A Review of

Indian Education

and

The Institute of Chartered Accountants of India

with Recommendations

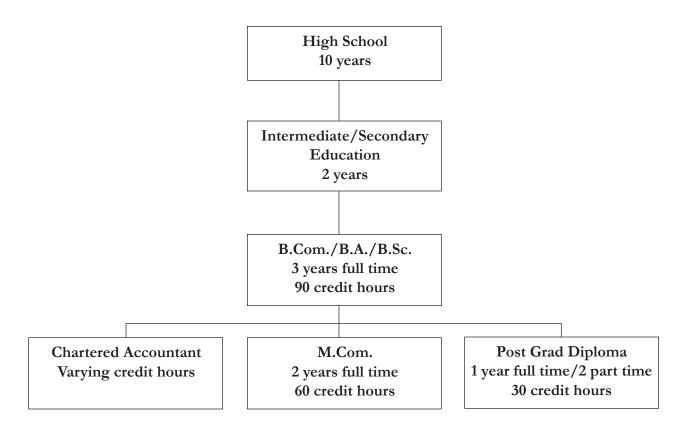
by Ravi Kallur, Ph.D., William Paver, Ph.D., and Robert Watkins, M.A.

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SECTION I:

Educational Ladder Leading to Certified Accountant Status in India



II. Overview of the Indian Educational System

The Indian educational system follows the British model, a legacy of British Colonial rule. Assessment is examcentered with success at each level necessary for continuance to higher levels. Universities are affiliating institutions with constituent colleges, centers and institutes comprising the integral components with the degree-granting authority resting with the university through recognition by the University Grants Commission, an arm of the Government.

As in the British model, secondary school students face exams at a critical point to determine eligibility for advancement. This comes at the end of the 10th year of primary/secondary schooling generally referred to as Standard X. Note that in Britain, the analogous situation is the General Certificate of Secondary Education (GCSE) examinations (referred to in the old days as GCE O Levels) at the end of Form V (11th year of primary/secondary education). Thus, the Indian version is a year behind that of the British in a chronological sense. This is an important factor when the issue of degree comparability arises and the British three-year degree is pointed out as equivalent to the US degree and the Indian three year degree is not. Two years after the Secondary School Certificate (SSC) exams following Standard X the student sits the final round of exams designed to select for university admission, these being referred to as the All India Senior Certificate Examinations at the end of Standard XII. Now the student is eligible to be considered for university admission in India, and has completed a total of 12 years of primary and secondary education.

Students may opt after Standard X and the SSC exams to enter a polytechnic program to study a technical field, such as engineering. The resulting diploma represents three years of full-time study in a technical field most comparable to a US 2-year college terminal technical applied associates degree. The total number of years of education after one of these programs is 13 years. Some schools, particularly two-year schools, though some senior institutions as well, may wish to award credit for this study.

Once in a degree program at a university in India, the student follows a major that matches the thrust of studies in the last two years of secondary school (referred to frequently as Intermediate). The three basic types of degrees (all called bachelor's degree as in the US or UK) are the Bachelor of Arts (BA), Bachelor of Science (BSc), and Bachelor of Commerce (BCom). All are three years in length and lead to the next level (master's) of study. Some degrees, such as the Bachelor of Technology or the Bachelor of Engineering, are four years in length. Even more confusing, some bachelor's degrees, such as the education degree (BEd) are SECOND bachelor's degrees wherein the entry requirement is a first bachelor's like the BA, BSc, or BCom. Master's degrees are two years in length (though the even higher Master of Philosophy/MPhil, is one year) and doctorates are a minimum of three years including coursework, research & thesis, and defense.

Given the nature of the general Indian degree (three years of intensive subject-specific study) with its lack of general education or elective coursework, US Admissions Officers historically do not accept the three-year degrees for admission into graduate programs. Three books on the Indian educational system, all authored or edited, and in the most recent case (see bibliography), co-authored with Dr. Ravi Kallur (also of University of Missouri-Kansas City), by Vice-Chancellor for International Programs Leo Sweeney (now retired) of the University of Missouri-Kansas City over the years have included placement recommendations that suggest only transfer credit and NOT graduate admission for these Indian degree-holders. The preferred credential for graduate admission is the master's degree (MA, MSc, or MCom) or a second bachelor's degree such as the BEd or LLB. Note that these degrees BUILD on the

prior degree required for entry. Two Indian three-year degrees are no more 'equivalent' to a U.S. bachelor's than are two Associates degrees in the USA.

In addition to the degrees, universities offer a wide range of diplomas. These are of two basic types: diplomas and post-graduate diplomas. The former require only high school completion and university entrance to take and are invariably one year in length. Students choose to take these diplomas to add a year of immersion in a different field from that of the planned degree concentration, not unlike a U.S. college student choosing to pursue a double major. Thus, these diplomas parallel degree courses and represent further, wider course work though not a higher level of achievement than the degree program. Conversely, the Post Graduate (PG) Diploma of a university requires completion of a first degree (BA, BSc, or BCom) to enter and therefore builds on the prior studies, even if the subject is altogether different from the prior degree. Nevertheless, the idea of chronological progression is what causes many International Credentials Analysts to consider the first degree PLUS the PG Diploma to be comparable to a US bachelor's. The basic reason is that now the student has a four-year university experience with a capstone achievement, the PG Diploma.

In terms of credit hours, analysts traditionally convert the Indian exam subjects into U.S. semester credit hours following a simple arithmetical model. This model is predicated on the average full load that an American college student carries per semester (15 hours) and per year (30 hours) each year resulting in graduation (one hopes!) in four years. The concept centers on the philosophy that full time status in India should be comparable (and not more!) to that same status in the USA. Thus, an Indian full load of five subjects, equally weighted, per year should be equal to some 30 US semester hours or 6 semester hours each. This is a logical supposition given that the courses last all year long (though some schools, such as University of Madras and the Indian Institutes of Technology use semesters rather than an annual exam scheme) and would be easily comparable to two semesters of the subject in the USA or twice 3 hours. Two caveats to bear in mind with this methodology is that one may find as few as three subjects in a year (though completely full time) or as many as seven (rarely, one may even find 10) per year thus affecting the per exam semester credit value. So, six subjects results in only 5 semester hours each or four subjects will earn as many as 8 hours each to maintain the overall comparability to 30. This last example (four) brings one to the second caveat: a precise count of 30 is not absolutely necessary just as the American student may choose to take 18 hours in a semester and earn 36 on the year. A built in evaluation prerogative of 30-36 as an overall goal for the year of transfer credit supplies the necessary flexibility the analyst needs to deal with unusual exam paper amounts in a year.

For purposes of illustration we will now take the Bachelor of Commerce (BCom) degree of three years duration and find that it will yield on the average 90 semester hours of credit. Now this number can vary if there are differing numbers of subject exams each year. Also, if one subject is worth more than others in terms of maximum marks obtainable in the grading scheme (almost always multiples of 100) then that subject would be accorded a higher number of semester credits. For example, if there are four subjects with three worth 100 but the fourth (an optional accounting subject chosen by the student) has a value of 200, then the first three get 6 each while the last is assigned 12 hours or double the amount of the others. The Master of Commerce (MCom) on top of that earns an additional 60 more for a total of 150 hours. This assumes, naturally, that all courses represented in the two degrees are acceptable to the analyst, often a U.S. institution that has clear policies with regard to transferable and non-transferable courses (usually remedial, technical, or vocational courses are not acceptable). MCom courses may differ in structure and have many more courses such that the single subject value drops to the more traditional 3 hours.

Later in this report the content of the degree curriculum as it pertains to accounting will be analyzed, but a word here might be in order regarding the general nature of the syllabus outline for degree programs. The Indian system presupposes that general education (pre-major studies) occur at the Intermediate level. The Indians liken it to the two years of Sixth Form in Britain leading to the GCE Advanced Level Examinations that conclude pre-university studies. The problem is that in Britain that represents 13 years of primary/secondary education while in India it is 12 as in the USA. Thus, US analysts see this as Grades 11 and 12 (albeit very much like AP course work) and offer no credit for this study. The Indian first degree syllabus, therefore, looks much more like what one expects to see in the second, third, and fourth years of a U.S. degree program. General, distributed education is not present. At most, the Indian college student will have some ancillary subjects (these could be likened to a minor in the USA) or perhaps one or

two key courses in an allied field that are vital to progression in the chosen field (economics for most business fields). Also, compulsory subjects such as English and a native language (usually, though certainly not always, Hindi) are found in the first, and, occasionally, the second years. Consequently, the final number of hours for the chosen subject will be much more than is the case in the US.

The master's courses become even more specialized so that the Indian student who sticks with the same field from first year of bachelor's through master's final year will have a large number of subject specific hours in an evaluation that converts these subjects to semester credit hours. Contrast this with the situation in the United States where a student is NOT allowed to do more than 30 or 36 in any one subject field. US graduate degrees, on the other hand, do allow, and indeed even require, the vast majority of courses to be in the major field. One can suggest, therefore, that the Indian student who stays with accounting for BOTH degrees will have far more accounting hours than his American counterpart.

Accreditation is a relatively new concept in Indian higher education. Until recently, recognition by the University Grants Commission (UGC) of the Union Government as a degree-granting institution of higher education was the only real method for higher education colleges to be recognized. Within this system, affiliating universities, those that accept smaller colleges under their aegis where the actual instruction takes place, extended university recognition to college affiliates. These autonomous colleges, while functioning as part of a University, have been given special status as a kind of experimental college having autonomy with respect to the determination of the curriculum, course content, teaching methods and evaluation. The degree, however, is awarded by the university with the explicit statement on the diploma indicating the name of the college that provided the instruction.

Many autonomous colleges offer Post Graduate Diplomas and Post Graduate programs and many have changed their calendars to semesters and marks from percentage to letter grades.

Existing and well-established colleges are being considered by the Act of Parliament to be "Deemed Universities." These Deemed Universities are identified as "Institutions of National Importance" and set their own curriculum, award their own degrees and have the ability to start new programs. Generally, schools within the Deemed University offer bachelor's, master's, and doctoral degrees.

Accreditation is a mechanism for maintaining and raising the quality of institutions for the maintenance and promotion of standards of education. The government of India and the University Grants Commission established the National Assessment and Accreditation Council (NAAC). The role of NAAC is similar to the regional academic accreditation associations in the U.S. NAAC has a responsibility to evaluate and grade overall quality of the institution, whether it is a college, autonomous college or department, Deemed University or a department with a university.

The All India Council for Technical Education (AICTE) was established by an Act of Parliament. Its primary role is to periodically evaluate technical institutions or programs on the basis of guidelines, norms and standards specified and correspondingly make recommendations. Interestingly AICTE's evaluation covers broad areas including engineering, technology, architecture, town planning, management, pharmacy and applied arts and crafts. The powers of AICTE extend to granting approval for starting new technical curricula, new courses or programs. AICTE is playing a major role in setting guidelines and performing accrediting evaluations of the Post Graduate Diploma programs.

Two other bodies recently created to oversee accreditation in specified technical fields are the Department of Electronics Accreditation of Computer Courses (DOEAC) for accrediting and monitoring computer training courses within the non-formal education sector and the National Council for Teacher Education (NCTE) which was created by an Act of Parliament to establish norms in teacher education.

Sample Evaluation of BCom, MCom

In this section, we offer a sample evaluation of the Bachelor of Commerce (Accounting), Master of Commerce (Accounting). Beginning this year (2003), only BCom or MCom graduates may enter the ICAI Professional Education Course and Final Course leading to associate membership in the Institute.

Bachelor of Commerce (Three-year):

Using the degree from University of Madras (see Sample Documents) and recalling the evaluation procedures discussed in Section I on university degree programs, the three years of BCom would yield the following results:

BCom I:

English=6 hours Comp and Lit (many US colleges do not transfer this)

Sanskrit=6 hours

Advanced Accounts=6 hours (Principles I and II)

Commercial Law=6 hours Business Law

Principles of Economics=6 hours (macro & micro)

Total for Year=30 semester hours; 6 accounting (P I and II)

BCom II:

Bus Correspondence/Off Mgt=6 hours

Indian Economy=6 hours

Banking Theory, Law/Practice=6 hours

Business Org & Mgt=6 hours

Business Math & Statistics=6 hours (Pre-Calc, Calc-based Bus Math)

Total for Year=30 semester hours; no accounting in this year

BCom III:

Cost Accounting=6 hours Corporate Accounting=6 hours Income Tax=6 hours Auditing=6 hours Management Accounting=6 hours

Total For Year=30 hours; 30 accounting hours

BCom Total=90 College hours; 36 accounting (including Principles I/II)

Master of Commerce:

MCom I (also known as MCom Previous):

Marketing Practice=6 hours (note student was absent in May 1994 but passed subsequent take in October 1994)

Management Accounting and Financial Control=6 hours

Legal Environment of Business=6 hours

Entrepreneurial Development=6 hours

Advanced Business Statistics=6 hours

Total for Year=30 hours; 6 accounting hours

MCom II (also known as MCom Final): Human Relations=6 hours Advanced Accounting=6 hours Applied Costing=6 hours International Trade and Finance=6 hours Advanced Banking=6 hours Total for Year=30 hours; 12 accounting hours

MCom Total=60 hours; 18 accounting hours BCom + MCom total=150 hours; 54 accounting hours

III. Summary of Indian Accounting Education

Accounting Education in Years and Credit Hours Completed by Indian Students

College Education	Admission Requirement	No. of Years	Total Credit Hours	Semester Hours in Accounting	Years of Practical Training	Sem. Hours of Practical Training	Credential Awarded		
B.Com M.Com	Grade 12 B.Com	Three Two	90 60	36 18	n/a n/a	n/a n/a	Bachelor Master		
The Institute of Chartered Accountants of India (ICAI)									
Professional Course II (PE II)	PE I or B.Com or Bachelor's	n/a	36	21	n/a	n/a			
Final	PE II	n/a	48	36	n/a	n/a			

There are other related courses like economics, financial management, information systems, corporate law, mercantile law, etc., that are not included in the accounting semester hours listed above.

Undergraduate, Graduate Degrees in Accounting:

The **B.Com** (Bachelor of Commerce) is considered a "first degree". It is three years in length. Subject patterns in B.Com include (1) one optional and eighteen compulsory commerce subjects; (2) one compulsory (a language) and nine specified commerce subjects plus one optional subject; (3) English, one other language, and eleven specified commerce subjects; and (4) English, one other language, one optional, and thirteen compulsory commerce subjects.

Typically university regulations call for attendance in at least two-thirds of the lectures each academic year to be eligible to sit for the annual examination. Well regarded schools schedule about 180 school days per academic year with each day to be about 5 hours in duration. In such instances the student would have 600-900 class hours per academic year as compared with the 450 class hours often required of U.S. full-time undergraduate students.

While an increasing number of institutions have adopted the semester system, still the typical undergraduate student in India faces annual examinations as the major, if not the only, evaluation of their academic performance. Grading practices in Indian higher education have continued to become less and less uniform in recent years, both in universities on the semester system and in those still on the annual examination system.

One aspect of assessing the selectivity of admission to the first degree program pursued by an Indian applicant would be to determine the minimum requirements set by the university attended. Sometimes that can also be misleading. In using the admission data for Indian universities and college's one needs to keep in mind the national policy to reserve percentages of places for applicants that belong to various caste groups.

M.Com (Master of Commerce): This degree is called a "post graduate degree" in India due to the fact that the minimum admission requirement to enter this degree is a bachelor's degree. It is typically two years in duration and three to four subjects are studied every year. Typically subjects include accounting, financial accounting, auditing, taxation, management accounting, business law, and managerial economics. Duration of the class is similar to that

of the bachelor's degree with a minimum of 180 school days and 4 to 5 hours five days a week contact hours. The examination is either conducted annually or on semester pattern and the minimum passing marks for a student to complete each year is 50% (B Average).

Admission requirements are very stringent and generally require an entrance examination and an interview with the selection committee. Only universities, Deemed Universities and autonomous colleges can offer an M.Com degree.

Examination patterns, sample credentials, syllabus and the grading pattern including actual number of accounting hours completed will be discussed later.

a. Post Graduate Diplomas:

Post graduate diplomas are a new phenomena in the Indian higher education system, due to an overwhelming demand from individuals who are seeking professional experience to enhance their employment opportunities. These PG programs are generally offered by individual colleges, universities and government approved institutions, as well as other educational institutions that are approved by AICTE. Most of the PG diplomas are in business administration with one or two subjects being taught in the area of accounting.

Many U.S. institutions consider a student with a three-year bachelor's plus a PG approved by AICTE or recognized by a university to have the equivalent of a U.S. bachelor's degree.

b. Professional Accounting Society:

In India, professional qualifying bodies also represent an area with strong British roots. As in the United Kingdom, such professional qualifying bodies often have several levels of membership and times higher honorary levels based on years of full membership and year and/or additional education.

Institute of Chartered Accountants of India (ICAI):

ICAI was established in 1949 by an act of Parliament to regulate the profession of chartered accountants. ICAI conducts a preprofessional foundation course and the professional course of chartered accountancy, coordinates the required practical training, and holds qualifying examinations. They award associate memberships to successful candidates in the final professional examinations and certificates of practice to those members intending to practice the profession. They also conduct post qualification diploma courses in management accountancy, corporate management and tax management. Their final examination is recognized by the Association of Indian Universities as the equivalent of an Indian master's degree for higher studies. Associate membership is recognized for admission to Ph.D. study.

With the introduction of the new scheme of education and training from October 1, 2001, the last Foundation Examination will be held in May 2003.

Subjects of study in the Foundation Course:

- 1. Fundamentals of Accounting
- 2. Mercantile Law
- 3. Mathematics & Statistics
- 4. Economics

Admission Elegibility:

The minimum qualification for admission to the Foundation Course is a pass in Senior Secondary Examination (10+2) or its equivalent in any discipline. Foundation Courses can be taken simultaneously with any undergraduate or graduate studies.

Foundation Examination:

Foundation Examinations are held in May and November (last examination in this scheme will be May 2003). A candidate is declared successful in the examination if he/she secures an aggregate of 50% of the total marks of all the papers subject to a minimum of 40% marks in each paper.

Professional Education (Course I):

With the introduction of new scheme of education and training, Professional Education Course I (PE I) replaces the Foundation Examination.

The minimum qualification for admission to PE I is successful completion of Senior Secondary Examination (10+2 examination) conducted by an examining body constituted by law in India or an examination recognized by the central government or the Council as equivalent thereto.

Examination Papers:

Fundamentals of Accounting Paper 1 Paper 2 Mathematics and Statistics **Economics**

Paper 3

Paper 4 Business Communication / Organization and Management

All papers are for a maximum of 100 marks.

Professional Education- (Course II)

Admission Eligibility:

- 1. Individuals who have passed the Professional Education Examination I
- 2. Individuals who have passed the Chartered Accountancy (CA) Foundation Examination under CA Regulations, 1988
- 3. Individuals who have passed the bachelor's degree with the following:
 - A. Commerce graduates with accountancy, auditing and mercantile law or commercial law as full papers and with minimum 50% marks of the total marks.
 - B. Non commerce graduates with mathematics as one of the subjects and with minimum of 60% of the total marks.
 - C. Non-commerce graduates with subjects other than mathematics and with minimum 55% of the total
 - D. Candidates who have passed the Final Examination conducted by the Institute of Cost and Works Accountants of India (ICWAI) or the Institute of Company Secretaries of India (ICSI).

Professional Education Examination II is divided into Group I and Group II with a total of 6 papers:

Paper I Accounting Paper II Auditing

Paper III Business and Corporate Law

Cost Accounting and Financial Management Paper IV

Paper V Income Tax and Central Sales Tax

Paper VI Information Technology

Final Course Admission Requirements:

After passing the Professional Education (Examination II), candidates are eligible for registration as articled clerks/Audit clerks for practical training and for admission to the Final Course of the Chartered Accountancy.

The Articled Clerk: Is a trainee attached to a practicing Chartered Accountant under a Deed of Articles for the duration of the training, namely three years.

The Audit Clerk: Is a person who has served as a salaried employee for a minimum period of one year under a Practicing Chartered Accountant or a firm of Chartered Accountants in practices. Such a person is provided opportunity of becoming a Chartered Accountant by registering as an Audit Clerk for practical training under the concerned Chartered Accountant or the firm wherein the Chartered Accountant is a partner. Training is prescribed for four years in such cases.

The CA course thus involves a unique blend of compulsory theoretical education and practical training which run concurrently for a period of three years. Theoretical knowledge is sought to be integrated and reinforced with practical training.

The subject for the final course in Group I and II (Total eight papers/subjects) are:

Paper I Advanced Accounting

Paper II Management Accounting and Financial Analysis

Paper III Advanced Auditing

Paper IV Corporate Laws and Secretarial Practice

Paper V Cost Management

Paper VI Management Information and Control Systems

Paper VII Direct Taxes
Paper VIII Indirect Taxes

The Institute of Charted Accountants of India also offers Continuing Professional Education called "Post Qualification Courses" in the following areas:

Management Accountancy Corporate Management Tax Management

These courses are open only to the Members of the Institute and are intended to enable them to give a visible evidence of specialization in specific areas of their interest.

Part I Examination in four subjects relevant to the course divided into two groups.

Part II Practical training of two years in an organization approved by the Continuing Professional Education Committee and submission of dissertation on a selected subject.

Current Examination subjects:

Management Accountancy course:

Group I Paper 1- Management Accounting and Decision Making

Paper 2- Financial Management

Group II Paper 3- Economic Environment and General Management

Paper 4- Systems Management

Corporate Management Course:

Group I Paper 1- Organizational Behavior and Planning

Paper 2- Management Control and Management Audit

Group II Paper 3- Production and Productivity Management

Paper 4- Marketing Management

Tax Management Course:

Group I Paper 1- Theory and Practice of Taxation

Paper 2- Direct Taxes (1)

Group II Paper 3- Direct Taxes (2)

Paper 4- Indirect Taxes