Earlier on, the Chairman, University Grants Commission (UGC), had addressed a
central, state and deemed universities and institutions of higher learning in the country,
drawing their attention to the pressing need for academic and administrative reforms. As
this initiative evoked a highly encouraging response, the UGC had set up a Committee on
Academic and Administrative Reforms, with Professor A. Gnanam as convenor, and
comprising several eminent educationists from a diverse range of disciplines. The
Committee has since submitted a comprehensive and path-breaking report. Based on this
document, an action plan has been developed — for the consideration of educational
authorities, and for the phase-wise introduction of substantive academic and
administrative reforms in the institutions of higher education in the country.

1. Semester System:
For long, educational institutions have had the format of academic session, spread over
10 to 12 months. This format suffers from several limitations, which is why most
institutions of higher education in western Europe and North America follow a semester-
based system. The semester-system goes far beyond being a ‘time-format’. It enlarges
curricular space, and encourages and supports accelerated learning opportunities for all
concerned. Further, it has the ability to accommodate diverse choices that dynamic and
motivated students may like to have.

In India, too, several professional and technical institutions have adopted semester
system. Reportedly, it is working satisfactorily. Given this, it is time that the semester
system is made mandatory for all the institutions of higher education in India, and all the
universities are asked to switch over to the semester system. The implementation of a
semester system calls for several interconnected and coordinated steps that will have to
be undertaken by the universities and colleges. These are as follows:

- Deliberation and resolution on the semester system in appropriate
  academic bodies of the institution at different levels to develop a time-
  line.
- Decision on the number of student-faculty contact hours during a
  semester in different programmes, that is, certificate, diploma,
  undergraduate and postgraduate. M. Phil. and Ph. D. students also to do
  course work (see Annexure I).
- Re-configuration and revision of curricula (while the quantum of
  instructional work of faculty members remains about the same, the
  number of papers or credits would be twice as many).
- Determining the amount of work to be completed (or credit points to be
  earned) by students in undergraduate, postgraduate, M. Phil. and Ph. D.
programmes.

\[ \Rightarrow \] Decision on the time-distribution on class room-work, field-work, laboratory-work, workshop practice and/or other curricular work. Distribution will vary from subject to subject.

\[ \Rightarrow \] The implementation of semester-system may be completed within two calendar years in all the central universities, and within three years in all the state universities.

2. Choice-Based Credit System:

Choice-based credit system (CBCS) has several unique features: Enhanced learning opportunities, ability to match students' scholastic needs and aspirations, inter-institution transferability of students (following the completion of a semester), part-completion of an academic programme in the institution of enrolment and part-completion in a specialised (and recognised) institution, improvement in educational quality and excellence, flexibility for working students to complete the programme over an extended period of time, standardisation and comparability of educational programmes across the country, etc.

The CBCS imminently fits into the emerging socioeconomic milieu, and could effectively respond to the educational and occupational aspirations of the upcoming generations. In view of this, institutions of higher education in India would do well to invest thought and resources into introducing CBCS. Aided by modern communication and information technology, CBCS has a high probability to be operationalised efficiently and effectively—elevating students, institutions and higher education system in the country to newer heights.

It might be added that a large number of universities and institutions in the country are already having their undergraduate and postgraduate 'papers' subdivided into units and sub-units. In switching on to CBCS, the task of such institutions would be relatively easy. In a generalised manner, the sequence of CBCS would be:

Paper $\Rightarrow$ Unit $\Rightarrow$ Sub-unit $\Rightarrow$ Credits

For implementing the CBCS, institutions of higher education need to take the following steps:

\[ \checkmark \] Review of curricular contents (study papers, term papers, 'assignment', workshop-assignment, experiments, etc.) of certificate, diploma, undergraduate, postgraduate, M. Phil. and Ph. D. programmes.

\[ \checkmark \] For the sake of clarity of faculty, students and examiners, all the curricular contents are specified and sub-divided into units and, if need be, into sub-units, which are subsequently assigned numerical values and termed 'credits'.

\[ \checkmark \] Faculty of the concerned 'department', deliberates and decides on (a) core-credits, and (b) elective or optional credits for different levels of academic programmes.

\[ \checkmark \] Departmental faculty evaluates and decides on the relative weightage of the core and elective credits.

\[ \checkmark \] Decision on the 'total' credits to be earned (or completed) by students...
undergoing certificate, diploma, undergraduate, postgraduate, M. Phil. or Ph. D. programmes.

- Generally, core-credits would be unique to the programme, and earning core-credits would be essential for the completion of the programme and eventual certification.

- On the other hand, elective-credits are likely to overlap with other programmes or disciplines of study (for example, languages, statistics, computer application, etc.).

- Students enrolled for a particular programme or course would be free to opt and earn elective-credits prescribed under the programme, or under other programmes within the department, faculty, university or even outside recognised university / institution of higher education.

3. Curriculum Development:

A hallmark of vibrant educational institutions and disciplines is their curricular content which evolves continuously. Curricular revision should be an ongoing academic activity involving all the faculty members. Not only does it endow academic programmes with quality but also adds to their contemporariness and relevance.

Available information indicates that universities and institutions of higher education in the country do undertake revision of the syllabi of the programmes offered by them, but priority and periodicity remain somewhat uncertain. The process of revision also varies with disciplines — professional and technical disciplines are comparatively more vigorous in this regard. Nonetheless, substantial thought and attention have to be devoted to curricular development in all disciplines and in all the academic programmes — whether undergraduate, postgraduate, M. Phil. or Ph. D.

In a general way, following steps need to be adopted on priority basis:

- All the academic programmes (certificate, diploma, undergraduate, postgraduate, M. Phil. or Ph. D.) should be subjected to updation or revision, to a limited extent every academic year (for professional and postgraduate courses), and substantially every three years for all the courses.

- Updation and revision of the curricula is to be carried out in terms of (a) current knowledge, (b) national and international developments, and (c) relevance of new ideas, concepts and knowledge to the concerned discipline.

- This important academic function requires ‘curricular transaction’ and the synergies of all faculty members in the Department, School or Centre, and is based on the principle, ‘Teach and update curriculum’.

- Towards this, faculty members are called upon to be discerning and given to notes-keeping on current knowledge, esp. relating to their teaching assignment.

- To achieve this, faculty members are to regularly draw upon books and journals — and internet search engines.
In this regard, UGC-promoted INFLIBNET, INFONET and E-journal would also make for a good resource.

Faculty members would also have the flexibility to develop, for one or more semesters, topical courses falling within their academic interests and in keeping with the thrust of the programme, along with the indication of credit values.

All curricular updates are to be reviewed and endorsed by Departmental, School or Committee and other university and college authorities.

4. Admission Procedure:

The process of admission of students to educational institutions is the first and most critical step that should ensure access, inclusion, equity and quality. With the fast-changing sociocultural milieu and growing demand for higher education, the importance of admission process can hardly be over-emphasised. It can no longer be left to 'well-meaning intentions' and ad hoc decisions. Admissions ought to have objective bases and transparent procedures.

As a part of academic reform, universities and institutions of higher education in the country need to pay very serious attention to the procedures for merit-based admission to their certificate, diploma, undergraduate, postgraduate, M. Phil. and Ph. D. programmes. In this direction, the following points may be taken into consideration:

* To ensure transparency and credibility in their admission procedure, universities and institutions of higher education need to make a liberal use of ‘notice-board’, print-media, electronic media, web-site, etc. to declare their admission procedures.

* Institutions and universities need to properly publicise their academic calendar, highlighting the number of seats (in all the courses including M. Phil. and Ph. D. programmes), required qualifications and important dates in the admission procedure for various courses.

* The candidates’ answer-sheets need to be assigned confidential codes, that is, they are encoded, before being passed on for evaluation / assessment.

* The candidates for undergraduate, postgraduate or doctoral programmes who have been assessed by recognised national or regional agencies (JET, NET, SET, etc.) may be granted exemption from the written examination.

* Depending upon the course requirements, candidates may also undergo group-discussion, interview or any other competency examination.

* The assessment as reflected by marks or grades in written examination, group-discussion, interview and / or any other competency examination, must be treated as strictly confidential, and be known to authorities only on ‘need-to-know’ basis, till results are finally compiled / announced.

* The marks or grades in written examination, group-discussion, interview and / or any other competency examination must be
communicated, promptly and directly, to tabulators or to the computer-centre, and the successive examiners / evaluators must not be privy to these marks or grades.

- Relating to Ph. D. programme, appropriate university bodies should decide as to which categories of faculty-members would be eligible to advise or guide doctoral students, and how many doctoral students could be assigned to different categories of faculty-members.

- University and college authorities, while finalising admissions, would take cognisance of 'reservation provisions' as announced by central and concerned state governments, and would take an affirmative action.

- Following admission, university and college authorities would initiate measures, depending upon the need-pattern of newly admitted SC, ST, OBC, and minority students, to organise remedial or bridge-courses in language, communication, subject-competency, etc.

- Following admission, university and college authorities would take proactive action to communicate to newly admitted SC, ST, OBC, minority students, and those from low-income families, regardless of the level of their course, the availability of tuition-wavier, free-ships, loans and scholarships available to these categories.

5. Examination Reforms

Higher education in India has thus far been largely examination-centered. Examination only at the end of academic session or year, more often than not, insulates students from the quest of knowledge, the excitement of discovery and joy of learning. Often the annual examination, along with marks, percentages and divisions, leads to insensitive cramming up of superficial information. It is surprising that, in several instances, university-certified degree-holders are subjected to fresh written examination, before they are accepted for jobs in public and private sectors.

Most universities and institutions of higher education in western Europe and North America base the assessment of their students wholly on 'internal evaluation', following the principle, 'those who teach should evaluate'. However, looking to the prevailing conditions in India, an adoption of this approach would be too radical or abrupt. Given these considerations, it may be more prudent that the assessment of student performance be carried out through a combination of internal and external evaluation.

(a) Continuous Internal Evaluation:

Aiming to assess values, skills and knowledge imbibed by students, internal assessment is to be done by the concerned faculty-member, Department, School or the Centre. It would comprise following steps:

- All the certificate, diploma, undergraduate, postgraduate, M. Phil. and Ph. D. courses offered by a university, college or institute are to have specified components for internal evaluation (e.g. essay, tutorials, term-paper, seminar, laboratory work, workshop practice, etc.).
Components for internal evaluation are to have a time-frame for completion (by students), and concurrent and continuous evaluation (by faculty-members).

The evaluation outcome may be expressed either by pre-determined marks or by grades.

The evaluation reports submitted by all the faculty-members are to be reviewed, from time to time, by the Department, School or Centre Committee, in order to ensure transparency, fair-play and accountability.

Following the review by the Department, School or Centre Committee, the outcome of internal evaluation is to be announced and displayed on the Notice Board and/or website as per the timeframe or academic calendar.

(b) End-of-semester evaluation:

This is to be carried out at the end of each semester, and will aim to assess skills and knowledge acquired by students through classroom, field-work, laboratory, work and workshop practice. The evaluation can be in the form of written examination, laboratory work or workshop assignment. Evaluation process should be verifiable and transparent.

Towards this end, the following steps may be adopted:

- All the students pursuing certificate, diploma, undergraduate, postgraduate, and research courses have to undergo external evaluation at the end of each semester as per syllabi or credit schedule (for Ph.D. evaluation, see Annexure 1).
- With regard to practicals and workshop assignment, the internal faculty may associate themselves with the external examiners in the examination process.
- In the case of written examination, whatever the format (objective-type, essay-type, etc.), test papers could be moderated by committees proficient in the subject.
- Answer-books or -sheets are to be 'encoded' (before being passed on to examiner/evaluator, and decoded (before tabulation).

(c) Integration of Continuous and End-of-semester evaluation:

The following points need to be considered for effecting the integration of continuous and end-of-semester evaluation:

- The integration procedure should be applicable to all the students pursuing certificate, diploma, undergraduate, postgraduate, M. Phil. and Ph.D. courses.
- University committees on the recommendations of Department committees and concerned Faculty would discuss and decide on the relational weightage of continuous and end-of-semester evaluations. This weightage could be flexible and could vary from institution to institution.
Relational weightage assigned to internal evaluation may range from 25 to 40 percent.

Following the integration of internal and external evaluations, the results may be expressed either in marks, grades or both, as per the policy of the university.

It will be useful if universities try to go beyond ‘marks’ and ‘divisions’ and, in keeping with the global trend, give Cumulative Grade Point Score (CGPS) which would place students into overlapping broad bands.

The CGPS may be based on a 5-point or 10-point scale and it could vary from institution to institution.

As soon as the integration of internal and external evaluations has been completed, the results should be announced, in keeping with the academic calendar, to facilitate students’ academic or occupational pursuits.