

CAS - A CONCEPT IN ENGINEERING EVALUATION

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Introduction :

Evaluation of students has always been a debatable issue. System which is more susceptible to malpractices will hamper the quality of education system. Every education system aims at developing human resource having wide range of capabilities which is essential for development of any nation. One way to assess the quality of their capabilities is examination. Hence providing an infrastructure which will conduct the examination and carry out the evaluation is as important as giving the education. The evaluation plays a vital role in governing the quality of the product of education system. Therefore it becomes necessary to have a well organized and well controlled format for the purpose.

Ways of Assessment in Engineering Education :

Engineering education involves theory as well as practicals of the concerned subject. So examination will consist of theory and practical examination. Performance of students can be assessed in two ways.

1. Continuous assessment.
2. Semester examination system.

In continuous assessment, student performance and progress in a particular

subject is assessed throughout the semester by conducting monthly test. The system of continuous assessment is very helpful for students and teachers in their day-to-day teaching as the feedback is available frequently for their improvement. But in actual practice the results of these continuous assessments are not truly conveyed to the universities for final assessment. We cannot ignore the possibility of biased reports from concerned faculty. Considering this aspect and the tedious work involved in continuous assessment system, Universities prefer semester examination system.

Semester examination system also contains assessment of practicals and theory papers. In the first, one has to judge the students for their conceptual understanding of the subject and their practical implications. In the later one, student understanding and his capabilities in the subjects. Presently, the university conducts the practical examination and theory examination. The practical examination involves the assessment by the external examiner from the other college and one internal examiner from the same college. The examiners will send the report jointly to the university.

For theory examination, the papers are dispatched to the examiners appointed by the university at their residential address.

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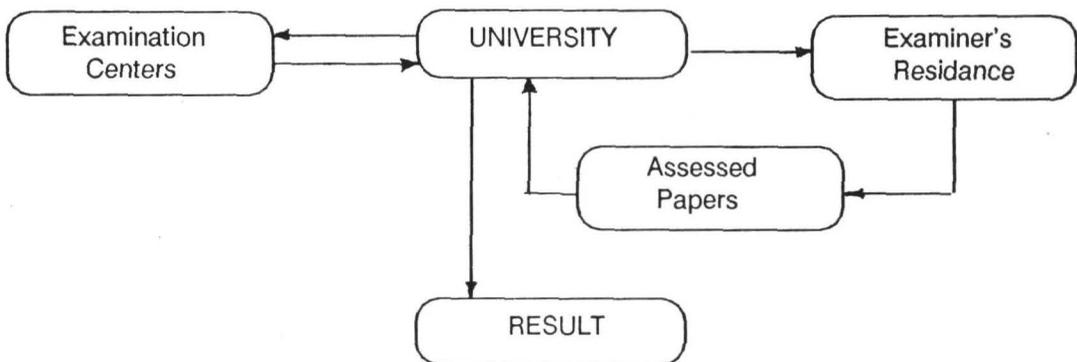
The examiner will then send the completed marklists and assessed papers back to the university.

examiners appointed by university from different colleges at the same place. The work of preparing result can be done simultaneously.

Necessity of CAS :

The RAS (Residential Assessment Scheme) is having many drawbacks which can be overcome by adopting CAS. The drawbacks in RAS are evolved from the managerial problems and the environment in which the examiner has to do his assessment work.

Fig. 1 Shows the schematic RAS



(Schematic Diagram of RAS)

Fig - 1.

Some of the drawbacks associated with RAS are listed below :-

1. Delay at every stage of the scheme.
2. Lack of effective communication between examiners and concern university staff.
3. Vast nature of managerial activities involved.
4. Malpractices at examiners and university level due to lack of contro.
5. Expenditure involved is of higher order which can be minimised.
6. Risk of missing the bundles of papers, marklists etc.
7. The assessment work get influenced by the environment at the examiners home.
8. There is also possibility of pressure by some social agents for getting good marks. in such cases, examiner cannot work in fear free atmosphere.

Thus we come to conclusion that RAS is time taking, costly, inefficient, and gives rise to different modes of malpractices in total education system.

It is necessary to have a system which will -overcome the above drawbacks, avoid the communication delays and have effective

CAS : AN EFFICIENT SCHEME :

Following fig. 2 Shows schematic diagram of CAS :

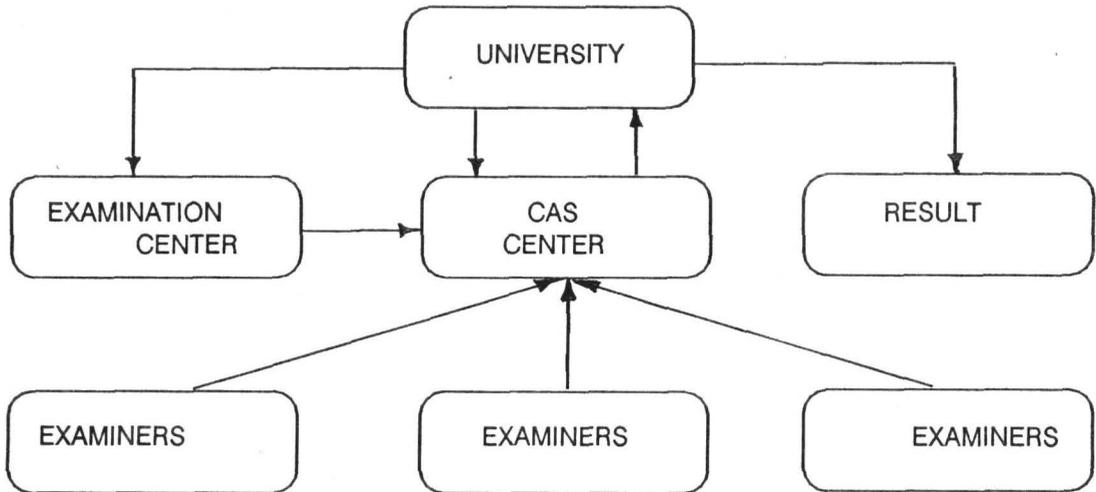


Fig. - 2

CAS in all respect is an efficient assessment scheme.

The main advantages are as follows.

1. Avoids unnecessary delay.
2. Provides good communication.
3. Removes all types of malpractices.
4. Provides good working environment to examiners.
5. Promote use of computers.
6. It removes the risk of missing of answerbook bundles and marksheets in communication media.
7. Examiners can give full time to the assessment work.

communication at all levels. CAS is one such attempt in this regard.

CAS provides good communication at each level so that the assessment work can be controlled easily. The administrative or managerial difficulties can be tackled quickly. It is possible to check the quality of assessment at any time.

In CAS, the possibility of malpractices is practically nill. As there is no chance for malpractices, it will avoid further complications.

As it is said that in RAS the faculty have to assess the answerbook along with the other duties, but in CAS the only work he has to look after is the assessment work. So that one can pay full attention and devotion towards the assessment work. The effect of surrounding environment on the assessment work will also get reduced.

In CAS, examiner is least bothered about the administrative and clerical job which otherwise in RAS has to be carried out by

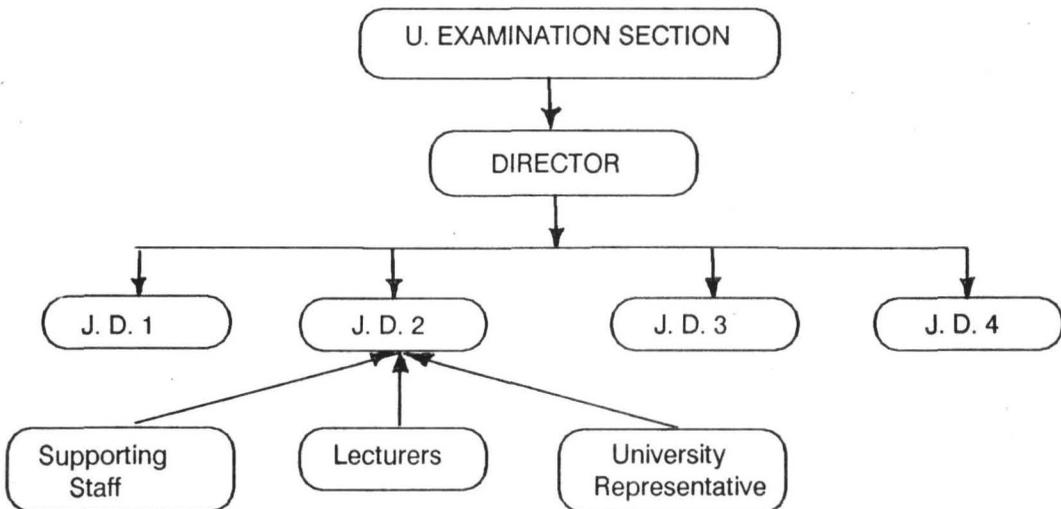
himself. This helps in improving his performance at the assessment work.

CAS proves efficient at all levels. As the assessment work is available at the table further data processing regarding declaration of results can be done simultaneously along with the assessment work, which helps in

- Timely declaration of results
- Increases efficiency of the administrative staff provided
- Removes all problems which arise from communication gap in declaration of results.

CAS promotes the use of computers in many ways in the evaluation system. The pre and post result data processing can be done by using computers at the CAS centre itself. As soon as the assessed marks are available that can be fed to the computer system and work of result preparation can be done quickly as the complete assessment work is over.

Following fig. 3 Shows the flow diagram of CAS center management.



J. D. = Joint Director

Fig. - 3
