of IRE with \((\alpha, \beta, \gamma)\) Norm” which provides an almost complete solution for Higher Education Management (HEM) & Policy Administration in any vast country like India, China, France, Germany, Australia, Brazil, Indonesia, Pakistan, Malaysia, USA, UK, Canada, Gulf countries and others in the world. The “Theory of IRE with \((\alpha, \beta, \gamma)\) Norm” is an engineering model for solving HEM problems, basically seven major problems which are about: (i) How To Continuously Monitor The Real Time Progress of Research Work of the Ph.D. Scholars in the Universities/Institutions in any country by a Common Rule of the ‘Ministry of HRD’ (ii) A New Improved Method for Recruitment of Teachers in Universities (iii) A New Method for Promotion Policy of Teachers In Universities (iv) How to select the ‘Most Suitable Candidate’ for the various prestigious awards/honors in a country (v) How to restrict the publications of bad quality research papers in fake/bad journals? (vi) How to select the true experts for every visiting team of NAAC of UGC? and (vii) How to select the ‘Most Suitable Candidates’ to fill-up the reserved quota. It is claimed that if this new theory be implemented by the ‘Ministry of HRD (MHRD)’ in all its universities/institutions, then a huge amount of quality-assurance can be achieved in pursuance of Excellence in Higher Education Management & Policy Administration in that Country.

INTRODUCTION

This chapter introduces a new theory called by “Theory of IRE with \((\alpha, \beta, \gamma)\) Norm” which is an engineering model for Higher Education Management (HEM) & Policy Administration in vast countries like...
India, China, France, Germany, Australia, Brazil, Indonesia, Pakistan, Malaysia, USA, UK, Canada, Gulf countries and others in the world. India and China are the two giant countries having a large number of in-built talents in every subject area. Our model is called an engineering model because of the fact that the model works dynamically on engineering & technology based elements: internet search engines, several databases of heterogeneous big data, intelligent software, computer hardware and distributed systems, mechatronics hardware, Information Technology, Electronics & Communication Engineering, Mechatronics, Fuzzy Logic (Zadeh, 1965), Soft Computing, Big Data (Biswas, 2015a, 2015b), and of course on Mathematics & Statistics of both R-Statistics and NR-Statistics (Biswas, 2016), up to the extent of Big Data Statistics (Biswas, 2016). Retaining the idea, core logic and philosophy behind its innovation, this model can be easily improved (extended) in future by the growth of various technologies, mainly of the subject’s computer engineering, information technology and electronics engineering. In the giant countries like India, China and other vast countries, every year a very large number of scholars take admissions for higher education, a very large number of students become graduates and post-graduates, a large number of students enroll for Ph.D. study, a large number of teachers retire in universities and institutions, a large number of fresh teachers are recruited in universities and institutions, a large number of teachers are promoted in universities and institutions, a large number of talents are awarded various prestigious awards/honors, etc. and many other academic/research oriented activities which are controlled by Higher Education Management (HEM) & Policy Administration. Consequently, the topic of Higher Education Management (HEM) & Policy Administration in such giant countries is itself a big subject and a major subject for their governments which cater to the overall academic/economic growth of the countries. For a hypothetical example, in India (or China) there could be more than 10,000 eligible candidates applying against only ten vacant post of Lecturers in Mathematics advertised in a newspaper. There are many other similar HEM functionalities and activities on every day and are of concern to the Government authorities on how to conclude daily work with correct, fair, transparent and successful solutions. This is quite naturally not always the situation in small but academically advanced countries like Japan, Finland, Ireland, Poland, Bulgaria, Singapore, etc. For the sake of smooth presentation of our new theory entitled “Theory of IRE with \((\alpha,\beta,\gamma)\) Norm”, we have identified the country ‘India’ and we have developed this theory in the context of ‘India’. But the theory can be well extended and applicable to other vast countries like China, Brazil, Indonesia, Pakistan, Malaysia, USA, UK, Canada, Gulf countries and in fact to any country in this world be it a small or big, without making any changes in the core philosophy/logic of the theory but incorporating slight customized adjustments in the equivalent nomenclatures of the respective country. One basic assumption in the Theory of IRE is that there is no rounding-off of any numerical results. Results of all numerical computations are to be made upto 3 decimal places only. Bracket expressions are to be computed with priority, in any complex mathematical or logical expression in this theory.

**THE MAJOR PROBLEMS OF MHRD IN INDIA IN HEM**

There exists a body of the MHRD which is known as University Grants Commission (UGC) in India, but may be with different nomenclatures in other countries. For instance, in Bangladesh, Pakistan, Sri Lanka, Nepal, the body name is UGC whose expanded phrase is also University Grants Commission, in UK and HK it is also UGC but it stands for the phrase University Grants Committee, etc. The main role of UGC is to look after the Higher Education Management (HEM) & Policy Administration in the
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