UNIT 4   ISSUES, CONCERNS AND TRENDS IN ASSESSMENT AND EVALUATION

Structure

4.1 INTRODUCTION

You have studied the concept and purpose of assessment and evaluation in Unit-1; context and perspectives of assessment in Unit-2; and various approaches of evaluation that we use in school system in Unit-3 of this Block. From the previous units, you might have understood the basics of assessment and evaluation. In the present Unit, we discuss the issues, concerns and trends in assessment and evaluation.

You might be aware of the recommendations of various committees and commissions on reforms in examination and initiations taken by the stakeholders in this regard. However, even today, the system of examination is a matter of concern. Various measures for improving assessment practices in schools have been taken in the near past. They are implementation of continuous and comprehensive evaluation; emphasis on making assessment as an integral part

of teaching-learning process; use of ICT in the process of assessment; and emphasis on informal and formal assessment.

Keeping in view the above, the present Unit has been designed to throw light on major issues and concerns in educational evaluation. In addition, recent trends and developments in the field of educational evaluation such as : question bank; semester system, choice based credit system; marking and grading system; on-demand; online; and computer based assessment system have been discussed in this Unit.

4.2 OBJECTIVES

After going through the Unit, you should able to:

- describe major issues in educational assessment and evaluation;

- list down recent trends in educational evaluation;

- describe the characteristics of learner-centered assessment techniques;

- discuss the merits and demerits of question banks;

- describe semester system along with its features, merits and demerits;

- discuss marking and grading system of evaluation;

- describe the features of continuous internal evaluation;

- explain the concept of choice-based credit system (CBCS);

- explain open book examination;

- explain the concept of on-demand and online examination; and

- discuss the application of computer in examination.

4.3 ISSUES AND CONCERNS IN ASSESSMENT AND EVALUATION

As discussed in the previous Units, you might have understood the importance of assessment and evaluation in the process of teaching and learning. Time and again starting from the independence of India, all most all the education committees and commissions have stressed upon reform in examination system in schools and higher education. Recommendations are given by the education commissions concerning the issues such as : making assessment and evaluation child-centred, objective based, assessing all aspects of child development, integrating assessment in the process of teaching and learning, use of ICT in assessment, making assessment a continuous process, introducing internal and external assessment system, developing question banks, marking vs grading, etc. Keeping in view the above issues and concerns, this section of the Unit will discuss criteria of assessment, how to interpret it, and possible errors in assessment.

4.3.1 What is to be Assessed?

In any educational system, there are three main components i.e. input, process and product. For improving the quality of education, it is essential that high

quality inputs in terms of human and physical resources should be provided. This helps in improving various administrative and academic processes in the educational system. Appropriate inputs and effective processes ultimately results in better educational outcomes (product). Our present system emphasises more on the output not on the input and the process. Our evaluation efforts are mostly on enhancing educational achievement of students. However, no attention is paid by the teachers and administrators towards quality of curriculum transaction processes and evaluation practices adopted by the educational institutions.

Many of the teachers believe that there is a need to assess the processes as well as the products or outcomes. But what exactly, 'process' means must be explicit and transparent for students and teachers. For example, if you want to assess 'the level of interaction', how can you ensure that the students reach at 'an outstanding' level? What is 'an outstanding' level? This example raises the question of how you can confidently know the level of interaction that has taken place. Hence, it is essential that you should involve the students in the teaching-learning process and observe their behaviour regularly. In this context, the techniques of self-assessment and peer-assessment may be used by the teachers. So, in addition to evaluation of educational outcomes, the ongoing educational processes must be evaluated so as to improve the process of learning.

4.3.2 Criteria to be used to Assess the Process and Product

In the present assessment and evaluation system, the criteria is decided by the teachers (in case of internal evaluation) or the certifying agencies (in case of external board or university examination). A student getting certain percent of marks or a particular grade is declared pass or fail. Such criteria is not objective in nature, because, it lacks in describing the specific areas of development of children. Even these criteria differ from institution to institution and teacher to teacher. The examining bodies appoint a large number of examiners to evaluate the answer scripts which results in inter-examiner variability in-case of on essay type and short answer type questions. In marking system, one percent mark can change the status of a student. (For example, a student with 49 percent marks has third division and with 50 percent marks, it is second division).

Any effective evaluation system must include specific, objective and description of the performance criteria such as : ability in language acquisition, skill of analysing and comprehending Mathematics and other concepts, description of life skill areas etc. for evaluating students' performance. Criteria for the assessment can be determined by teachers, students or through consultation between the two. Any continuous and comprehensive evaluation system can be most successful when students are involved in establishing their own criteria for assessment through consultation with teaching staff. These criteria are then used to assess and grade the performance of the students. A clear understanding of the intended learning outcomes of the subject is useful starting point for determining criteria for assessment. Once these broader learning requirements are understood, a consideration of how the learning task, and criteria for assessment of that task, fit into those broad requirements can then follow. The criteria for the process and product of learning may be decided separately than to attempt to do both at once.

4.3.3 Who will Apply the Assessment Criteria and Determine Marks or Grades?

The present evaluation system has an inherent feature that it is more teacher-centric in nature and not context-based. The prevailing examination system has many ills like; subjectivity, favouritism, use of unfair means by the students to get good grades and so on. The marks or grades of the students mostly depend upon student's relation with the teacher. It is seen that students who are more close to the teacher gets good marks or grades than those students who are comparatively better in studies. The students' grades are decided according to the teachers' wishes and desires and not by the students' abilities and skills. This is a major weakness of existing evaluation system. Assessment parameters are implemented by the teachers in accordance with their own requirements and convenience. This issue needs to be seriously addressed if we wish to improve the quality of evaluation practices and overall educational processes. The students should be well informed about the criteria of assessment and the procedure of its implementation in advance. Evaluation should be a collaborative effort which must ensure the participation of other teachers and students while evaluating and awarding grades to a student. Self-assessment, peer-assessment and opinion of other teachers should be essential aspects of grading a student.

4.3.4 How will the Scores or Grades be Interpreted?

Interpretation of evaluation results depends on how the assessed or measured traits are expressed. In India, you can observe that both marking and grading system of assessment are used. It is true that at the present time, grading system is highly used for assessing achievement of the students in schools and colleges as well. Different boards of education use different grade points for assessment. Under a definite grade, you will find there are certain percentage limits. Let us understand the grading system use by CBSE for the secondary stage classes.

Table 1: CBSE grading system for secondary stage classes

Marks Range	Grade	Grade Point
91-100	A1	10
81-90	A2	9
71-80	B1	8
61-70	B2	7
51-60	C1	6
41-50	C2	5
33-40	D	4
21-32	E1	-
20 and below	E2	-

(*Source : CBSE, 2010*)

The above Table shows CBSE 9-points grading system for the secondary stage classes. According to the grading system, the evaluation is made on 9-points, starting from A1 grade to E2 grade and corresponding percentages starting from 91-100 marks range to 20 and below. As per the grading system, the secondary students in the CBSE system are getting their certificate.

4.3.5 Sources of Error in Examination

In the process of evaluation, there is a possibility of committing certain errors either as a human error, deliberate error or other technical errors. But, our efforts should be to make evaluation error free or to minimise the errors. The main sources of errors in the present examination system may be summarized under the following points:

- Errors due to subjectivity in marking by the same examiner or different examiners.

- **Errors due to biased selection of topics for asking questions:** The emphasis on different topics to be covered in the examination is not equitable and certain topics have no questions related to them in the test.

- **Errors in selection of students' abilities to be evaluated:** The main emphasis of examinations is to assess the memorization ability (understanding ability to certain extent) of the students. Application and other higher order abilities are not given due place in the examination.

- **Errors due to arbitrary time limits in examination:** The imposed time limit in the examination produces a variation in students' marks or grade which is not related to variation in students' real attainment.

- Errors due to improper evaluation conditions.

- **Errors due to choice of questions in examination:** The marks of students due to choice of questions in examination may not be a true score of his/her abilities. This is because different questions may not have same difficulty level.

- **Errors due to assumption of addition of marks:** For obtaining a final score of student, marks on different questions are added and it is assumed that marks are of equal weightage and scale in nature. This is not true and leads to variation in evaluation.

Check Your Progress 1

Note: a) Write your answer in the space given below.

     b) Compare your answer with the one given at the end of the Unit.

1. Explain briefly two major issues of educational evaluation of students.

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4.4 RECENT TRENDS IN ASSESSMENT AND EVALUATION

In the last section, we discussed about certain concerns of evaluation system and also hinted upon new trends in evaluation. In this section, we will discuss the emerging trends to make our examination system effective. Before discussing the trends, let us highlight the issues concerning suitable use of examination.

- The obtained results should be carefully systematized and conclusions should be scientifically drawn and reported to the stakeholders involved in the system including the students.

- The number of external examination should be reduced. More scientific and systematic methods of evaluation need to be devised.

- While conducting evaluation, the student's work throughout the year should be assessed.

- Evaluation procedures should include variety of techniques and tools, new types of tests among which objective type tests are of considerable importance.

- In testing performance of students focus should be on what and how much the student knows, not on what he does not know. Scoring should be objective and transparent.

- The evaluation should be treated, not as the end, but only as the means, since the purpose of evaluation is to aid education/learning in achieving its primary goals.

- Oral testing should be given a suitable place in the system of evaluation.

- Evaluation should be in parts and not at one stroke.

- There is great need for reform and improvement in the question papers employed in the prevailing system.

- The questions should be so designed that the child is stimulated to think for himself seeking for the answers. Questions to test higher abilities should be included.

- Evaluation needs to be diagnostic, comprehensive and continuous. Stress should be on performance in both scholastic and co-scholastic areas.

Keeping the above points in consideration, many new initiatives and trends are recently being witnessed in our evaluation system. Let us discuss the trends of evaluation in detail.

4.4.1 Learner-centered Assessment Strategies

Learner-centred assessment is intended primarily to inform students and teachers about what students need to do, as they are doing it, to improve their learning. As we have studied in the earlier units (Unit-3 of this Block) that evaluation of learning is often classified into two categories: formative and summative. While summative evaluation may involve a suite of evaluation tasks, formative evaluation involves ongoing evaluation to provide timely and constructive feedback to students about the progress of their learning. In contrast to summative evaluation, formative evaluation is often more learner-centered. It is true that students tend

to perform better when they are actively involved in their learning, when they are under less stress and when assessment is woven into everyday classroom activities. Under such conditions, the students are more easily and accurately able to show what they know and can do.

The main features of learner-centered assessment strategies are as follows:

- Learners are actively involved in assessment process.

- Learner-centered assessment relates to students' learning goals.

- Learner-centered assessment has explicit criteria that can be negotiated, thus the focus may vary between the learners.

- Learner-centered assessment involves multiple data sources.

- Learner-centered assessment is multimodal i.e. it allows for a range of learning preferences.

- Learner-centered assessment involves a range of skills, depending on the needs of the learners.

- Learner-centered assessment may include individual and collaborative elements.

In learner-centered assessment strategies, you should be a skilled observer and take time to carefully watch the students at work, monitoring their behaviour, interactions with others and the way the students approach to various learning tasks. You should observe each student closely on a regular basis. In learner-centered assessment, you need to think about how you can involve students in making decisions about their learning and assessment and how the assessment data can be used for improving learning among students.

To sum up, we may say that strategic learner-centered assessment is primarily intended to make students and teachers aware about how learning among students can be facilitated. Learner-centered assessment involves various strategies like continuous and comprehensive evaluation, formative evaluation, diagnostic evaluation, on-demand examination, open book examinations, portfolio assessment, self and peer evaluation and such other informal strategies which involve students in evaluation process for improving their learning levels.

Check Your Progress 2

Note: a) Write your answer in the space given below.

b) Compare your answer with the one given at the end of the Unit.

2. Write any three features of learner-centered assessment.

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4.4.2 Question Banks

Question banks are databases of questions that can be shared between courses and programmes of study. A question bank is the list of questions from the concerned subject. In other words, a question bank is a planned library of test items pooled through cooperative efforts for the use of students, teachers and evaluators. Question banks have been called by other names also, such as; 'item-banks', 'item pools', 'item collections', 'item reservoirs' and 'test item libraries'. A 'question bank is a collection of large test items developed by a group of trained and experienced professionals and printed on index cards or stored in the memory of a computer along with certain supporting data and capable of being reproduced whenever needed (Aggrawal, 2005)'. Question banks are searchable so that questions meeting specific criteria can be drawn from them to create assessment. The question banks allow users with the appropriate access to create questions. A question bank serves many purposes. It can be used by teachers at the pre-testing stage, for setting question papers, for measuring learners' achievement, etc. Questions for the question banks should be prepared by practicing teachers. Enrichment of questions by updating, discarding, replacing, modifying and adding new questions should be a continuous process. In question banks, all types of questions, such as objective type, short answer type as well as long answer type that could be on a particular topic are included. These question banks are of immense importance from teaching and general examinations, competitive examinations and entrance tests. Large scale public examinations involving wider content coverage can enhance the significance of question banks.

The following are the main reasons for preparing question banks:

● to meet the need of increasing number of students in various courses;

● to increase in knowledge and facing competition in all walks of life;

● to devising more reliable, valid, comprehensive, fair and objective testing techniques;

● to arrange more efficient, economical and comprehensive testing programmes; and

● to exploit the scientific and technology devices for data processing so as to increase the efficiency of testing programmes.

Question bank can play an important role in making testing techniques more efficient and objective. We shall now discuss the merits and demerits of a question bank.

Merits :

● There is a least chances of leakage of question paper as even experts do not know whether their questions have been included in the test or not.

● The teachers know what types of questions are to be asked in the examination. So, they teach accordingly.

● Question papers can be set immediately or in emergency.

● The students will be aware of as to what type of questions will be asked in the examination.

- Question bank helps in facilitating learning from various angles.

- Question bank helps as a guide for paper setters.

- Objectivity in evaluation is quite obvious as many teachers and experts take part in item construction.

- Question banks are also used for admission and examination purpose.

- Question banks improve overall validity of examination.

- Due to standardized scoring procedure, reliability and objectivity of test results is maintained.

- Sample tests drawn from the bank may be safely assumed to be parallel or equivalent in all respects and the problem of non-comparability of marks over time or years is solved.

- Question banks may be used by teachers to get feedback for improvement of teaching-learning process.

Demerits :

- Educators do not have uniform opinion with regard to secrecy of the question bank.

- Originality lacks in the construction of questions for question papers.

- In the present set-up, when examination aim is to pass or fail, there is no justification of such banks for students and teachers.

- It requires subject specialization and special training on the part of item-writers.

- It requires proficiency in the techniques of test construction on the part of item-writers.

- The item writer may not be well-versed with the psychological characteristics of the students for whom the test is to be constructed or used.

4.4.3 Semester System

Semester system came into existence as an improvement over the annual examination system. When a particular course of study is divided into different equal parts not on the basis of the session but on the basis of months and examination is conducted after the completion of every part, it is called as semester system. For example, if course of study is of two years, four semesters will be there and a three year degree course will be divided into six semesters. Under this system, a student failing in one subject in one semester is not declared to be failed, rather he is admitted to the next semester and is given an opportunity to re-study the subject and re-appear the examination in that particular subject in that semester. In semester system, examination becomes a part and parcel of the daily routine and the system no more produces any sort of stress and strain among the students. The main objective of the semester system is to broaden the outlook of the students and instil in them a sense of confidence and responsibility. The semester system is a very proactive system as it engages both the faculty and the students throughout the year in academic activity.

Semester system not only involves students throughout the year but also reduces examination burden.

Both the systems have its merits and demerits. Let us know the merits and demerits of the semester system.

Merits :

- It keeps the students engaged in studies throughout the year.

- The progress of the students is constantly assessed and continuously their knowledge gets improved.

- It allows greater interaction with teachers and students.

- It reduces workload among students as few courses are studied in a semester and the workload gets equally distributed in all semesters.

- The semester system discourages students to study at the last minute and encourage rote memory.

- Continuous internal assessment and periodical test is one of the greatest merits of this system.

- Students are free to discuss their performance and transparency in the assessment is ensured.

- It reduces stress and strain and makes learning purposeful, pleasant and joyful.

Demerits :

- Because of continuous examination in the semester system, students are constantly under the hammer of examinations.

- This system suits only to higher education.

- It is a difficult task to frame proper syllabus of each semester.

- A gap between the semesters sometime is loss for the students.

- The workload on teachers and students is increased.

- Sometimes, it is felt that examination is more than study.

- Students get involved in the curriculum, other aspects of students' development gets hampered.

4.4.4 Continuous Internal Evaluation

You might be aware that the students spend most of their time in the class\school. The teachers, who deal with the students everyday are the right person to judge their progress. It is therefore, many a time, emphasized that internal assessment of the performance of the students in different areas should be conducted. At present, continuous internal evaluation is an integral part of the teaching-learning process. The objectives of implementation of continuous internal evaluation are as follows :

- To make an overall assessment of students personality.

- To motivate students and teachers to make the teaching-learning process effective.

- To provide feedback to teachers, students and the parents as well.

- To lay less emphasis on memorization and rote learning.

- To lay emphasis on the assessment of co-scholastic areas of child's personality.

- To make evaluation system more meaningful, reliable, valid and objective.

The characteristics of continuous internal evaluation are as follows :

- It involves both ongoing observation and periodic testing of students by teachers who teach them.

- It serves both formative and summative purposes. Formative in the sense that it is used to improve instruction and summative because it is used to supplement final examination results.

- It enhances rapport between students and teachers.

- It incorporates both cognitive and other areas of students personality.

- The system compels the students to remain alert and regular throughout the course of their studies.

Apart from its usefulness in the system of teaching and learning, the following weaknesses have also been observed.

- The system requires a reasonable teacher-taught ratio in the class.

- In this system, the teachers have ample opportunities for favouritism.

- The system requires a healthy atmosphere in the institution.

- In this system, the students who arrange recommendations, impress their teachers or show closeness to their teachers get more marks/grades than they deserve.

- Due to undue pressure, teachers may feel insecure.

- Proportion of internal and external assessment in the system is also a subject of debate.

4.4.5 Choice-Based Credit System (CBCS)

Choice-Based Credit System (CBCS) essentially implies a redefining of the curriculum into smaller measurable entities or 'modules' with the hours required for studying / learning (not teaching) these modules. The primary focus is to combine the modules in different ways so as to qualify for a certificate, diploma or degree. In a sense, therefore, the completion of a single 'module' of learning can pave the way for learning other modules either in the same institution or elsewhere and a combination of modules in keeping with the needs and interests of the learners. It is therefore inter and intra institutional mobility of the students is possible.

Features of CBCS : As highlighted by the UGC (2015), the features of CBCS are:

- Enhance learning opportunities of the learners.

- Match the learners' scholastic abilities and aspirations.

- Inter-institution transferability of learners (following the completion of a semester).

- Part-completion of an academic programme in the institution of enrolment and part-completion in a specialized (and recognized) institution.

- Improvement in educational quality and excellence.

- Flexibility for working learners to complete the programme over an extended period of time.

- Standardization and comparability of educational programmes across the country and global scenario as well.

Choice-based implies that the learner has the choice to select the subjects that he/she would like to learn within the prescribed time period and the programme parameters. For example, a learner who wants to major in Accountancy wishes to study History may be permitted to study. The CBCS enables a student to obtain a degree by accumulating required number of credits prescribed for that degree. The number of credits earned by the student reflects the knowledge or skill acquired by him/her. The CBCS enables the students to earn credits across departments and provides flexibility in duration to complete a programme of study. The CBCS facilitates transfer of credits earned in different departments/ centers of other recognized/accredited universities or institutions.

The following are the main advantages of CBCS :

- Teaching and learning process is shifting from teacher-centric to learner-centric education.

- All activities are taken into account - not only the time learners spend in lectures or seminars but also the time they need for individual learning and the preparation of examinations etc.

- Learning is self-pacing and self-directed.

- Learners may undertake as many credits as they can cope with without having to repeat all the courses in a given semester. In case they fail in one or more courses. Alternatively, they can choose other courses and continue their studies.

- Affords more flexibility to the learners by allowing them to choose interdisciplinary courses, change majors, programmes, etc.

- Respects 'learner autonomy'. It allows learners to choose subjects according to their own learning needs, interests and aptitudes.

- Helps in learner mobility. It offers the opportunity to study at different times and in different places.

- Beneficial for achieving more transparency and compatibility between different educational structures.

4.4.6 Marking versus Grading System

The performance of students is represented in 'marks' or 'grades'. 'Marks' are used to indicate the raw scores of a student in a test like marks in a subject 40, 45, 67, 39, 86, etc. On the other hand, grading system is a qualitative assessment of achievement of a student. On the basis of the quality of the answer, the examiner gives various grades to different examinees by keeping the parameters from 'excellent to very poor'. In grading, an attempt is made to identify relatively uniform score intervals in a hierarchical order ranging from very poor to outstanding performance and vice versa. As discussed in Table 1 of this Unit, CBSE has implemented 9-point grading system with a 'Letter Grade' (A1, A2, B1, B2, C1, C2, D1, D2, E) corresponding to a percentage limits (91-100, 81-90, 71-80, 61-70, 51-60, 41-50, 33-40, 21-32, and 20 and above). Grading can also be made in five or seven points scale. In Indira Gandhi National Open University (IGNOU), five-point grading system is implemented. (A, B, C, D, and E).

Sometimes, the performance of students is also reported in terms of Grade Point Average (GPA) which is obtained by assigning the letter grades to each question separately and awarding numerical weights. Such system of grading is adopted by IGNOU for evaluation of students' performance in many of its programmes of study. In the statistical grading method, the teachers mark the answer books as usual in terms of numerical scores and then grades are assigned. Here, scores are converted into grades by fixing range of scores. Let us discuss the merits and demerits of grading system.

Merits :

● Achievement of examinees in different subjects can be known separately.

● Errors of measurement are reduced to minimum base i.e. achievement of different students may by easily compared.

● In grading system, inter-subject comparison of the same examinee and inter-examinees comparison in a particular subject is possible.

● Grading system takes the emphasis away from marks.

● This system is much more meaningful and feasible in comparison to marking system.

● This system is a boon to weak students than the brights.

● It reduces fear and complexities among the students.

Demerits :

● There is lack of consensus among the educators with regard to points of the scale.

● The grade system is very sensitive. While awarding marks, examiner may switch over from 60 to 65 easily, but the same is not in the case of grades.

● Subjectivity in evaluation is possible like marking system.

● It is easy to convert marks into grades but vice-versa is difficult.

● Lack of uniformity in grading creates confusion and interpretation of the result.

4.4.7　Open　Book　Examination

An "open book examination" is one in which examinees are allowed to consult their class notes, textbooks, and other approved material while answering questions. The essential difference between closed book examination and open book examination is that the former can still be used to evaluate how much the students have memorized, while the latter cannot. An open book question provides the candidates with the theory the question is examining and then asks them to demonstrate their ability to apply the theory to a scenario. A closed book question will require the candidate to state the theory from memory. In this respect, the open book examination is closer to the working environment where the employee has access to manuals and examples of past work to draw on. An open book question will rarely use the words 'describe' or 'state' or even 'explain' since these words usually preface a question which requires the candidate to recall a theoretical approach from memory. Open-book examinations often comprise of tasks based on a problem or argument to which the student is required to respond, employing their knowledge of the subject and making use of the reference material as appropriate. The open-book examination measuring high-level skills such as conceptualizing, problem solving and reasoning corresponds almost completely to a total, real-world situation, less stressful, less memorization, more room for logical and creative thinking.

There are two kinds of open book examination, the restricted type and the unrestricted type. In the restricted type of open book examination, students are permitted to bring into the examination room one or more specific documents approved by the course instructor. In the unrestricted type of open book examination, students are free to bring books, documents whatever they like. When used properly, it will be pointless for students taking the unrestricted open book examination to consult any material they have brought, because the questions will be designed in such a way the answers will not be found in the textbooks, handouts or class notes.

Open Book Examination has the following merits and demerits :

Merits :

● OBE not only tests students' capacity to construct a coherent response to the assessment task, but also require a demonstration of their ability to use resource material effectively in doing so.

● By allowing students access to relevant reference material, open-book examination reduces the need to memorise information, and can therefore allow students to concentrate on demonstrating their ability to understand and apply this information to the question.

● By providing students with reference material prior to the assessment, it may give them greater confidence when taking examination and therefore produce a more accurate account of their achievements.

● Students can use revision time more constructively, focusing on reinforcing their understanding of the subject rather than attempting to memorised information.

Demerits :

● The students would stop studying and simply copy from the open book provided at the examination hall.

● Where textbooks are allowed, teachers and other staff must either ensure that students are provided with clean copies of the appropriate text or make clear in the assessment strategy any alternative arrangements i.e. allowing students to make notes on the text.

● It is possible that arbitrary factors may be introduced into the process i.e. whether students have the appropriate material, or whether any notes used are the student's own.

● Teachers and staff must provide students with more detailed guidance on what they may or may not take into the examination.

● Board examinations would lose their importance and no one would like to assess the ability and competence of an individual on the basis of marks or grades awarded by the board or any certifying agency.

Check Your Progress 3

Note: a)   Write your answers in the space given below.

   b)   Compare your answers with the ones given at the end of the Unit.

3.   Highlight any two objectives of continuous internal evaluation.

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4.   Explain the concept of semester system.

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5.   Discuss the advantages of Choice Based Credit System.

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6.   Why grading system is better than marking system?

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7. Differentiate between Open Book and Close Book system of examination.

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4.5 ICT SUPPORTED ASSESSMENT AND EVALUATION

You might have realised that Information and Communication Technology is an integral part of teaching-learning process. From last few decades, ICT is being used in the curriculum, teaching-learning process, evaluation, and recording & reporting results of the students. But, during these days, the use of ICT in education in general and evaluation processes in particular has been increased. In this section, we will study ICT support to assessment and evaluation, particularly, the online and on-demand examination and also application of computers in examination. You will study the details about the ICT support in assessment processes in Unit-8 of Block-2 of this Course.

4.5.1 Application of Computer in Examination

Use of computers in education is very wide. This is used not only for teaching-learning process but also for assessment & evaluation and for various educational administrative purposes. In every school, every year a lot of information and data relating to record of attendance, account of income and expenditure, annual results etc. can be easily prepared, stored and retrieved with the help of computers. Many schools have started using e-portfolio for assessment purpose, which is possible through the use of computers. Information about the family background, personal qualities, achievement and aspirations regarding every student should be essentially made available and used for preparing portfolios of students so that the areas of their strengths and weaknesses could be identified and appropriate educational guidance could be made available to them to improve their educational standards. Computers can go a long way in helping to do this job. By pooling the student-related data and making it available instantly to each teacher and the counsellor, the computer can make full scale individualized instructional planning a reality. Computers can be used as counsellors too. They may be programmed to initiate the behaviour of a human counsellor. A computer may be taught to interact with individual students so as to render diagnosis.

The Central and various State Governments have launched various schemes on the use of ICT in schools and have provided them computers. It is successfully working in many schools but at the same time, it faces many difficulties in implementation because of the following reasons :

● Dedicated computer lab has not been developed in the schools for its use.

● Regular computer orientation is not given to the teachers for its use.

● Full time computer instructors are not appointed in schools.

● Heavy rush of students is also another difficulty to manage computer classes.

4.5.2 On-demand Examination

The scheme of on-demand examination is a comprehensive ICT enabled system of examination which provides the learners an opportunity to appear in the examination as per their preparation and convenience. In fact, it is a blended scheme of ICT and traditional examination system wherein students can walk-in any time at the selected examination centres and take examination. The demand of flexibility in education system and changing profile of learners has necessitated starting such innovative scheme which has made the existing examination system more flexible and learner-friendly. This is very much successful in distance education system as most of the distance learners in higher education are working people; they normally do not get leave from their organizations for several days at a stretch for term end examination, and hence they fail to complete their courses in stipulated time limit. Most on-demand examination are conducted through ICT. Its objective is to enable the learners to appear in the examination as per their preparation and convenience on the date and time of their choice.

The **features** of on-demand examination system are as follows:

- Learner-friendly innovative scheme of examination.

- More flexible and independent of traditional fixed time frame in examination.

- No need to wait for the six monthly term end examination.

- Different sets of question papers generated on the day of examination.

- A particular software specially developed for the purpose are used.

- Least possibility of malpractices or unfair means.

- May reduce load on the term-end exam in future.

- It reduces workload of students, teachers and also the entire system of examination.

On-demand examination makes use of ICT to solve problems which arise due to human limitations. The major advantages of on-demand examination are as follows:

Advantages :

- It makes possible instant generation of parallel question papers, and facilitates authorised data entry at different points, leaving no chance for human error.

- It has very silently reformed the system of evaluation without making abrupt changes.

- It is not only simple and user friendly but it is also cost effective and saves time and effort in setting question papers.

- It generates individualised and unique question papers on the day of examination by picking up the questions randomly from the question bank as per the blueprint & design.

- It removes frustration, loss of self esteem, and depression that are generally characterized by the term-end examination.

4.5.3 Online Examination

Online examination, sometimes referred as e-examination, are the examination conducted through the internet or in an intranet (if within the organization) for a remote candidate(s). A dedicated software is used to manage the entire online examination system. Candidates have to sign up and create an account as per their student profile and sign in for its use for a limited time to answer the questions and after the time of expiry, the answer paper is disabled automatically and answers is sent to the examiner. The examiner evaluates answers, either through automated process or manually and the results are being sent to the candidate through email or made available in the website. Internet will be used as a media for disseminating and conducting tests. The progress reports can be printed at any point of time by just providing the necessary details of a candidate. Generally question banks are prepared for online examination. The online examination system is a web based application. The system can be modified and customized to suit the needs of any educational institution; primary and secondary schools, colleges, professional and vocational institutes, universities or coaching academies. This system aims at reducing costs associated with conducting examination over a period of time and achieving total automation of examination system and its related tasks like registration, publication of results, which leads to a very high degree of system efficiency.

Check Your Progress 4

Note: a) Write your answers in the space given below.

b) Compare your answers with the ones given at the end of the Unit.

8. Write any three features of on-demand examination.

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9. Explain the characteristics of online examination.

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10. Enlist the works in which computers can be used in a school system.

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4.6 LET US SUM UP

In this Unit, we have discussed about major issues and concerns related to educational assessment and evaluation. Reforms in examination system are a continuous work. This has been focused in many education committees and commissions. Although, many attempts have been made particularly in Indian context to bring reforms in the examination system, still it requires making it more goal oriented and productive. We discussed two major sections in this Unit, i.e. trends in evaluation and ICT support in assessment and evaluation.

In the section on recent trends in educational evaluation, we discussed development of question banks, semester system, choice-based credit system (CBCS), grading system, continuous internal evaluation and open book examination which is the priority in bringing systemic changes in assessment and evaluation. In ICT support assessment and evaluation, we discussed on-demand and online examination and computer applications in assessment and evaluation which are at present largely used by schools.

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4.8 ANSWERS TO CHECK YOUR PROGRESS

1. To make evaluation student-centered and bring objectivity in evaluation.

2. Learners are actively involved in evaluation process; directly relates to the students' learning goals; and involves multiple data sources in evaluation.

3. (a) To make an overall assessment of child's personality; and (b) To motivate students and teachers to make teaching-learning process effective.

4. When a particular course of study is divided into different equal parts not on the basis of the session but on the basis of months and examination is conducted after the completion of every part, is called a semester system. Ideally, an annual system is divided into two parts (six months each) for the semester pattern.

5. CBCS makes education more broad based. One can take credits by combining unique combinations of the subjects. It helps in learner mobility. It offers opportunity to the students to study at different times and in different places. It also helps students to study diverse subjects.

6. Self exercise. (Refer 4.4.6)

7. Open book examination is one in which examinees are allowed to consult their class notes, textbooks, and other approved material while answering questions whereas the close book system of examination is like our traditional system of examination where no learning materials are provided to the learners during the examination. The essential difference between closed book examination and open book examination is that the former can still be used to evaluate how much the students have memorized, while the latter cannot.

8. Learner-friendly innovative scheme of examination; more flexible and independent of the traditional fixed time frame in examination; and no need to wait for the six monthly term end examination.

9. Online examination, sometimes referred to as e-examination, are the examination conducted through the internet or in an intranet (if within the organization) for a remote candidate(s).

10. Self exercise. (Refer 4.5.1)