

A Report of the Study on

Students' Perception of On-Demand Examination in IGNOU

National Centre for Innovation in Distance Education
Indira Gandhi National Open University
New Delhi, INDIA

Students' Perception of On-Demand Exam in IGNOU – A Report

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1

Introduction

A Study of Students' Perception of On-Demand Exam in IGNOU

Developments in Information and Communication Technology (ICT) have revolutionized the teaching, learning, evaluation and learner support system in the Open and Distance Learning (ODL) system. Increasing use of ICT all over the world has demonstrated remarkable growth in terms of enrolment, numbers of courses, and out geographical reach. In fact it has proved to be a viable mode of providing education to many unreachable on-demand as per the pace, place and time of learning of an individual. The Indira Gandhi National Open University (IGNOU) in India caters to the educational needs of more than 3.0 million learners through open and distance learning mode and a large number of them are working people and these unable access formal education like woman disable and the deprived action of comity. As in any teaching-learning system, the evaluation and assessment of the performance of the learners is one of the important components everywhere to which IGNOU has no exception. Normally, the performance of its learners is evaluated through Tutor Marked Assignments, project works and the term end examinations (TEE). As the TEE is conducted in the month of June and December every year in a fixed time frame, it has however, certain limitations to meet the demand of the learners as per their convenience and preparation.

It has been noticed that because of several reasons, many of the learners particularly those who are working somewhere and are unable to take their exam during the TEEs (Sharma and Bhardwaj, 2010) as per schedule. One of the reasons of missing the exam seems to be the fact that they do not get leave from their organizations for several days at a stretch for term end examinations. Consequently, such learners fail to complete their courses with in stipulated time span. Sometimes it results in then dropping out of the system for good. Secondly, the TEE being institute centric, are conducted in a fixed time frame and therefore, many of the students appear without proper preparations which leads to the large scale low performance in many courses. Thirdly, there are also several cases where the students have cleared all courses except one or two due to which their programme remains incomplete and they have to wait for next TEE for its completion. Moreover, for a large amount of the time and energy of the faculty and other staff are required every time in making arrangements manually for term end examinations, which otherwise they could have effectively devoted to concentrate on academic matters. To focus on the issues of qualitative improvence.

In order to overcome the rigidity of a fixed schedule, IGNOU has brought out a more flexible and learner centric scheme of “ODE”. In this scheme of examination, the students who have completed the period of minimum study hours and submitted all their assignments can choose the date of examination as per their convenience and preparation and need not to wait for another six months for term-end examinations.

1.1 Review of Literature

With increasing use of ICT and computers in distance education, computer-aided examination has become a favoured system because it over comes several limitations of traditional practices. Several ODL institutes are using computers for testing and evaluation including online examination for purposes of admission selection and recruitment. According to Turner (2005), Warren Hellomn (2005), Wellman et al (2004) and Green Berg (1998) there are various reasons for using online testing including automated grading, less time administering the exam, instant evaluation, instant result instant feedback for students, and flexibility for students to take exam as per their preparation . According to Gaba and Sethy (2010). IGNOU’s students (about 42.79%) are in favour of appearing in examination through online and majority of students say that submission of assignment through ICT is more convenient these face to face. However, on the other side, Turner (2005), Summers et al (2005) and Loungetti (2006) have raised certain concerns like academic honesty, accessibility, limited computer skills and use of supporting for online testing and the use of technically found system. Besides, of course the need for generating equivalent tests for ensure comparability of standards of repeated tests, thus safeguarding the technical pre-requisite, the reliability and validity of the testing instrument. According to Rids way, Mc cuskar & head (2004), once created, e-assessment application become less expensive, easy to operate and score, from year to year in different combinations. The contents of test, however, will need to be reviewed and revised every year on the basis of scientifically conducted item analysis. This will rein force the questions belonging to each of the blueprint, for which at least ten questions for each cell would need to be made available for the generation of testing instrument with questions in different combination and presentation yet ensuring comparability and equivalence.

In India, the Position Paper of National Focus Group On Examination Reforms (2006) has very clearly recommended to provide flexibility to the students to select date and time as per their convenience. Moreover, with increasing use of ICT in the field of education, the concept of online and on-demand examination is being provided and practiced all over the world (Byrnes, R., et al 2006 and Andrew Fluck, et al, 2009). At school level, the scheme of On-Demand Examination is successfully operational in National Institute of Open Schooling (NIOS) for secondary level at different locations (Prasad, 2008) science 2000. In this case the individualized question papers are generated locally and the registration for On-Demand Exam was also done manually at these locations. However, because of its learner friendly features, the On-Demand Exam became very popular among the students. Impressed by the features and usefulness of On Demand Examination System, the National Open University of Nigeria has also taken initiative to start On-Demand Exam as an alternative to the end-of-semester exam (Okonkwo, 2008).

According to Mehta and Saxena (2003), IGNOU had developed on prototype of Online and On-Demand Examination model. But it seems that it was only an online examination system having a provision of generating different questions each time when an examinee logs on with out a technically sound design and blueprint. In such cases the designs of the proposed question papers are a publically known item, by the blueprint is to be generated for each instance. The online examination is more suitable for objective types of questions. Electronic management of descriptive type of questions is real challenge for online exam. Thus without deviating from the existing pattern of question papers, it required a blended approach of exam having a mix of technology and paper-pencil exam.

On reviewing the literature, it has been found that though there has been discussion about the theoretical and conceptual aspects of On-Demand Exam (Saxena, 2005; Prasad, 2008; Sharma& Bhardwaj, 2011), no formal research study has been undertaken indicating the effectiveness of the scheme and the perception of the students about this scheme. The present study is an effort to get actual feedback from the students who have appeared in On-Demand Exam as well as those who are willing to appear.

A study by Tripathi and Fozdar (2007) suggests to use multiple sets of question papers which will help in preventing the possibility of copying during examination in ODL system. Normally, it is not easy to set multiple sets of question papers, but the scheme of On-Demand Exam is basically based on the concept of individualized and unique sets of question papers of each student (Sharma, 2011)

1.2 Objectives of the study

The IGNOU has been doing innovative experiments to make the open and distance learning more learner friendly and useful for the varied group of distance learners to suit their needs. One of such experiments is the implementation of the scheme of On-Demand Exam. The scheme has been implemented for more than 135 courses of IGNOU through 15 Regional Centers. The present study was aimed at getting the student's perceptions about different aspects of the scheme of On-Demand Exam. The basic objectives of the study were:

- to assess the need of the scheme of On-Demand Exam;
- to ascertain the feasibility and effectiveness of the scheme for the learners;
- to discover the areas of improvement in the existing scheme;
- to identify the possible challenges and prospects of the scheme;
- to identify the areas of preferences of the IGNOU's learner for bringing new courses with in its orbit.
- to find out the difference in perception of the candidates those who have appeared in On-Demand Exam and those who have not appeared.

The report stands organized in five sections. Section 1 highlights the background of the scheme and give a brief review of literature. Section 2 provides a brief outline of the ODES in IGNOU. Section 3 presents the cliental of the study and basic characteristics of the database, while section 4 presents the findings of the study. Section 5 provides a brief summary and important conclusion of the paper.

2

Scheme of On-Demand Examination

A Study of Students' Perception of On-Demand Exam in IGNOU

Recognizing the importance, need and potential of On-Demand Examination at higher education level where majority of learners are employed or working somewhere, the National Centre for Innovations in Distance Education (NCIDE) at Indira Gandhi National Open University (IGNOU) has developed a comprehensive ICT enabled system of examination on-demand which not only provides the learners a facility to appear in the examination as per their preparation and convenience, but also provides automated examination management system covering all aspects except the evaluation of answer sheets.

The basic objectives of the scheme of on-demand examination in IGNOU are:

- to provide opportunity to the learners to appear in the examination whenever they feel prepared for examination after completing the minimum eligibility criteria,
- to reduce the possibility of malpractices in the examinations as each student may get different set of question papers,
- to minimize the fear of failure in the examination and thus saving the distance learner from frustration and depression,
- to improve the pass percentage of students in the university by giving chance to really motivated and prepared students to appear in the examination,
- to improve the reliability of examinations and to make evaluation a continuous process, and
- to reduce the load on the term end examinations of the University.

2.1 Architectural Design of the Scheme of On-Demand Exam

The scheme of On-Demand Exam is basically a blended approach of examination which has a mix of technology and traditional system of examination. For example, in this scheme of examination the registration for exam, payment of fee for registration, Hall tickets, generation of individualized question papers, delivery of question papers to the examination centres, attendance of students, sending of marks / awards after evaluation, declaration of result etc. are completely online i.e technology based, whereas the conduct of exam and evaluation of answer sheets is manual as in case of the traditional system of

examination. For web based components of the scheme, the National Centre for Innovations in Distance Education (NCIDE) has developed a software which takes care of almost all the above mentioned technology based aspects of examination including various other facilities to the Regional Centres and learners. The scheme of on Demand exam has basically three operational modules. Online Registration Module, Question Paper Module and Regional Centre Module.

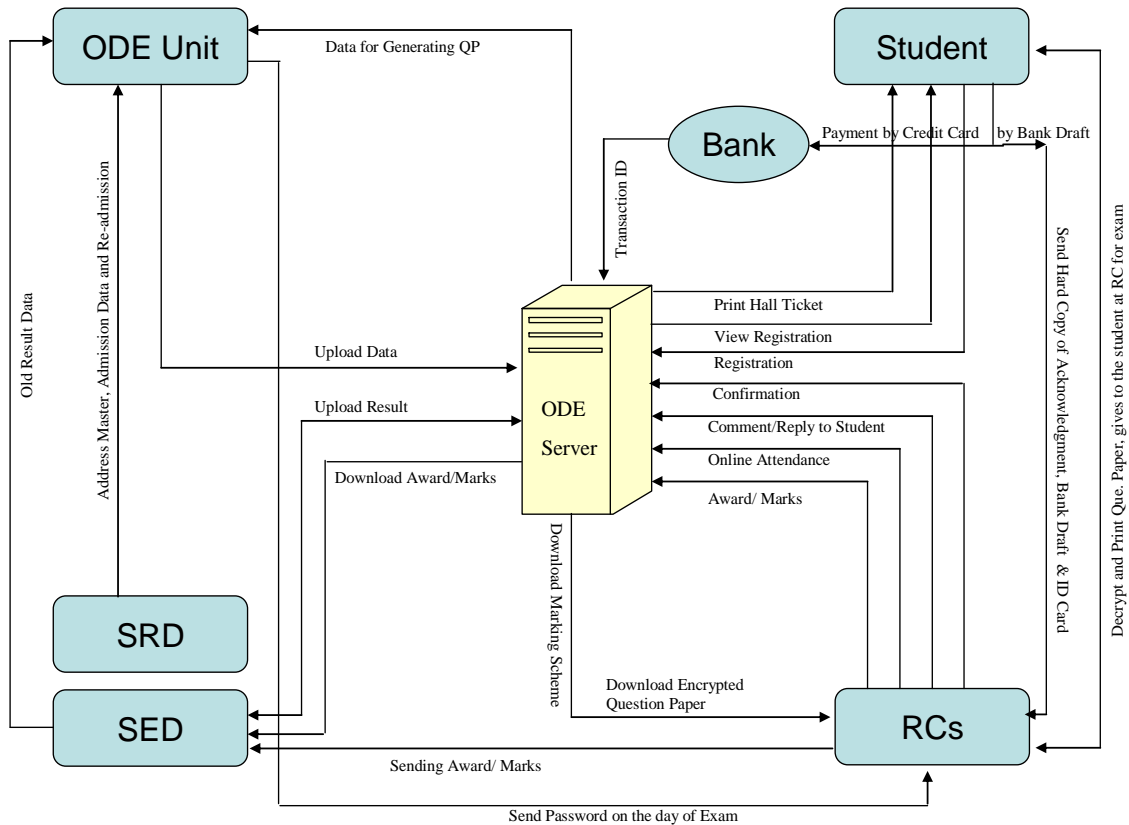
On-line Registration Module, using which the eligible students of IGNOU can register online for on-demand exam, anytime from anywhere and select date and exam centre from the given list as per their convenience. It provides open access for on-line registration for all eligible students of IGNOU. However, there is restricted access for registered students through unique registration number allotted automatically. The registered students can take print out of Hall Ticket and Acknowledgment Receipt. They can check status of their registration and result. The Registration Module has certain inbuilt Check Points such as only valid student can register for OD-Exam, one can not register for OD-Exam in the courses already passed, can not register on one exam date for more than one courses. As the online registration is linked with the database of the students, there is hardly any possibility of error in filling on-line registration form as the student has to mention only enrolment number, other fields are automatically taken from the database. For the same course re-registration can be made only once in a session after the result of previous exam is declared

Question Paper Module, which can generate instantaneously any number of unique question papers of comparable difficulty level as per the design and blueprint from the digital question bank. The question paper is automatically encrypted immediately after its generation, and the encrypted question paper is stored in the server. If it is decrypted at any system, the information regarding the date, time and IP address of the system is automatically received at the administrator server. Even if it is accessed at NCIDE, the record is there in the server.

Regional Centre Module which keeps the exam centres (here Regional Centers of IGNOU) updated with the records of students registered for OD-Exam at their centres with date, subject, names of students etc., and delivers them the requisite number of question papers online just before the exam and marking schemes a day after. There is also a facility using which the RC can send attendance on-line. Date wise list of students registered for OD-Exam, attendance sheets and blank award lists can also be downloaded by the concerned RC. Each RC is given a unique User ID and password to enter RC Module and access the information concerning ODE exam related to their centre. RC can not access the data pertaining to the students of other RCs. In addition to it, the Regional Director can send reply or comments to the registered candidates which they can see online by using their registration number. The students can also give their feedback on On-Demand exam. All these modules have multilayered security features, well defined accessibility and provisions for scalability. ICT enabled monitoring of the conduct of on-demand exam under web camera surveillance ensures fair and smooth conduct of OD-Exam.

On-Demand Exam

Entity Relation and Data Flow Diagram



2.2 Innovative Features of ODES

The scheme of On-Demand Exam is innovative, as it is a completely flexible and ICT enabled system of examination independent of the traditional fixed time frame, the student need not to wait for the six monthly examination. It makes use of ICT to solve problems which arise due to human limitations such as instant generation of parallel question papers, and authorised data entry at different points, leaving no chance for human error. In fact it is an initiative towards reforming the system of evaluation without abrupt changes in the prevailing system (Sharma and Bhardwaj, 2011). Some of the innovative features of the On-Demand Examination are as given below:

- The registration for On-Demand Exam is completely on-line. After ensuring the eligibility and receipt of registration fee, Hall Ticket indicating date, time and exam centre is issued on-line.
- There is inbuilt mechanism for checking the authenticity of the student's data, eligibility for the exam, validity of the admission etc. which ensures that only genuine learners are benefited.
- It has facility for multi mode registration–fee payment which includes on-line payment through credit card, bank draft and cash challan.

- The entire scheme of ICT Enabled examination on-Demand is an objective, reliable, valid and practical system. It is safe and secured and truly transparent.
- It is not only simple and user friendly but it is also cost effective and saves time and effort in setting question papers, in database management and in data transfer.
- It is capable of generating individualised question papers on the day of examination picking up the questions randomly from the question bank as per the blue print & design. Though each student may get a unique question paper, the various question papers are of comparable difficulty level.
- The question papers generated on the day of on-demand exam are automatically encrypted at the time of generation of questions paper. The encrypted question papers are made available online to the RCs which are decrypted by the authorised person using a specific decryption software and unique key generated along with the question papers which is different for different RCs. Moreover, the decrypted question papers can not be saved in the hard disc of any system.
- Each question paper has unique bar code and a unique question paper code having date and time of generation, with the help of which students' question paper and answer sheet can be matched at any later instant, if required
- Marking scheme for each question paper is also generated along with the question paper which can be accessed only after 24 hours of the On-Demand Exam.
- It has an inbuilt provision of backup of the database such as question papers generated and printed, changes made in the database etc. Log files are created in the server indicating the date, time and the IP address of the computer system from which the question paper is downloaded. Thus, there is a provision for keeping the track of the access of question papers.
- In this context it is to mention that, a provision has been made in the software by which the information about the date, time, name of the question paper and the address of the computer from which the question paper is downloaded, is automatically received in the administrator server at NCIDE. Thus, there is a provision for checking the track of access of question papers.

The question bank is the most important component for generating the required number of question papers for On-Demand Exam. Each question is coded – course wise, block wise and unit wise up to section level. Besides coding about the type of question (i.e. multiple choice, very short answer type, short answer type or long answer type) and marks allotted to it, the difficulty level and objective (i.e. knowledge, understanding and application) of the each question are also specified.

Question bank is got reviewed and moderated by a group of subject experts. The finalized Question Bank is converted into Database and sample papers are generated as per the blueprint and design of the question papers. The final database of course-wise question bank is stored in a password protected system in encrypted form and it can not be accessed by any body. For frequent updation and addition of new question items it is planned to give online authoring access to the Faculty and the experts.

3

Sampling Design and Database

A Study of Students' Perception of On-Demand Exam in IGNOU

In order to societies a feedback of students on different aspects of the scheme of On-Demand Exam in IGNOU, a questionnaire with 30 questions was prepared expecting students' response on a five point rating scale. In order to ensure the usability and reliability of the questionnaire, the draft questionnaire was first field tested on a group of 20 students and based on their suggestions and feedback it was revised and finalized.

As the scheme of On-Demand Exam is an application of the ICT for evaluation, the users i.e. the students are supposed to use the website of On-Demand Exam. Over the past one and half year it was noticed that the website was hit more than 70,000 times. Therefore, it was decided to administer the questionnaire online through OD Exam website. The questionnaire was converted into digital form and uploaded on website of OD-Exam in the month of August 2010. The questionnaire was made open for all visiting the website for three months. During this period a total 392 entries were received. The demographic characteristics of the participating cliental sample are shown in Table -1.

Table-1 : Demographic Profile of the Respondents

S.No.		Number	Percentage
1	Gender		
	Female	94	23.98
	Male	298	76.02
2	Age Group		
	Below 25	158	40.30
	25-35 years	189	48.22
	35-45 years	34	8.67
	45 and above	11	2.81
3	Locality		
	Rural	113	28.83
	Semi-Urban	60	15.31
	Urban	219	55.86
4.	Education Qualification		
	Doctorate	2	0.51
	Post Graduate	75	19.13
	Graduate	147	37.50
	Sr. Secondary	135	34.44
	Secondary	33	8.42
5.	Employment Status		
	Salaried Employed	197	50.25
	Self Employed	45	11.48
	Unemployed	150	38.27

The questionnaire consisted of two parts- the first part was related to the personal information whereas the second part had questions related to the On-Demand Exam, which have been subdivided into five main categories. i.e. utility of the scheme of OD exam, process of online registration, conduct of OD exam, quality of question papers, and desirability for extension of the scheme of OD exam.

3.1 Sample

Although the questionnaire was open for all visiting the website of On Demand Exam, a total 392 candidates submitted their filled in questionnaire online. It included the students of different programmes. Some of whom 17.35% have appeared in the On-Demand Exam while the rest 82.65% have shown their interest in the OD Exam. Out of these 392 respondents, 356 are students of IGNOU and remaining 34 are outsiders. A Demographic profile of the respondents reveals that it consists of 23.98% female and 76.02% male candidates.

About 53 % of respondents are related to Bachelor’s degree level programme, where as 35 % are related to Post Graduate degree level programme. Only 3.30 % are related to certificate, diploma or PG diploma level programme. About 8.70 % have not mentioned their programmes of studies. It appears that these respondents are not IGNOU’s students, but have shown their interest in On Demand Exam.

If all the states are kept in 6 zones i.e. North, South, East, West, Central and North-East, the majority of respondents 46.51 % are from North zone, followed by 20.06 % from South and 15.41 % from East zone. About 12.79 % of the respondents are from West 2.03 % from central and 3.20 % from North-East states. Out of the total 392 respondents 70 are those who have appeared in the On Demand Exam, whereas 322 responded have not registered or appeared in the On Demand Exam.

3.2 Analysis of the Profile of Respondents

Age Group: About 48.22% respondents represents the age group of 25-35 years and about 40.30% are below 25 years of age. It means, total 88.52% respondents are below 35 years of age. Only 11.48% of the respondents interested in On Demand Exam belong to the age group of above 35 years. It clearly indicates that the youth of our country is some how more interested in the scheme of On Demand Exam. May be because of some specific reasons, which need to be investigated further.

Sl. No.	Age Group in Years	Percentage
1	Below 25	40.30
2.	25-35	48.22
3.	Above 35	11.48

Respondents’ Geographical locale : As majority of the respondents i.e. 55.86% belong to the urban area and 15.31% to the semi urban area which indicates that about 71.16% of

them are from cities or towns where people may be more aware, educated and may have better access to the ICT and other facilities as compare to the rural areas.

Educational Background : From the point of view of educational qualification, it is found that majority of respondents 37.50% are graduate followed by 34.44% having Sr.Secondary level qualification. There are about 19.13% post graduate respondents. Two of the respondents i.e. 0.51% have doctorate qualification.

Respondents' Employment Status : More than 61.00% of the respondents are salaried employed or self employed. Around 39.00% are unemployed. It shows that the candidates who are employed or working somewhere, have displayed greater interest in the scheme of On-Demand Exam. May be, they want to save their time or may like to take advantage of the opportunity to appear in the exam as per their convenience without taking off from their offices.

Means of knowing about the Scheme of On-Demand Exam in IGNOU: In response to the question about how they came to know about the scheme of OD Exam, a majority of the respondents i.e. 77.18% have mentioned IGNOU's website as the main source of information. About 7.53% knew through news papers, 6.41% through study centres and 5.38% through their friends. It reveals that more publicity needs to be done about OD-Exam through news papers and other mass media. It should be publicised through study centres also.

4

Analysis of the Data and Discussion

A Study of Students' Perception of On-Demand Exam in IGNOU

The data collected in the present study was analysed and the student's perception of On-Demand Exam in IGNOU has been studied from different points of view. The findings obtained through analysis of the data revealed that most of the respondents are in favour of the innovative scheme of On-Demand Exam in IGNOU. The important findings of the present study are summarized below:

4.1 Students' Perception of On - Demand Exam

For the purpose of analysis of the data, the entire questionnaire has been divided into five sections i.e. utility of the scheme of OD-Exam, process of online registration, conduct of OD-Exam, quality of question papers and further expansion of the scheme. Section wise analysis of the result and findings are given below:

i) Students' Perception on Utility of the Scheme of On - Demand Exam

Out of 30 questions, 11 questions are aimed at knowing the students' perception of the utility and usefulness of the scheme of On-Demand Exam in IGNOU. Almost all the respondents have appreciated the new scheme of On-Demand Exam introduced by IGNOU. They say that it is a very innovative and student friendly scheme which their saves time, as most of them are employed.

Table -2 : Students' perception of utility of On Demand Exam

S No	Statement	SA	A	UD	DA	SDA	N	(\bar{x})	V	SD
1.	On-Demand Exam will help the motivated students to complete the programme without waiting for six monthly term end examination as per their preparation.	272 (80.95)	58 (17.26)	2 (0.60)	3 (0.89)	1 (0.30)	336	1.78	0.27	0.52
2.	On-Demand Exam will help to improve the results of IGNOU.	218 (66.87)	93 (28.53)	11 (3.37)	3 (0.92)	1 (0.31)	326	1.61	0.40	0.63
3.	On-Demand Exam will help students in their career.	227 (69.85)	88 (27.08)	8 (2.46)	1 (0.31)	1 (0.31)	325	1.66	0.33	0.57

4.	On-Demand Exam reduces examination related tensions of students.	222 (67.89)	84 (25.69)	10 (3.06)	9 (2.75)	2 (0.61)	327	1.57	0.54	0.74
5.	On-Demand Exam will reduce tendency of malpractices.	149 (46.86)	119 (37.42)	40 (12.58)	8 (2.52)	2 (0.63)	318	1.27	0.68	0.82
6.	On-Demand Exam will help students to complete their courses within specified maximum time limit.	223 (69.91)	79 (24.76)	11 (3.45)	4 (1.25)	2 (0.63)	319	1.62	0.45	0.67
7.	On-Demand Exam provides a facility for the employed students to appear in the examination without taking long leaves for so many days as in case of term end examination.	250 (79.87)	53 (16.93)	7 (2.24)	2 (0.64)	1 (0.32)	313	1.75	0.31	0.55
8.	On-Demand Exam inspires students to study.	192 (60.19)	96 (30.09)	20 (6.27)	9 (2.82)	2 (0.63)	319	1.46	0.62	0.79
9.	Provision of On-Demand Exam may help students to complete their courses in lesser time.	191 (61.81)	96 (31.07)	17 (5.50)	5 (1.62)	0 (0.00)	309	1.53	0.46	0.68
10.	The On-Demand Exam may be helpful in improving the result of those who have already passed a course, as in improvement schemes in other universities.	170 (58.42)	86 (29.55)	28 (9.62)	5 (1.72)	2 (0.69)	291	1.43	0.62	0.79
11.	The On-Demand Exam will reduce the possibility of drop out from the ODL system.	169 (58.48)	76 (26.30)	40 (13.84)	3 (1.04)	1 (0.35)	289	1.42	0.62	0.79

Notes: 1. SA-Strongly Agree (2), A-Agree (1), UD-Undecided (0), DA-Disagree (-1), SDA-Strongly Disagree (-2), N-Total, (\bar{X}) =Mean, V=Variance, SD-Standard Deviation.

Notes: 2. Figures in parentheses indicate percentage share of the total.

According to 98.21% respondents, the scheme of ODE will help the motivated students to complete their programme as per their preparation and convenience without waiting for six monthly term end exam. Around 96.80% agree with the statement that ODE provides a facility for the employed students to appear in the examination without taking long leaves for so many days as required of term end exam. It means, they can appear in different courses one by one whenever they get off from their offices without disturbing their office work. According to 94.67% respondents, ODE will help students to complete their courses within the specified maximum time limit. Moreover, 92.88% students feel that they can complete their courses in lesser time other wise normally more time is taken to complete the same programme. Around 88 % students feel that, the ODE may be help then to in improve upon then result of who have already passed a course, if allowed under performance improvement scheme. Around 95% respondents think that this new scheme of exam will help in improving the overall result of IGNOU and around 97% say that it will help students in their career growth also.

Further 92.58% students feel that the flexible scheme of ODE may reduce examination stress of the students. Around 90.28% students say that ODE will inspire students to study. It is important to mention that 84.78% respondents agree that ODE will reduce the possibility of drop out –from the ODL System. Moreover, more than 84% say that the ODE will reduce the tendency of malpractices also in the examination system, if, any.

ii) Students' Perception on the process of Online Registration for On-Demand Exam

As the scheme of On-Demand Exam is an ICT supported system of examination, a number of activities including the online registration for exam, exam fee payment, issue of Hall Tickets, delivery of question papers etc. are online. The responses to the statements 1, 2 & 3 gives in the table-3 have been analysed only for those who have appeared in or registered for OD-Exam. As their responses only can yield useful clues. Whereas item No 4 & 5 have been considered for all the respondents.

Table -3: Process of On-line Registration

S No	Statement	SA	A	UD	DA	SDA	N	(\bar{x})	V	SD
1.	The On-Line registration for On-Demand Exam is easy.	14 (33.33)	23 (54.76)	2 (4.76)	2 (4.76)	1 (2.38)	42	1.12	0.77	0.88
2.	The issue of Hall Ticket for appearing in the On-Demand Exam was satisfactory and correct.	18 (43.90)	19 (46.34)	2 (4.88)	2 (4.88)	0 (0.00)	41	1.29	0.60	0.77
3.	Online payment of exam fee for the On Demand Examination was hassle free.	17 (39.53)	21 (48.84)	4 (9.30)	1 (2.33)	0 (0.00)	43	1.26	0.52	0.72
4.	The user manual given in the website is useful for the students.	117 (40.77)	121 (42.16)	36 (12.54)	9 (3.14)	4 (1.39)	287	1.18	0.75	0.87
5.	The facility of On-Demand Exam can be availed by the computer savvy persons only.	67 (24.01)	86 (30.82)	61 (21.86)	44 (15.77)	21 (7.53)	279	0.48	1.50	1.22

Notes: 1. SA-Strongly Agree (2), A-Agree (1), UD-Undecided (0), DA-Disagree (-1), SDA-Strongly Disagree (-2), N-Total, (\bar{x}) =Mean, V=Variance, SD-Standard Deviation.

Notes: 2. Figures in parentheses indicate percentage share of the total.

According to majority of the respondents (88.19%) the online registration for On Demand Exam is easy and about 90.24% feel that the issue of Hall Ticket for appearing in the exam was satisfactory and correct. About 88.37% have said that the online payment of exam fee for On Demand Exam was hassle free and they did not face any problem in submitting fee for ODE. Majority of all the respondents i.e 83% have agreed that the user manual for ODE given on the ODE website quite is useful for them. However, 54.83% feel that the facility of ODE can be availed by the computer savvy persons only.

The implication of this is that computer savyness or also accessibility needs to be further augmented which even otherwise an accepted phenomenon, with the further rise of this which is growing in geometrical programming courses no reason for concern.

iii. Students' Perception on Conduct of On-Demand Exam & Declaration of Result

The items No.1 and 2 given in the table-4 have been analysed in view of the response of those who have appeared in the OD-Exam, whereas items 3, 4 & 5 have been considered for all the respondents.

Table -4 Conduct of On-Demand Exam & Declaration of Result.

S No	Statement	SA	A	UD	DA	SDA	N	(\bar{x})	V	SD
1.	The arrangement for On-Demand Exam at the Regional Centre was good.	13 (32.50)	19 (47.50)	6 (15.00)	1 (2.50)	1 (2.50)	40	1.05	0.80	0.89
2.	Coming down to regional centre for On-Demand Exam is very troublesome.	9 (21.95)	20 (48.78)	7 (17.07)	2 (4.88)	3 (7.32)	41	0.73	1.17	1.08
3.	On-Demand Exam should be conducted on public holidays so that the students need not to take leave for the exam.	139 (48.60)	93 (32.52)	33 (11.54)	13 (4.55)	8 (2.80)	286	1.20	1.00	1.00
4.	Frequency of conducting On-Demand Exam once in a week is OK.	165 (57.09)	96 (33.22)	15 (5.19)	7 (2.42)	6 (2.08)	289	1.41	0.74	0.86
5.	Result for On-Demand Exam should be announced within a month of the date of appearing.	185 (64.46)	74 (25.78)	19 (6.62)	4 (1.39)	5 (1.74)	287	1.50	0.68	0.82

Notes: 1. SA-Strongly Agree (2), A-Agree (1), UD-Uncecided (0), DA-Disagree (-1), SDA-Strongly Disagree (-2), N-Total, (\bar{x}) =Mean, V=Variance, SD-Standard Deviation.

Notes: 2. Figures in parentheses indicate percentage share of the total.

It is found that majority of the respondents (80.00%) who appeared in OD-Exam have said that the arrangement for OD-Exam at the Regional Centres was satisfactory. However, 70.73 % of them have said that coming down to Regional Centres for OD-Exam is trouble some. It may be because the facility of OD exam may not be nearby their residence.

According to 81.12% of the total respondents OD-Exam should be conducted on public holidays so that students need not to take leave for the exam. However, more than 90% are satisfied with the existing frequency of OD-Exam once in a week. Again more than 90% of all the respondents have desired that the result for OD-Exam should be announced within a month of the date of appearing in the exam.

iv. Students' Perception on Quality of Question Paper

The five items given in the table-5 are related to the quality of question papers used for On-Demand Exam. Therefore, the responses of only those candidates have been taken into account, who have appeared in the ODE.

Table -5: Quality of Question Paper

S No	Statement	SA	A	UD	DA	SDA	N	(\bar{x})	V	SD
1.	The question papers that you got in On-Demand Exam, covered the whole course.	18 (41.86)	20 (46.51)	4 (9.30)	1 (2.33)	0 (0.00)	43	1.28	0.53	0.73
2.	The question papers that you got in On-Demand Exam had clear instructions.	18 (41.86)	19 (44.19)	4 (9.30)	2 (4.65)	0 (0.00)	43	1.23	0.64	0.80
3.	The question papers that you got in On-Demand Exam could be answered in the stipulated time.	14 (31.82)	22 (50.00)	7 (15.91)	1 (2.27)	0 (0.00)	44	1.11	0.56	0.75
4.	The language of the questions in On-Demand Exam was clear and set the scope of the answer precisely.	13 (33.33)	20 (51.28)	4 (10.26)	2 (5.13)	0 (0.00)	39	1.13	0.62	0.79
5.	The English and Hindi version questions in On-Demand Exam paper help in understanding the questions better.	16 (40.00)	20 (50.00)	1 (2.50)	3 (7.50)	0 (0.00)	40	1.23	0.67	0.82

Notes: 1. SA-Strongly Agree (2), A-Agree (1), UD-Undecided (0), DA-Disagree (-1), SDA-Strongly Disagree (-2), N-Total, (\bar{x}) =Mean, V=Variance, SD-Standard Deviation.

Notes: 2. Figures in parentheses indicate percentage share of the total.

Analysis of the data given in the table 5 reveals that 88.33% of students found that the question papers covered the entire course. About 86.05% of them have said that instructions given in the question papers were clear. Around 81.82% have agreed that the question papers could be answered in the stipulated time. According to 84.61%, the language of the question papers was clear and set the scope of the answer precisely. Almost 90.00% candidates have agreed that the English and Hindi version questions question papers help in understanding in OD exam question better.

v. Students' Perception on Further Expansion of On-Demand Exam

The items given in the table-6 are related to the perception on the need of further expansion of ODE. For this purpose, the response of all the candidates have been considered

Table -6: Further Expansion of On-Demand Exam.

S No	Statement	SA	A	UD	DA	SDA	N	(\bar{x})	V	SD
1.	The facility of On-Demand Exam must be extended to all the Regional Centres of IGNOU.	209 (72.82)	66 (23.00)	10 (3.48)	2 (0.70)	0 (0.00)	287	1.68	0.33	0.57
2.	Facility for on-line registration for On-Demand Exam should be provided on all Regional Centres/study centres.	208 (71.72)	64 (22.07)	15 (22.07)	3 (1.03)	0 (0.00)	290	1.64	0.39	0.63
3.	The On-Demand Exam should be started in all the courses of IGNOU.	224 (77.51)	50 (17.30)	11 (3.81)	3 (1.04)	1 (0.35)	289	1.71	0.39	0.62
4.	Students appearing in On- Demand Exam should not be allowed to appear in the next Term End Exam.	48 (16.61)	44 (15.22)	29 (10.03)	53 (18.34)	115 (39.79)	289	0.49	2.35	1.53

Notes: 1. SA-Strongly Agree (2), A-Agree (1), UD-Undecided (0), DA-Disagree (-1), SDA-Strongly Disagree (-2), N-Total, (\bar{x}) =Mean, V=Variance, SD-Standard Deviation. Notes: 2. Figures in parentheses indicate percentage share of the total.

Around 96% of the respondents have desired that the facility of ODE must be extended to all the Regional Centres of IGNOU. About 93.79% of them want that the facility of online registration for ODE should be provided at all the Regional Centres and Study Centres. It will be very helpful for those students who do not have easy access to the computer and internet for Online registration. Almost 95% of the respondents have said that ODE should be started in all courses being offered by IGNOU. In response to the statement that a student appearing in ODE should be not allowed to appear in the next Term End Exam, only 31.83 students have agreed with the provision of not allowing in the next TEE. It means that majority of the students are in favour of allowing them both in OD exam and Term end exam.

4.2 Sub-Samples Analysis

The present sample had two categories of respondents, those who have appeared/registered for OD exam and other those who have not appeared in the OD exam. Therefore, a comparative analysis has been done and t-test has been applied to find out the significance of the difference of perception on various subcategories of the questions given in the questionnaire.

Table -7: Students' perception of utility of On Demand Exam

S. No.	Statement	Appeared in OD-Exam				Did not Appear in OD-Exam				t
		n ₁	\bar{x}_1	v ₁	SD ₁	N ₂	\bar{x}_2	V ₂	SD ₂	
1.	On-Demand Exam will help the motivated students to complete the programme without waiting for six monthly term end examination as per their preparation.	51	1.59	0.52	0.72	285	1.81	0.22	0.47	2.10
2.	On-Demand Exam will help to improve the results of IGNOU.	48	1.48	0.37	0.61	278	1.63	0.40	0.63	1.57
3.	On-Demand Exam will help students in their carriers.	50	1.42	0.40	0.64	275	1.70	0.30	0.55	2.94
4.	On-Demand Exam reduces examination related tensions of students.	49	1.35	0.55	0.74	278	1.62	0.53	0.73	2.36
5.	On-Demand Exam will reduce tendency of malpractices.	50	1.14	0.56	0.75	268	1.30	0.69	0.83	1.36
6.	On-Demand Exam will help students to complete their courses within specified maximum time limits.	49	1.33	0.51	0.71	270	1.67	0.43	0.65	3.10
7.	On-Demand Exam provides a facility for the employed students to appear in the examination without taking long leaves for so many days as in case of term end examination.	42	1.45	0.49	0.70	271	1.80	0.26	0.51	3.11
8.	On-Demand Exam inspires students to study.	47	1.26	0.53	0.73	272	1.50	0.63	0.79	2.06
9.	Provision of On-Demand Exam may help students to complete their courses in lesser time.	42	1.26	0.57	0.76	267	1.57	0.42	0.65	2.52
10.	The On-Demand Exam may be helpful in improving the result of those who have already passed a course, as in improvement schemes in other universities.	43	1.21	0.54	0.73	248	1.47	0.63	0.79	2.12
11.	The On-Demand Exam will reduce the possibility of drop out from the ODL system.	42	1.12	0.68	0.82	247	1.47	0.60	0.77	2.56

The comparative analysis of the means of the perceptions of the two categories of respondents regarding the utility of ODE, reveals that except two aspects i.e. the role of ODE in improving the result of IGNOU ($t=1.57$) and its role in reducing the tendency of mal practices in exam ($t=1.36$) the difference of mean is not significant. It means the respondents both who have appeared in ODE and those who have not appeared are not certain of the role of ODE in these two aspects. Where as for all other aspects, the difference is significant which indicates significant role of ODE.

Table -8: Process of On-line Registration

S. No.	Statement	Appeared in OD Exam				Did not Appear in OD Exam				t
		n_1	\bar{x}_1	v_1	SD_1	N_2	\bar{x}_2	V_2	SD_2	
1.	The On-Line registration for On-Demand Exam is easy.	42	1.12	0.77	0.88	249	1.15	0.75	0.87	0.21
2.	The issue of Hall Ticket for appearing in the On-Demand Exam was satisfactory and correct.	41	1.29	0.60	0.77	236	0.88	0.73	0.86	3.08
3.	Online payment of exam fee for the On Demand Examination was hassle free.	43	1.26	0.52	0.72	237	1.01	0.83	0.91	2.00
4.	The user manual given in the website is useful for the students.	43	1.12	0.75	0.87	244	1.19	0.75	0.87	0.49
5.	The facility of On-Demand Exam can be availed by the computer savvy persons only.	41	0.71	1.23	1.11	238	0.44	1.53	1.24	1.41

Comparative analysis of the perception of two groups on the aspect of online registration for ODE is easy reveals that through the individual group mean is in favour of the statement but there is a difference of significance on $t = 0.21$. It means those who have appeared in ODE have different perception on this aspect then those who have not appeared in ODE. However, regarding the online payment of registration fee, ($t = 2.0$) there is no difference of significance. Regarding usefulness of user Manual of ODE given on ODE website and requirement of computer savyness for using ODE, the difference of mean is not significance. i.e. both the groups agree with the hypothesis statements.

Table -9: Conduct of On-Demand Exam & Declaration of Result

S. No.	Statement	Appeared in OD Exam				Did not Appear in OD Exam				t
		n_1	\bar{x}_1	v_1	SD_1	N_2	\bar{x}_2	V_2	SD_2	
1.	The arrangement for On-Demand Exam at the Regional Centre was good.	40	1.05	0.80	0.89	228	0.68	0.93	0.96	2.38
2.	Coming down to regional centre for On-Demand Exam is very troublesome.	41	0.73	1.17	1.08	229	0.45	1.36	1.16	1.51
3.	On-Demand Exam should be conducted on public holidays so that the students need not to take leave for the exam.	43	1.12	0.80	0.89	243	1.21	1.03	1.01	0.60
4.	Frequency of conducting On-Demand Exam once in a week is OK.	41	1.07	0.90	0.95	248	1.46	0.69	0.83	2.48
5.	Result for On-Demand Exam should be announced within a month of the date of appearing.	43	1.23	0.69	0.83	244	1.55	0.66	0.81	2.34

The comparative analysis of the perception of two groups on the conduct of ODE and declaration of result shows that there is a significant difference of means of two groups on the statements 2 and 3 in the table-9, it means those who have appeared in ODE have

found that coming to the ODE centre is not convenient which necessitates to start ODE at as many locations as possible.

As regards the statements 1, 4 and 5 it is noticed that there is no significance of difference between the two groups.

Table 10: Quality of Question Paper

S. No.	Statement	Appeared in OD Exam				Did not Appear in OD Exam				t
		n ₁	\bar{x}_1	v ₁	SD ₁	N ₂	\bar{x}_2	V ₂	SD ₂	
1.	The question papers that you got in On-Demand Exam covered the whole course.	43	1.28	0.53	0.73	243	0.70	0.88	0.94	4.59
2.	The question papers that you got in On-Demand Exam had clear instructions.	43	1.23	0.64	0.80	242	0.70	0.85	0.92	3.91
3.	The question papers that you got in On-Demand Exam could be answered in the stipulated time.	44	1.11	0.56	0.75	239	0.70	0.80	0.89	3.23
4.	The language of the questions in On-Demand Exam was clear and set the scope of the answer precisely.	39	1.13	0.62	0.79	238	0.72	0.81	0.90	2.95
5.	The English and Hindi version questions in On-Demand Exam paper help in understanding the questions better.	40	1.23	0.67	0.82	240	1.04	0.89	0.94	1.33

The comparative analysis of the means of perceptions of two groups regarding the quality of question papers used in the ODE reveals that there is no significance of difference for the statements 1 to 4 as the $t > 2.0$ for all these cases. However, regarding the usefulness of the bilingual questions in the question papers, there is a significance of difference between the mean perceptions of two groups. It means perception of two groups. It means those who have appeared in ODE, have found it useful in understanding the questions better.

Table -11: Further Expansion of On-Demand Exam

S. No.	Statement	Appeared in OD Exam				Did not Appear in OD Exam				t
		n ₁	\bar{x}_1	v ₁	SD ₁	N ₂	\bar{x}_2	V ₂	SD ₂	
1.	The facility of On-Demand Exam must be extended to all the Regional Centres of IGNOU.	40	1.28	0.55	0.74	247	1.74	0.26	0.51	3.78
2.	Facility for on-line registration for On-Demand Exam should be provided on all Regional Centres/study centres.	41	1.37	0.48	0.69	249	1.69	0.37	0.61	2.79
3.	The On-Demand Exam should be started in all the courses of IGNOU.	41	1.34	0.52	0.72	248	1.77	0.34	0.58	3.63
4.	Students appearing in On- Demand Exam should not be allowed to appear in the next Term End Exam.	42	0.43	1.72	1.31	247	-0.65	2.28	1.51	4.82

Regarding the further expansion of ODE, the comparative values of means and standard deviations and the t value shows that there is no significant difference between the perceptions of two groups which indicates that all the respondents whether they have appeared in ODE or not are in favour of further expansion of the scheme of On-Demand Exam in terms of exam centres and courses. Interestingly the response to the statement 4

in the table – 11 reveals that in case of those who have not appeared the mean value of response is -0.65 where as in case of the appeared candidates it is 0.43 but the t value is very high (i.e. $t = 4.82$). It means both the groups are against this statement.

4.3 Suggestions by the Respondents

In response to the open feedback and suggestions, many of the respondents have given valuable suggestions also. Some of them are summarized below:

- (i) The facility of the On Demand Exam should be started in all programmes and courses especially at the graduation level because graduation is the minimum criteria for any job or courses to enter.
- (ii) The On-Demand Exam should be started at other Regional Centres also as soon as possible.
- (iii) Some of the students have suggested to conduct On Demand Exam on Sunday or Saturdays, whereas some other students wants it to be conducted every day.
- (iv) It will be very helpful to those students whose maximum duration is going to be completed. It will not only save career of such students but will motivate them for further studies.

Some of the students' have pointed out certain problems also which needs to be addressed for smooth and effective functioning of the scheme of On-Demand Exam, such as some times the internet does not work or server does not accept the registration forms, similarly the declaration of result of on-Demand exam takes too much time which discourages them to opt for ODE.

5

Findings and Recommendations

A Study of Students' Perception of On-Demand Exam in IGNOU

The analysis of the result of the present study reveals that all the students of IGNOU have appreciated the scheme of On - Demand Exam and majority of them want it to be extended to all the courses through maximum number of Regional Center of IGNOU. However, the important findings of the study are given below :

- The scheme of On-Demand Exam is still more flexible scheme of exam which may help the learners to appear in the examination as per their preparation and convenience.
- On Demand exam inspires the student to study and may reduce examination related stress of students.
- The quality of question papers used in On Demand Exam are better having clear instructions.
- The online registration process for On Demand Exam is easy and hassle free. However, for using the facility of On-Demand Exam, basic knowledge of using computer and internet is required.
- The facility of On-Demand Exam should be extended to all the Regional Center of IGNOU and there should be provision of facilitating the student's registration for On - Demand Exam at the Regional Centres also.
- The present frequency of conducting On-Demand Exam once in a week is sufficient but the respondents want the On-Demand Exam to be conducted on public holidays mainly on Sundays so that the student need not to take leave from their offices.
- Most of the students are not satisfied with the time taken in declaration of the On-Demand Exam result. They want the result to be declared within one month after the date of appearing in the exam.
- The maximum demand is for starting On - Demand Exam in different courses of MCA, BCA BEd and BDP.

6

Summary and Conclusion

A Study of Students' Perception of On-Demand Exam in IGNOU

On the basis of the analysis of the data and findings it can be concluded that majority of the respondents including those who have appeared in ODE and those who have not appeared in the ODE, have appreciated the scheme of OD-Exam and have said that this innovative scheme will be very helpful in appearing in the exam as per their preparation and convenience and thus will help them in completing their programmes without waiting for six monthly term end exam. The scheme of OD-Exam being a more flexible scheme may help students in reducing the exam related tension. Thus when a student gets an opportunity to appear in the examination as per his/her choice and preparedness, it is expected to perform better. The ODE has added one more dimension in the openers and flexible nature of the ODL system. The ODE can be more useful in better implementation of the scheme of Flexi learn where students are allowed to register course wise and take exam whenever they want. In fact, it can be considered a step towards fast track assessment system where anybody may walk in for instant assessment of the prior knowledge and ask for certification. Particularly in ODL system, where majority of students are working or employed, the scheme of examination On-Demand needs to be expanded for all courses through more examination centres.

Because of some unique features of the scheme like instant generation of individualized and unique question papers, it can be used for continuous and comprehensive evaluation with more transparency and efficiency.

Though the findings of the study are encouraging and useful for improving the system, it is important to mention that the study has certain limitations also. For example, the sample of the study includes only those who visited ODE website which may not be considered as a representative of the entire target group. As an extension of the study, another study focusing on the analysis of the question papers covering different aspects like different types of questions, language of questions, coverage of syllabus and objective of the questions etc. could be taken up for the purpose of improving the quality of question paper.

7

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