

## **Application of Technology with Special Reference to Pondicherry University Library**

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### **1. INTRODUCTION:**

The University Library named after ANANDA RANGAPILLAI was established in September 1986 and it serves the students, Research Scholars, Members of the Faculty and Non-Teaching Staff of the University. The Library functions during the months of March, April, October and November between 8.30 a.m. and 12.00 p.m. (Library Annexure-Reading Hall ) and it functions on all the days of the week (i.e. 9:30 A.M. to 10.00 P.M. on week days and 9:30 A.M. to 5:30 P.M. on weekly holidays and six public holidays. Reprographic and photocopying facilities, E-Journals access service, Internet access service, E-mail service and CD-ROM Journals Databases access service are provided to the Students,. The Library has a centrally air-conditioned Journals Reading Hall, Theses & Dissertation Halls & UN Depository Section. From the year 2012(Nov) onwards, Library has introduced RFID Surveillance with CCTV were commissioned by Prof. J.A.K. Tareen Library has Libsys7.0 module for house keeping activities. Library has got Annexure building (Reading Hall) from 2015 onwards

### **About the Section :**

Computer based Library Services are provided from this section. All sections of the Library have been connected through LAN. Computer Data Base of the holdings of the Library has already been created using the Library Management Software LIBSYS. Maintaining Hardware and Software, Providing Internet; E-Journal and CD-ROM access services, Maintaining Library Databases, RFID self check –in and check-out Kiosks 24x7 Book Drop facility, RFID WI-Fi wand for stock verification , locating books and identifying misplaced books. Surveillance Gates to alert unauthorised exit of books from the Library. RFID multipurpose ID card generated

using Smart card reader and creating Membership details etc. are some of the activities of the I.T. section. Moreover,

Library Collection		Data as on 31.03.2017	
<b>1. Total Library Collections (Print + E-Resources)</b>		<b>(217467 185071)</b>	<b>+402538</b>
<b><u>Total Library Collections (Print)</u></b>		<b>217467</b>	
Total no. of Books (including 942 Major Reference Works)		208908	
Total no. of Ph.D. Theses	779		
Total no. of M.Phil. Dissertations	4962		
UN Documents	2818		
<b><u>Total E-Resources</u></b>		<b>185071</b>	
E-Books (including 4413 Major Reference Works)	159894		
E-Journals	24235		
E-Databases	46		
E-Theses	896		
<b>2. Total Journals (Print + E-Journals)</b>		<b>(13352 24235)</b>	<b>+37587</b>
<b><u>Total Journals (Print)</u></b>	242	<b>13352</b>	
Current Subscription			
National	107		
International	135		
Back volumes	13110		
<b><u>Total E-Journals</u></b>	9761	<b>24235</b>	
UGC INFONET			
PU Subscription	14474		
<b>3. E-Resources Usage:- Jan - Dec 2016</b>		<b>1102240</b>	
<b>4. Details of Publications</b>	<b>Source: SCOPUS (as on 9.5.2017)</b>		
a) No. of Publications		<b>4177</b>	
b) h-index		<b>65</b>	
c) Citation Index (CI)			<b>8.26</b>

### **AUTOMATION ACTIVITIES**

A number computer servers and workstations are installed in the University Library for Modernising and Automation of the Library operations and Services. The Library resource materials have been computerised by using LIBSYS software. The LIBSYS software is an integrated Library Management Software used for library automation.

The various sections that are automated are :

1. Acquisition Section
2. Catalogue Section
3. Circulation Section
4. Periodicals (Journals) Section
5. Binding Section
6. U.N. Documents Section
7. Theses Section
8. Office of the Librarian

### **Computer Facilities :**

<b>Item Description</b>	<b>Nos.</b>
SCO Unix Server	1
Linux Server	2
CD-Mirror Server	2
Workstations	46
Color Laser Printer	2
B/W Laser Printer	5
132 Col. Dot Matrix Printer	5
80 Col. Dot Matrix Printer	2
High Resolution Scanner	1

### **Barcoding of Library Resources :**

Apart from automating of the above sections, as part of modernising the University Library all the Books, Theses, Bound Volumes, U.N. Documents, Reports, etc. are Barcoded. Initially, the barcoding work was outsourced and now the work is being done by the I.T. Section of the Library.

### **Barcoding of Membership Identity Cards :**

The Faculty, Non-Teaching Staff, Research Scholars and Students of the University are issued a single barcoded Membership cum Library Identity card. The users of the library can use the same Identity card for borrowing books.

**Affixing Computer Generated Spine Labels :**

Our University Library is following Dewey Decimal Classification (DDC) system to classify the Library resources. The classification scheme is used for efficient storage and retrieval of Library resources. The books in the stacks are arranged according to the classification numbers. Any user wants to refer/find a book, he has to search in the relevant stack area. The classification number of any book could be obtained from the OPAC terminals. The Spine Labels, which bears the classification numbers of books, theses, etc. are generated by the system and affixed on the spine of the Book. Theses, etc..

**I.T. SERVICES:****On-line Public Access Catalogue (OPAC) Service:**

The computerised bibliographic details of the books, theses, reports, U.N. documents, etc. are available in the library through the **OPAC** (On-line Public Access Catalogue) service. Three computer systems are provided to the users of the library for this service. The users can search the databases in different ways, viz:

- Author
- Title
- Subject
- Classified
- Words within title
- Any other Keywords using Boolean Operators

In addition to that, the availability of journals issues and bound volumes are also obtained using the OPAC service. Whenever a journal issue is arrived, the same is entered immediately in the computer and hence the availability of journal issues can be accessed from the system. In addition the details of books borrowed by the members can also be seen.

Most of the users of the Library are using the On-line Public Access Catalogue to find the holdings of the University Library. The following databases are available on OPAC :

- BOOKS DATABASE
- SERIALS DATABASE
- THESES DATABASE
- REPORTS DATABASE
- U.N. DOCUMENTS DATABASE

Users can avail the OPAC facility on intra-net through the browser based WEBOPAC module.

**CD-ROM Database Search Service :**

The University Library has acquired two numbers of CD-MIRROR server. Both the Abstract/Index CD-ROMs and Full Text CD-ROMs of the Journal Databases are mirrored in the CD-MIRROR servers. Around 2000 journals from various subjects are covered by the CD-ROM databases.

The users can browse the databases through Keywords, Publication, Author, ISSN, etc. This facility can be availed through the campus-wide Intranet also. The following CD-ROM journals databases are available with the Library.

CD-ROM Database	Period
<b>General Periodicals on Disc (GPO)</b>	1988-1997, 2000-2002
Business Periodicals on Disc (BPO)	1991-1997, 2000-2002
Social Science Index	1994-1997, 2000-2002
INSPEC – Physics	1996-1997, 2000-2002
Life Science Collections	1992-1996
Energy and Environmental	1984-1996
Ulrich+	1996
Biological Abstracts	1995-1997

**E-Journals(On-line) Access & Internet Service :**

E-journals are the result of rapid development of Internet facility in the Libraries. It is most useful to the Research Scholars and other users of the library. The scholarly journals available on-line can be browsed and searched in different ways and thereby save the search time of the users.

Pondicherry University is subscribing to some of the E-journals and E-journal databases. The INFLIBNET Centre through its UGC-INFONET consortia also provided On-line access to more than 2000 scholarly journals covering different subjects like Physics, Chemistry, Computer Science, Management, Arts and Humanities, etc.

Pondicherry University is provided 8 MBPS internet connectivity through radio link. The library is providing full time internet connectivity for the students and other users. Twenty computer systems are provided to the users of the library to access the above facilities. All the On-line Journals are available on the Intranet. The usage of the internet and e-journals services are regulated through allotting one hour slot during the working hours of the library.

**Information & Library Network (INFLIBNET) of UGC:**

INFLIBNET is to be a computer-communication network for linking Libraries and Information centres in Universities, Deemed Universities, UGC Information Centre, etc.

Pondicherry University Library, being a part of the INFLIBNET programme of UGC, covered under phase I, has been associated from the beginning, in all the deliberations regarding INFLIBNET. Library database creation work has been carried out as per the standards approved by the INFLIBNET Centre, Ahmedabad. Pondicherry University

Library is identified as one of the core libraries in contribution towards Compilation of Union Catalogue by INFLIBNET.

On-line access to more than 2000 scholarly journals (e-journal access) has been provided to the Pondicherry University by the INFLIBNET Centre through its UGC-INFONET consortia.

#### UGC INFONET CONSORTIUM E-JOURNALS:

*Pondicherry University Library has been provided online access to the E-Journals subscribed under UGC INFONET PROGRAMME by the INFLIBNET Centre of UGC as detailed below:*

#### List of Resources provided under UGC-Infonet E-Journals Consortium As on 31-03-2008

Pondicherry University, Pondicherry

Sl. No	Name of the Publisher	Number of Journals	Website address
1.	American Chemical Society (1876)	31 Journals	<a href="http://www.pubs.acs.org/">http://www.pubs.acs.org/</a>
2.	American Institute of Physics	18 Journals	<a href="http://www.aip.org/">http://www.aip.org/</a>
3.	American Physical Society	10 Journals	<a href="http://www.aps.org/">http://www.aps.org/</a>
4.	Annual Reviews	29 Journals	<a href="http://arjournalsannualreviews.org">http://arjournalsannualreviews.org</a>
5.	Biological Abstract	One Database	<a href="http://web5.silverplatter.com/webspirs/start.ws">http://web5.silverplatter.com/webspirs/start.ws</a>
6.	Blackwell	489 Journals	<a href="http://www.blackwell-synergy.com/">http://www.blackwell-synergy.com/</a>
7.	Cambridge University Press	189 Journals	<a href="http://journals.cambridge.org/">http://journals.cambridge.org/</a>
8.	Elsevier Science	34 Journals	<a href="http://www.sciencedirect.com/">http://www.sciencedirect.com/</a>
9.	Institute of Physics	36 Journals	<a href="http://www.iop.org/EJ/">http://www.iop.org/EJ/</a>
10.	J-Stor	457 Journals	<a href="http://www.jstor.org/">http://www.jstor.org/</a>
11.	MathSciNet	One database	<a href="http://web5.silverplatter.com/webspirs/start.ws">http://web5.silverplatter.com/webspirs/start.ws</a>
12.	Nature	1 Journal	<a href="http://ww.nature.com">http://ww.nature.com</a>
13.	Oxford University Press	169 Journals	<a href="http://www.oup.co.uk/">http://www.oup.co.uk/</a>
14.	Portland Press	4 Journals	<a href="http://www.portlandpress.com">http://www.portlandpress.com</a>
15.	Project Euclid	18 Journals	<a href="http://projecteuclid.org">http://projecteuclid.org</a>
16.	Project Muse	222 Journals	<a href="http://muse.jhu.edu/journals/">http://muse.jhu.edu/journals/</a>

17.	Royal Society of Chemistry	23 Journals + 6 databases	<a href="http://www.rsc.org/">http://www.rsc.org/</a>
18.	SciFinder Scholars	1 database	<a href="http://www.cis.org">http://www.cis.org</a>
19.	Siam	14 Journals	<a href="http://www.epubs.siam.org">http://www.epubs.siam.org</a>
20.	Springer & Kluwer	1217 Journals	<a href="http://www.springerlink.com/">http://www.springerlink.com/</a>
21.	Taylor & Francis	1105 Journals	<a href="http://journalsonline.tandf.co.uk">http://journalsonline.tandf.co.uk</a>

Total No. of Journals

▪ Full Text	:	4053
▪ Abstracts	:	10000
▪ Databases	:	8
▪ Encyclopedia	:	1

**9.2.1.2 ELSEVIER – SCIENCEDIRECT E-JOURNALS (ONLINE)**

“ScienceDirect”-A database of journals published by ELSEVIER is available online, on annual subscription for the year 2008

**(i) SUBJECT BACKFILES:**

(Journals From Volume 1 to December 1994)  
[Access from January 2004 to Perpetual]

Sl.No	Subject	No. of Journals
1.	Biochemistry, Genetics and Molecular Biology	108
2.	Earth and planetary Sciences	93
3.	Economics, Econometrics and Finance	59
4.	Environmental Science	77
5.	Inorganic Chemistry	9
6.	Materials Science	101
7.	Organic Chemistry	8
8.	Physics General	70
	Total	525

The above 8 Subject Backfiles of ScienceDirect were subscribed at a one time cost of Rs.63,96,140/- (6 Subjects Backfiles Rs.48,85,683/- (+) 2 Subjects Backfiles Rs.15,10,457/-) (Non-Plan A/c 2003-04 & X-Plan A/c 2004-05) respectively.

**9.2.1.3 EBSCO Publishing: Online Journals.**

EBSCO Publishing Ltd –online Publishing company of U.S.A. provides access to the electronic databases viz. Academic Search Premier and Business Source Premier the

cost of this combination and the premier payment would be US\$ 27,500/-The difference of US\$ 9,350 from the earlier package would have additional 15,000 full text Publications with great back files.

Database Name	No. of Journals	
	Abstract Level	Full Text
Academic Search Premier	8,250*	More than 4,500 title*
Business Source Premier	-	More than 2,300 titles+
Total	8,250	6,800
* Peer Reviewed Journals 3,700		
* PDF Images	100	
+ Peer Reviewed Journals 1,100		

### 9.2.1.3 ANNUAL REVIEWS ARCHIVES:

Annual Reviews (Electronic Back Volumes) Archives covering a comprehensive collection of Annual Reviews back Volumes with content spanning from Biomedical Sciences, Physical Sciences and Social Sciences dating back to the very first volume of Annual Reviews in 1932 and upto 2002 on perpetual access.

The coverage of subjects are as follows:

#### Biomedical Sciences:

1. Biochemistry : 1930s-2002 (Vol.1-71)
2. Biomedical Engineering : 1999-2002 (Vol.1-4)
3. Biophysics : 1970s-2002 (Vol.1-31)
4. Cell and Development Biology : 1980s-2002 (Vol.1-18)
5. Ecology, Evolution and Systematic : 1970s-2002 (Vol.1-33)
6. Entomology : 1950s-2002 (Vol.1-47)
7. Genetics : 1960s-2002 (Vol.1-36)
8. Genomics and Human Genetics : 2000-2002 (Vol.1-3)
9. Immunology : 1980s-2002 (Vol.1-20)
10. Medicine : 1950s-2002 (Vol.1-53)
11. Microbiology : 1940s-2002 (Vol.1-56)
12. Neuroscience : 1970s-2002 (Vol.1-25)
13. Nutrition : 1980s-2002 (Vol.1-22)
14. Pharmacology and Toxicology : 1960s-2002 (Vol.1-42)
15. Physiology : 1930s-2002 (Vol.1-64)
16. Phytopathology : 1960s-2002 (Vol.1-40)
17. Plant Biology : 1950s-2002 (Vol.1-53)



*Application of Technology with Special Reference to Pondicherry University Library 2335*

18. Psychology : 1950s-2002 (Vol.1-53)  
 19. Public Health : 1980s-2002 (Vol.1-23)

**Physical Sciences:**

20. Astronomy and Astrophysics : 1960s-2002 (Vol.1-40)  
 21. Biomedical Engineering : 1990s-2002 (Vol.1-4)  
 22. Biophysics : 1970s-2002 (Vol.1-31)  
 23. Computer Science : 1980s-1990 (Vol.1-4)  
 24. Earth and Planetary Science : 1970s-2002 (Vol.1-30)  
 25. Environment and Resource : 1970s-2002 (Vol.1-27)  
 26. Fluid Mechanics : 1960s-2002 (Vol.1-34)  
 27. Material Research : 1970s-2002 (Vol.1-32)  
 28. Nuclear and Particle Science : 1950s-2002 (Vol.1-52)  
 29. Physical Chemistry : 1950s-2002 (Vol.1-53)

**Social Sciences:**

30. Anthropology : 1970s-2002 (Vol.1-31)  
 31. Environment and Resources : 1970s-2002 (Vol.1-27)  
 32. Political Science : 1990s-2002 (Vol.1-5)  
 33. Psychology : 1950s-2002 (Vol.1-53)  
 34. Public Health : 1980s-2002 (Vol.1-23)  
 35. Sociology : 1970s-2002 (Vol.1-28)

**E-Journals (Online) Access Availability from the year 2008 An Abstract**

Sl. No	Publisher/Aggregator/ Consortium	Current E-Journals			Back Files E-Journals Full Text	National Site License (Encyclopaedia)
		Full Text	Abstract	Databases		
1.	Annual Reviews Archives	-	-	-	35	-
2.	EBSCO Publishing Ltd.	3,181	2,119	-	-	-
3.	Elsevier Science Direct	763	-	-	525	-
4.	UGC Infonet E-Journals Consortium	4,053	10,000	8	-	1
	Total	4,007	12,119	8	560	1

**CONCLUSION**

Information Technology thus provides greater avenues for easy access to information and providing efficiency of the library system. Time has come for library personnel to equip themselves appropriate training to serve better and benefit from the improved system. In the present scenario, all the libraries irrespective of their library collections should take imitative for computerisation and automation of services in the libraries to serve the user communities in a better and quicker manner

**REFERENCES**

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