

# ROLE OF UGC AND INFLIBNET IN THE DEVELOPMENT OF ELECTRONIC LIBRARY IN INDIA: A BOON IN DIGITAL EDUCATION

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**Abstract:** Traditional methods and patterns of work in all field has replaced by day-to-day tremendous change take place in the field of Information Technology, Information & Communication Technology and Satellite Technology. Similarly old Library Management System has been also replaced by above technology. The process of digitization of documents in libraries is going on to full-fill the needs of dissemination. These digitized documents are changing the pattern of educational system in India as well as abroad. The new education system based on Internet, Online Courses, Online Cataloguing, Video lecture etc.. This paper focuses on the contribution of UGC and INFLIBNET in electronic library in India at present.

**Keywords:** SWAYAM; SWAYAM Prabha and Vidya Mitra.

**1.0 Introduction:** Technological revolution has been changed the pattern and style of every work. The traditional library management system has been also replaced by innovative management system. Information & Communication Technology (ICT), Information Technology (IT), Satellite Technology (ST), World Wide Web (WWW), Internet Protocol Address (IPA), Electronic Portal System (EPS), Databases and Electronic Storage Devices (ESDs) have been created a new pattern of education system in India including library and their management system also.

Online courses are being conducted by different academic institutions and organizations through audio, video and Skype lecture classes in India as well as abroad also. Compact Disk (CD), Digital Versatile Disk (DVD), External Hard Disk (EHD), Internal Hard Disc (IHD), Memory Card (MC) has been made easy and more effective classroom lecture. These are also made easy to access and retrieve of electronic documents of library. All the above technologies and their components has been changed the academic system at school level to University level.

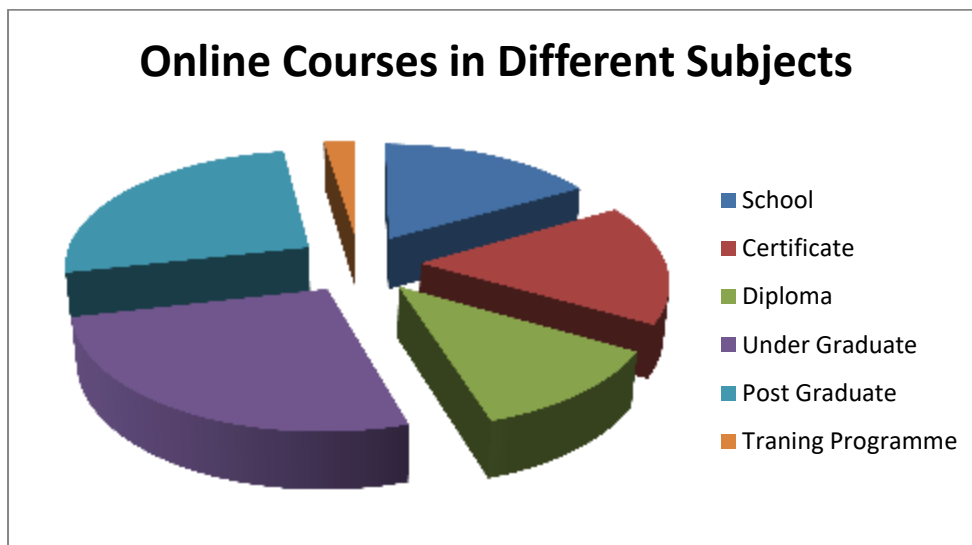
## **2.0 SWAYAM:**

The University Grant Commission (Credit Framework for Online Courses through SWAYAM) Regulation, 2016 has provisioned to made online education in India. SWAYAM (Study Web of Active Learning by Young & Aspiring Minds) is an Information Technology platform was established by Ministry of Human Resource Development, Government of India on 11 March, 2017. The main objective of this project is to conduct Massive Open Online Courses (MOOCs) in higher education through easy to access of e-documents with saving the valuable time and its cost in remote areas. The courses is being completed by dissemination of knowledge through online learning, regular classroom lectures, video/audio lectures, animation classes, access from virtual library, access from digital library, access from electronic library. As well as databases, e-books, and Protected Document Files (PDF) also helps in dissemination of knowledge at any time anywhere basis. SWAYAM has been launched various online courses such as School level Courses, Certificate Courses, Diploma Courses, Under Graduate Courses, Post Graduate Courses and special courses on the teacher training through providing of electronic documents/ electronic course materials. Some of themes are showing in the table-1.

**Table-1 – Showing Different Electronic Courses and Subjects**

Sr. No	Online Courses Name	Subjects	Total Online Courses
1	School	7 (16.66%)	47 (6.56%)
2	Certificate	7 (16.66%)	16 (2.23%)

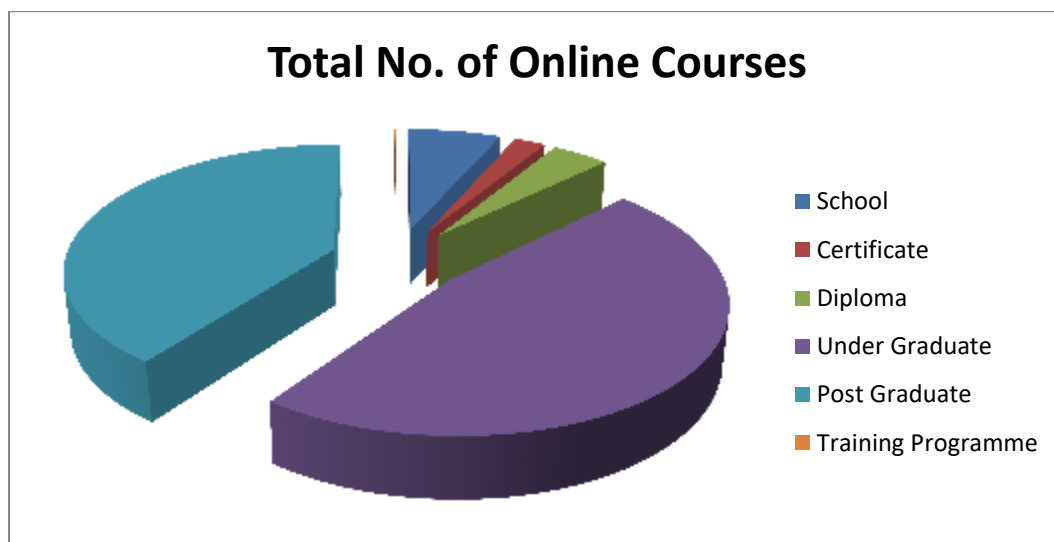
3	Diploma	5 (11.90%)	29 (4.05%)
4	Under Graduate	11(26.19%)	338 (47.20%)
5	Post Graduate	11(26.19%)	285 (39.80%)
6	Training Programme	1 (2.38%)	1 (0.13%)
Total	6	42 (100%)	716 (100%)



**Fig 1-Showing subject wise percentage in Online Courses**

Fig-1 shows that different type of online courses have available in different areas of knowledge. After passing out of 10<sup>th</sup> class students can be applied to select seven subjects such as Arts and Recreation, Education, Humanities, Language, Management, Mathematics and Science to complete the course.

Certificate courses are being conducted in General, Library, Management, Education and Art and Recreation. Similarly diploma courses have been also conducted in Arts and Recreation, Education, Engineering, Humanities and Science. Under graduate courses are being conducted in Science, Mathematics, Library, Language, Humanities, General, Engineering, Education and Arts and Recreation. Post graduate courses are being conducted in Arts and Recreation, Commerce, General, Humanities, Language, Library, Management, Mathematics, Science. Training Programme for untrained teachers is being also conducted in Elementary Education.



**Fig 2-Showing Total Number of Online Courses**

Fig-2 Shows that total number of online courses available at different stages of certificate, diploma and degrees. Total 47 courses are being conducted at school level. 16 courses at certificate level, 29 courses at diploma level. As well as 338 courses have been conducted at graduate level and 285 courses have also conducted at post graduate level. Only one training programme is being conducted for untrained teachers in India.

The above all online courses in different subjects are being a symbol of initiation of electronic education system in India.

### 3.0 SAWAYAM Prabha:

Department of Higher Education, Ministry of Human Resource Development, Government of India has established an educational project called Swayam Prabha on 9<sup>th</sup> July, 2017 at Vigyan Bhavan, New Delhi. This portal is maintained by INFLIBNET Centre which is Inter University Center of UGC. This Project is working based on GSAT-15 satellite technology of Indian Space and Research Organization (ISRO). The orbital location of this satellite is 93.5 east, receiving frequency of channels from 1-16 is 11590 MHz and the receiving frequency of channels from 17-32 is 11670MHz.

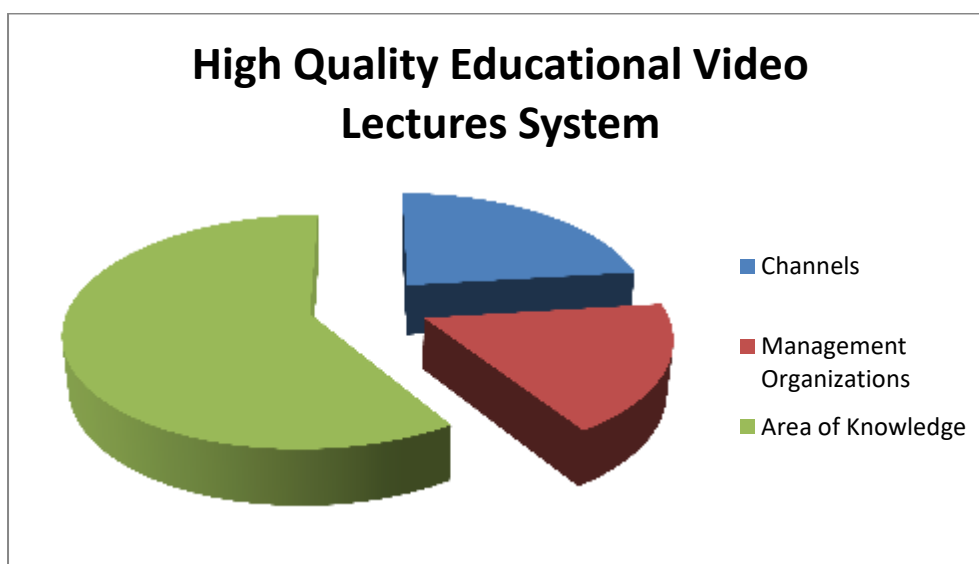
Actually this project is a group of 32 channels which are responsible for telecasting of high quality education based video lectures 24x7. The unique quality of these video lectures is being repeated 6 times in 24 hours. Each channel is responsible for telecasting of high quality video lectures on specific area of knowledge. These are shown in table-2.

**Table 2 Showing Different Channels**

Channels No.	Managing Organizations	Area of Knowledge
1	EMRC, EFLU, Hyderabad	3
2	CEC, New Delhi	5
3	CEC, New Delhi	4
4	CEC, New Delhi	5
5	EMRC/MCRC/Jamia Millia Islamia, New Delhi	5
6	EMRC, Punjabi University, Patiala	5
7	EMRC, Gujarat University, Ahmedabad	3
8	EMRC, University of Calicut	5
9	EMRC, Kashmir University, Srinagar	5
10	EMRC, Anna University, Chennai	3
11	IIT, Kharagpur	3
12	IIT, Delhi	2
13	IIT, Kharagpur	2
14	IIT, Delhi	3
15	IIT, Madras	2
16	IIT, Kanpur	2
17	IIT, Kanpur	2
18	IIT, Tirupati/ IIT, Madras	4
19	IIT, PAL-1/IIT, Delhi	1
20	IIT, PAL-2/ IIT, Delhi	1
21	IIT, PAL-3/ IIT, Delhi	1
22	IIT, PAL-4/ IIT, Delhi	1
23	IGNOU, New Delhi	2
24	IGNOU, New Delhi	3
25	IGNOU, New Delhi	1
26	IGNOU, New Delhi	1
27	NIOS, New Delhi	1
28	NIOS, New Delhi	1
29	IIT, Madras	2
30	IIT, Madras	1
31	NCERT, New Delhi	2
32	IGNOU and NIOS, New Delhi	1
<b>32</b>	<b>25</b>	<b>82</b>

Table-2 shows 32 channels, every channel has responsibility to telecast of high qualities video lectures on the specific areas of knowledge. The channel number 1 has three areas of knowledge such as Humanities-1, Language and Literature. The Channel number 2 has 5 areas of knowledge such as Humanities-2, Arts, History,

Philosophy and related Knowledge. The Channel 3 is telecasting on Social Science-1, Sociology, Political Science and related knowledge. The channel 4 is telecasting on Social Science 2, Education, Psychology, Home Science and related knowledge. The channel 5 is telecasting on Social Science-3, Management, Library Science, Information Science and related Knowledge. The channel 6 is telecasting on Social Science-4, Law, Legal Studies, Human Rights and related knowledge. The channel 7 is telecasting on Economics, Commerce and Finance. The channel 8 is telecasting on Physical Science, Mathematics, Physics, Chemistry and related knowledge. The channel 9 is telecasting on Life Science, Botany, Zoology, Bio-Science and related knowledge. The channel 10 is telecasting on Applied Sciences, Allied Physical & Chemical Sciences and related knowledge. The channel 11 is telecasting on Chemical Engineering, Chemistry and related knowledge. The channel 12 is telecasting on Civil Engineering and related knowledge. The channel 13 is telecasting on Computer Science and Engineering. The channel 14 is telecasting on Electrical Engineering, Electronics and Communication Engineering and related knowledge. The channel 15 is telecasting on Engineering Sciences and general knowledge for Engineering. The channel 16 is telecasting on Humanities, Social Science and Management. The channel 17 is telecasting on Mechanical Engineering and related knowledge. The channel 18 is telecasting on Mathematics, Physics, Metallurgy and related knowledge. The channel 19 is telecasting only one on Biology. The channel 20 is telecasting also only one on Chemistry. The channel 21 is telecasting on the Mathematics only. The channel 22 is telecasting on the Physics only. The channel 23 is telecasting on Liberal Arts and Humanities. The channel 24 is telecasting on Agriculture, Vocational and Allied Sciences. The channel 25 is telecasting on the Culture only. The channel 26 is telecasting on the State Open University Programs only. The channel 27 is telecasting on the Secondary School Education only. The channel 28 is telecasting on Higher Secondary School Education only. The channel 29 is telecasting on live classes in Engineering and Technology. The channel 30 is telecasting only one on Mathematics. The channel 31 is telecasting on School and Teacher Education and channel 32 is telecasting on the Teacher Education only.

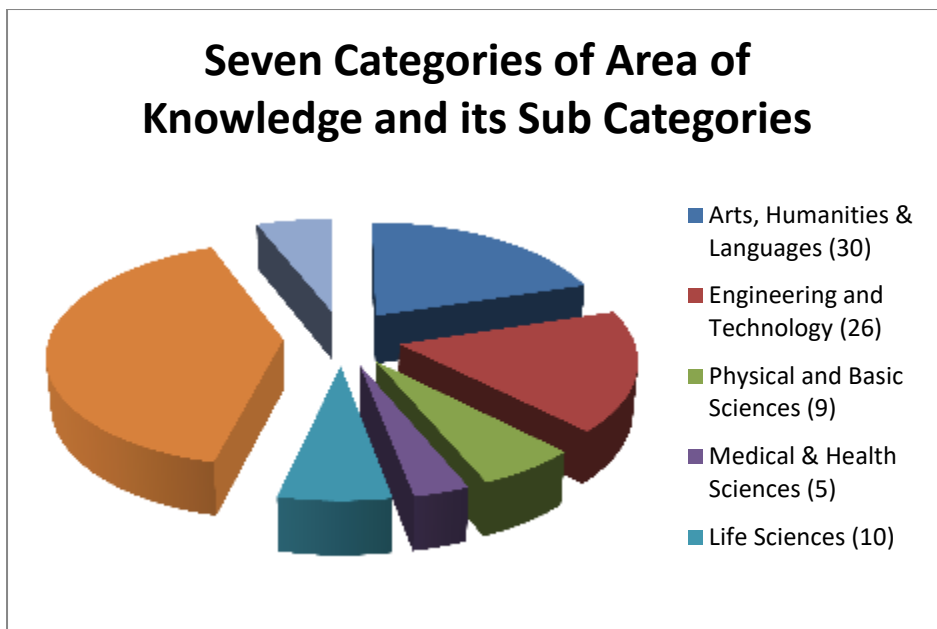


**Fig 3-Showing Components of Educational Video Lectures System**

Fig 3 shows about the components of a system which are really responsible for giving output on high quality video lectures on different areas of knowledge. In these system 32 channels, about 25 managing organizations and almost 82 areas of knowledge are acting as components of this system. The unique quality of this system of education is that untrained teachers in services can get their trained certificate without leaving from its service period and make sure service for the age of retirement. A period of year 2019 was the dead line given by government of India, the untrained teachers will be not eligible for the post of a teacher at school level in India. As well as the students will get their benefits in remote areas of India with this system of education.

#### **4.0 Vidya Mitra:**

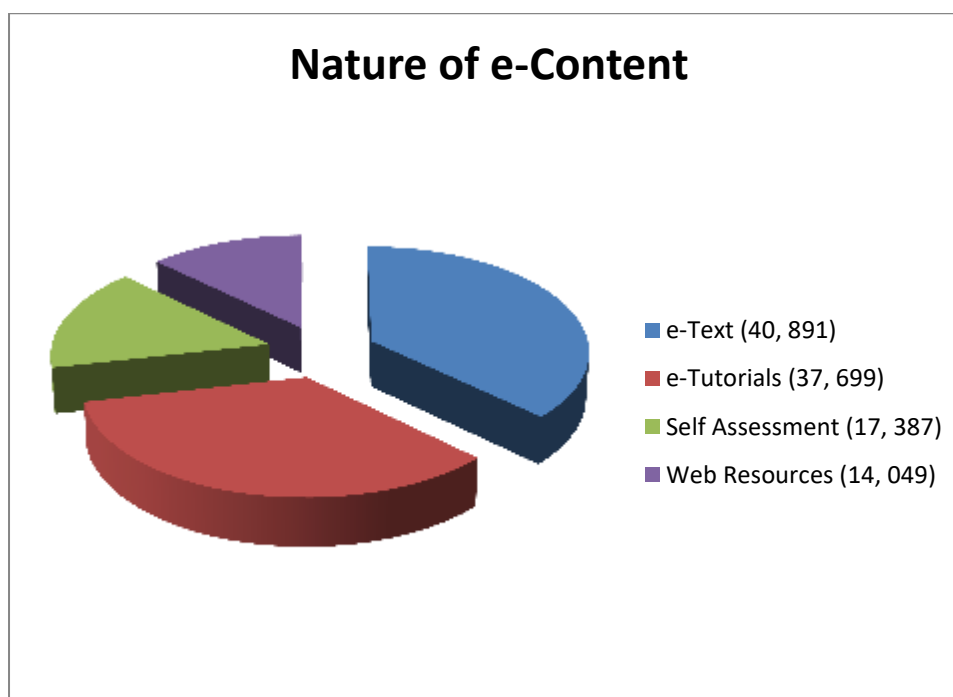
Vidya Mitra is an integrated web based e-contents platform. This platform has founded and funded by Ministry of Human Resource Development, Govt. of India and developed by Inter University Center of University Grant Commission. The main objective of this platform is to provide a new pattern of education through Information and Communication Technology for all specially in remote areas. This pattern of education has applicable from school level to Universities level. The e- contents related to different areas of knowledge has arranged in seven categories and many number of sub categories also. These are shown in figure 4.



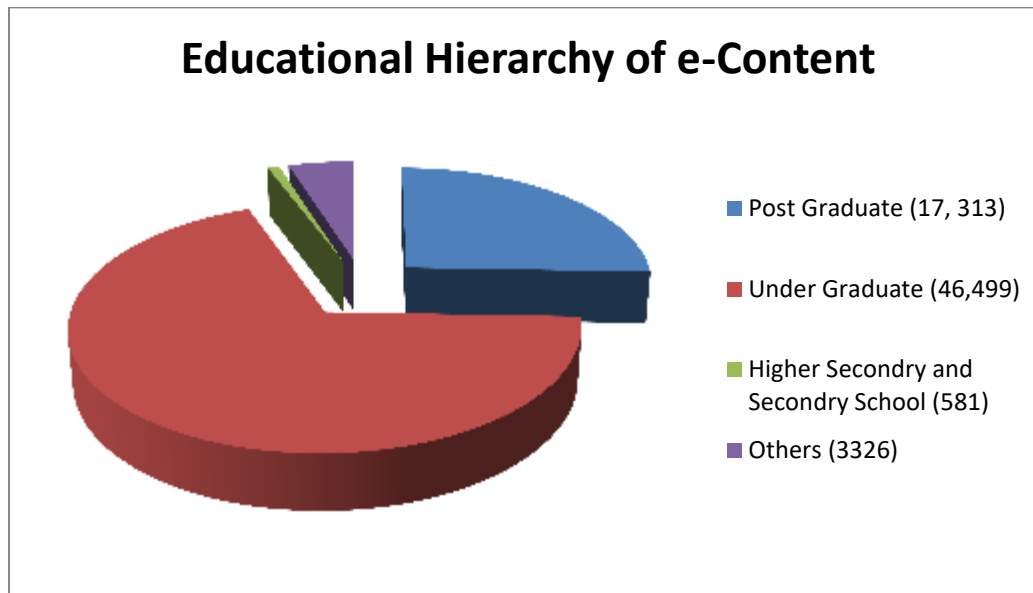
**Fig 4 Showing Area of Knowledge at Vidya Mitra**

Fig- 4 shows that all the knowledge at Vidya Mitra has been classified into seven main categories. The 1<sup>st</sup> main category is Arts, Humanities & Languages are again classified into 30 types of sub categories of knowledge. The 2<sup>nd</sup> main category is Engineering and Technology again classified into 26 types of sub categories of knowledge. The 3<sup>rd</sup> main categories Physical and Basic Sciences are again classified into 9 types of sub categories of knowledge. Similarly the 4<sup>th</sup>, 5<sup>th</sup>, 6<sup>th</sup> and 7<sup>th</sup> main categories have also classified into respectively 5, 10, 60 and 9 types of sub categories of knowledge.

On the basis of nature of e-contents at Vidya Mitra these are classified into four categories i.e. e-text, e-tutorials, self-assessment and web resources. These are showing in the figure-5



**Fig-5 Nature of e-Contents at Vidya Mitra**



**Fig-6 Showing Educational Hierarchy of e-content at Vidya Mitra**

On the basis of hierarchy of educational system in India, the e-contents at Vidya Mitra has also classified into four groups. These are shown in fig-6. These all above e-contents in different areas of knowledge can be search by name of titles, Institutions, Subjects, Post graduate, Under Graduate, Senior Secondary and Secondary as well as others materials also.

#### **5.0 Conclusion:**

On the basis of above explanation, author may conclude that Information Technology, Information & Communication Technology, World Wide Web, Internet Connectivity and sufficient amount of electricity have change the pattern of education system with changing in library management also. National Mission on Education through Communication and Information Technology, Ministry of Human Resource Development, Govt. of India has also played a vital role in providing of e-contents in different areas of knowledge. Due to these activities the role of physical library system will be replaced by electronic library system. Out of these advantages of technologies the maximum peoples and educational organizations of India are suffering from minimum requirement of foods, literacy and lac of basic infrastructures in educational organizations especially in remote areas. On the urgent basis there is a need to solve these above Problems and then we can get actual and exact benefits of above advantage of technologies.

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