

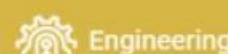
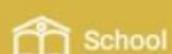


SESSION2-ICT

01-04-2024

@UNIFY STU

ASI BHARATHI

National
Digital Library
of Indiaestd.
who
NDLI**Purpose****2016****TEST PREPARATION****STUDY AT HOME****COVID-19 RESEARCH REPOSITORY****FEATURED COLLECTIONS**

NDLI - National Digital Library of India -2016



2018

- provides a host of services including textbooks, articles, videos, audiobooks, lectures, simulations, fiction, and all other kinds of learning media for the learners/users community.
- Pilot launch: May 2016
- Dedicated to the nation: June 19, 2018, by Union HRD Minister Prakash Javadekar

- Sponsored by Ministry of Education, Govt. of India
- Developed by IIT Kharagpur
- Integral to NMEICT
- Single-window platform for diverse digital learning resources
- Accessible to all demographics



Expert Database & National Researcher's Network

HOME

ABOUT US

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REGISTRATION

FEEDBACK



Vidwan-ID : 338116

Edit Profile



Vidwan Score

6.1



ARTICLES



BOOKS



AWARDS

Ms THULASI BHARATHI

SRIDHARAN

Assistant Professor

St.Joseph's College

Publications 2018 - 2023



Profile

- Personal Information
- Expertise Information
- Experience
- Education Qualification
- Honours and Awards
- Professional Bodies

Publications

5	1	1
Journal Articles	Book	Awards

Similar Experts
(9418)
Partha Pratim Chakrabarti
Computer Science
Artificial Intelligence
Sujoy Ghosh
Computer Science
Artificial Intelligence
Anupam Basu
Computer Science
Artificial Intelligence
Malati Hegde
Computer Science
Artificial Intelligence
Anandi Giridharan
Computer Science
Artificial Intelligence[View More](#)Same Organisation
(1635)

Google Scholar



E-VIDWAN- Expert Database and National Researcher Network-2012

HISTORY:

- University Expert Database launched in 1999 for academic experts.
- Expert Database in Science and Technology developed in 2001 for R&D experts.
- Merged in 2012 to form VIDWAN with modern features.
- EXPERT DATABASE *University Expert Database (1999)+ Expert Database in Science and Technology (2001)*
- = E-VIDWAN

- VIDWAN: Premier database of scientists/researchers in India.
Information & Library Network
- Developed by INFLIBNET with NME-ICT support.
- Provides expert profiles, contact info, publications, skills.
- Used for expert selection in govt. committees.



https://nad.gov.in/index.html



A^W



...



Government of India | Ministry of Education



Skip to main content

Skip to navigation



NATIONAL ACADEMIC DEPOSITORY (NAD)
University Grants Commission

nibble, bit



NATIONAL ACADEMIC DEPOSITORY
Transparency & Transformation Through Digitization

Home

About NAD

Benefits

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Academia

Student

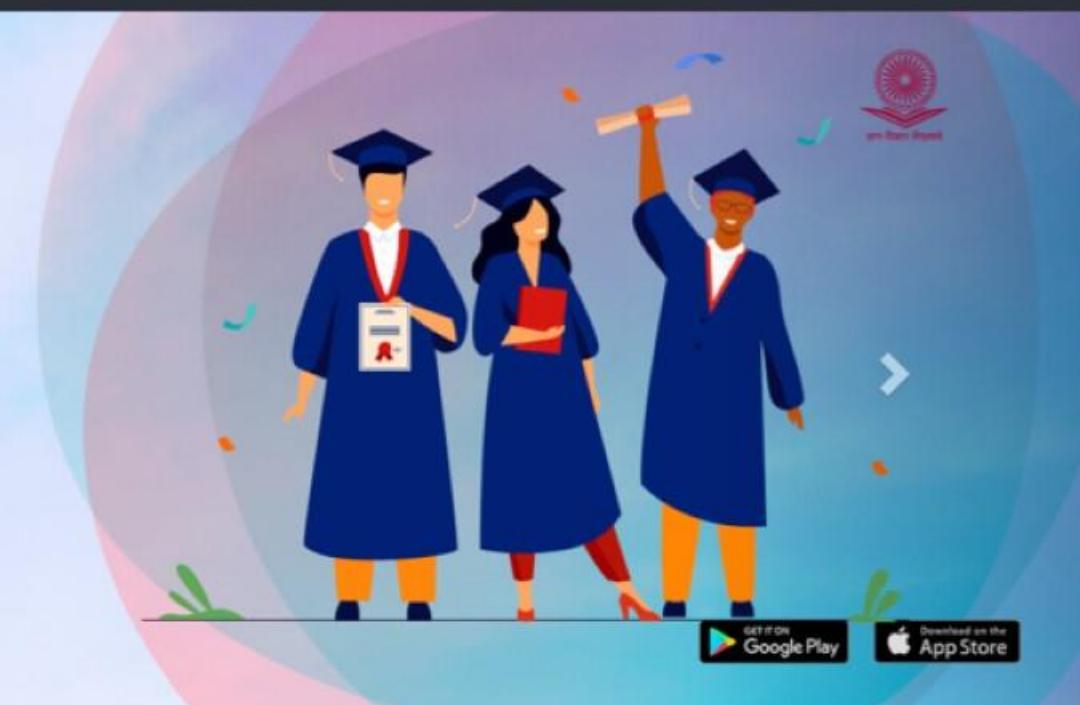
Verifier



National Academic Depository Brings Academic Awards into Students Locker

UGC NAD is a 24x7 Online Storage for Accessing and Verification of Awards

Register Now



GET IT ON
Google Play Download on the
App Store



UGC NET/SET COMPLETE COURSE JUNE 2024



NAD - National Academic Depository - 2017

↳ DigiLocker

- NAD: 24x7 online repository for academic awards.
- Stores certificates, degrees, mark-sheets digitally.
- Ensures easy access, authenticity validation, and safe storage.
- The Ministry of Education (MoE) has designated University Grants Commission (UGC) as an authorized body to implement NAD as a permanent scheme by a single depository i.e. DigiLocker an entity owned by the Ministry of Electronics and Information Technology (MeitY).



NATIONAL ACADEMIC DEPOSITORY

Transparency & Transformation Through Digitization
Organisation logo.

Abbreviation	NAD
Formation	17 July 2017 (6 years ago)
Type	Government Scheme
Headquarters	New Delhi, India
Parent organization	University Grants Commission (UGC), Ministry of Education (MoE)
Website	nad.gov.in



A horizontal banner for the ANIMATE 2024 conference. On the left, there's a blue circular logo with a gear and a stylized tree, followed by the text "fossee" in a red box with "DESIGNE" underneath. Below this, the text "FOSSEE MT BOMBAY Presents" is written in red. To the right is a white triangle pointing right, containing a silhouette of a person pointing upwards towards a lightbulb. The word "ANIMATE" is written in large, bold, white letters, with "2024" in smaller letters to its right. Below "ANIMATE" is the tagline "Create | Express | Inspire". To the right of the main title are several white icons on a red background: a clock, a gear, a target, a lightbulb, a person at a desk, and a person holding a megaphone. A large white square is on the far right.



NME/C

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"The most unfortunate thing is that India still seems to believe in proprietary solutions. Further spread of IT which is influencing the daily life of individuals would have a devastating effect on the lives of society due to any small shift in the business practice involving these proprietary solutions. It is precisely for these reasons open source software need to be built which would be cost effective for the entire society.

In India, open source code software will have to come and stay in a big way for the benefit of our billion people."

- Dr. A.P.J. Abdul Kalam

Projects

FOSSEE (Free/Libre and Open Source Software for Education) project promotes the use of FLOSS tools in academia and research. The FOSSEE project is part of the National Mission on Education through Information and Communication Technology (ICT), Ministry of Education (MoE), Government of India. Below is the list of projects which are promoted by FOSSEE.



FOSSEE -Free/Libre and Open Source Software for Education -2008- IIT BOMBAY

FOSSEE develops and promotes various open-source software tools for use in teaching, learning, and research across different disciplines. The initiative also conducts workshops, training programs, and creates educational resources to support educators, students, and researchers in utilizing open-source software effectively.

~~Scilab~~: Numerical computing software.

~~Python~~: Versatile programming language.

~~eSim~~: Electronic design automation tool.

~~Osdag~~: Structural engineering GUI platform.

~~DWSIM~~: Chemical process simulator.

~~OpenFOAM~~: Computational fluid dynamics software.

- ~~OpenModelica~~: Modelica-based simulation environment.
- ~~OpenPLC~~: Open-source PLC software for industrial automation.
- FLOSS Arduino: Open-source Arduino platform.
- ~~Single Board Heater System~~: Educational thermal dynamics platform.
- ~~R Language~~: Statistical computing language.
- ~~QGIS~~: Open-source GIS software.
- ~~FOCAL Soul~~: Finite element analysis software.



An MoE Project

National Mission on Education through ICT
(NME-ICT)[HOME](#)[STUDENT CORNER](#)[QUIZ](#)

Welcome to

e-PG Pathshala

A Gateway to all Post Graduate Courses

About e-PG Pathshala

e-PG Pathshala is an initiative of the MHRD under its National Mission on Education through ICT (NME-ICT) being executed by the UGC.

[Read More](#)

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e-PG Pathshala – NMEICT -2014



e-Adhyayan (e-Books)

e-Adhyayan is a platform to provide 700+ e-Books for the Post-Graduate Courses. All the e-Books are derived from e-PG Pathshala courses. It also facilitates play-list of video content.



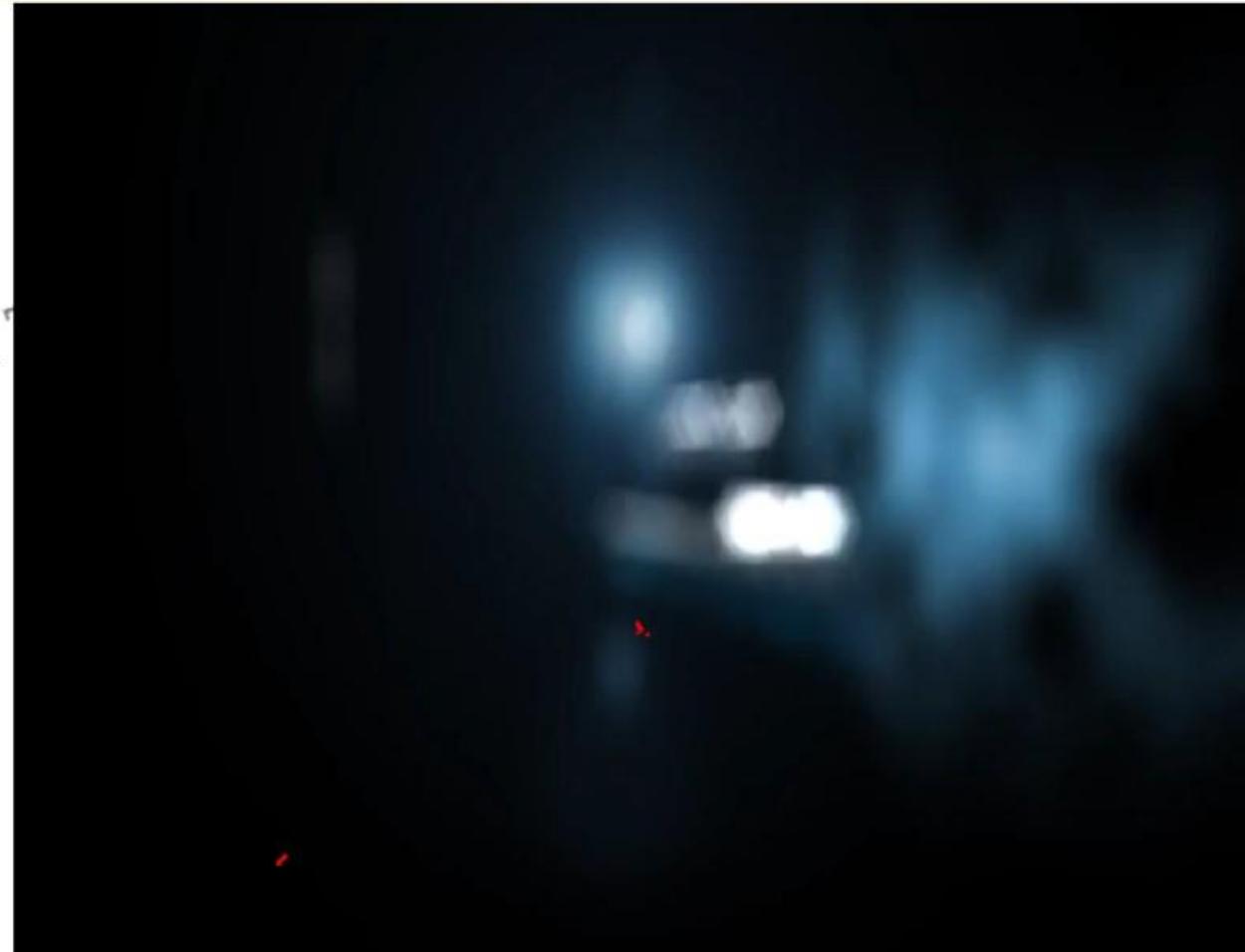
UGC MOOCs (Online Courses)

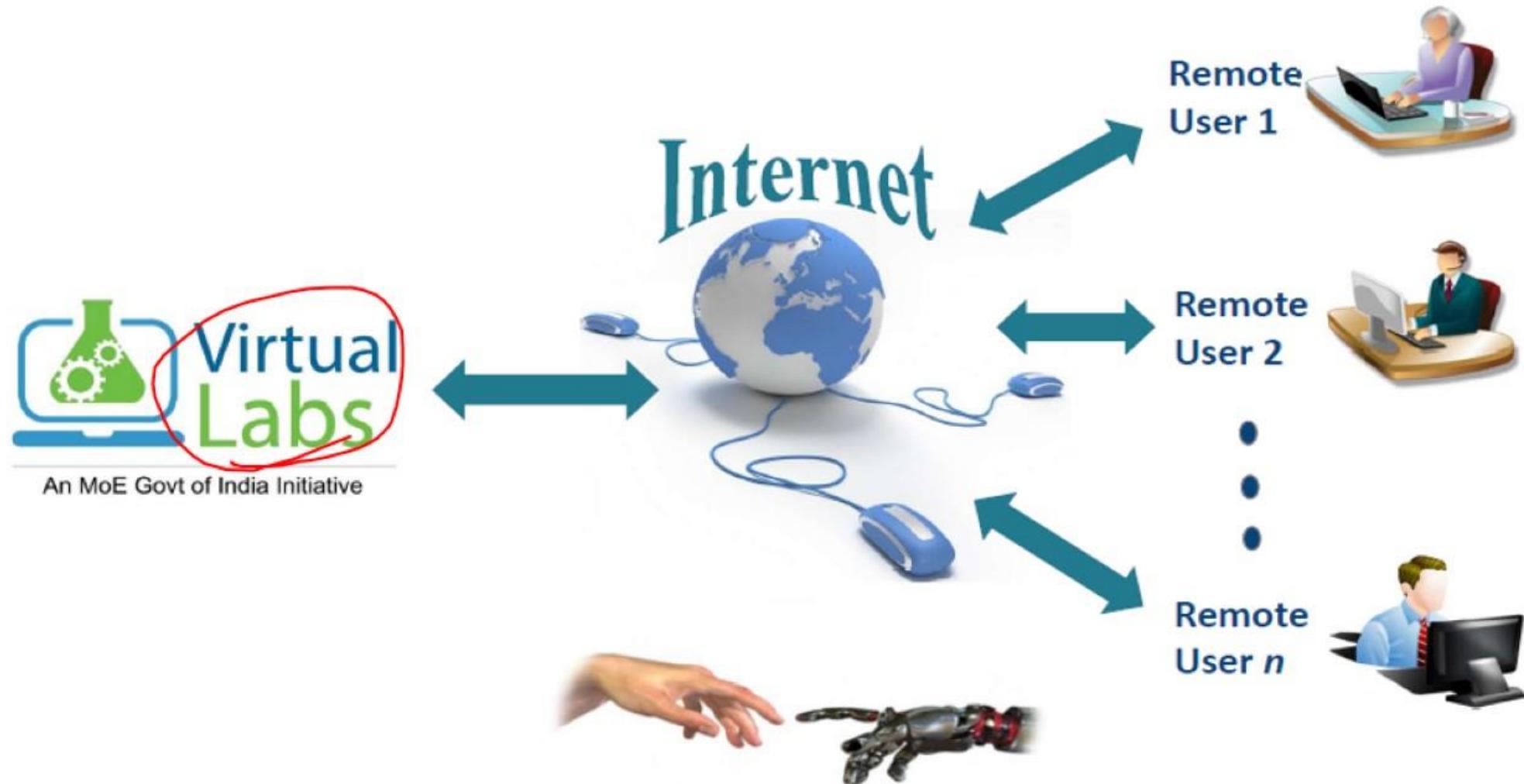
UGC-MOOCs is one of vertical to produce course on Post Graduate subjects in SWAYAM (Online Courses, An MHRD initiatives). UGC is one of the national coordinator of SWAYAM & INFLIBNET is technical partner for UGC-MOOCs.



e-Pathya (Offline Access)

e-Pathya is one the verticals of e-PG Pathshala which is software driven course / content package that facilitates students pursuing higher education (PG level) in distance learning as well as campus learning mode. it also facilitate offline access.





VIRTUAL LABS- PILOT PHASE **2009** – MAIN PHASE – **APRIL 2010**

- Virtual Labs: MoE initiative under NMEICT.
- Coordinated by IIT Delhi WITH total of **11 participating institutes** in the consortium
- Introduces remote experimentation.
- Offers 100+ Virtual Labs with 700+ web-enabled experiments.
- The simulations-based experiments can be accessed remotely via internet.





Repository of Research in Progress & PG Dissertations

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Repository of Research in Progress/Synopses MRPs/ PDFs/ Emeritus Fellowship Reports

Search Synopsis in Shodhgangotri

[Advanced Search](#)[Browse Title](#)

TOTAL

13663

SYNOPSIS

13575

MRPs

26

PDFs

46

Fellowship

5

PG Dissertations

5

UGC NET/SET COMPLETE COURSE JUNE 2024



Shodhganga :

Shodhganga: a reservoir of Indian theses is a digital repository of theses and dissertations submitted to universities in India. [Wikipedia](#)

Access requirements: Free digital access, online and downloadable

Director: J P Singh Joorel; Manoj Kumar K; Scientist-E (CS)

Established: 2011

Location: India

Parent organisation: INFLIBNET Centre, University Grants Commission (UGC), Ministry of Education, Government of India

Reference to legal mandate: UGC (Minimum Standards and Procedure for Award of M.PHIL./PH.D Degrees) Regulations, 2016

Size: 359378 full-text thesis; 8657 synopses

- Synopsis in "ShodhGangotri" would later be mapped to full-text theses in "ShodhGanga".
- As such, once the full-text thesis is submitted for a synopsis, a link to the full-text theses would be provided from ShodhGangotri to "ShodhGanga".



+91 79 2326 8241/42

Search-an-article



ICT Initiatives by Ministry of Education

[f](#) [t](#) [eshodhsindhu\[at\]inflibnet.ac.in](mailto:eshodhsindhu[at]inflibnet.ac.in)[Home](#)[About](#)[Members](#) ▾[E-Resources](#) ▾[Search](#)[INFED](#)[InfiStats](#)

Welcome to e-ShodhSindhu: Consortium for Higher Education Electronic Resources

Provides access to e-resources to Universities, Colleges and Centrally Funded Technical Institutions in INDIA.



An Initiative by Ministry of Education, Govt of India



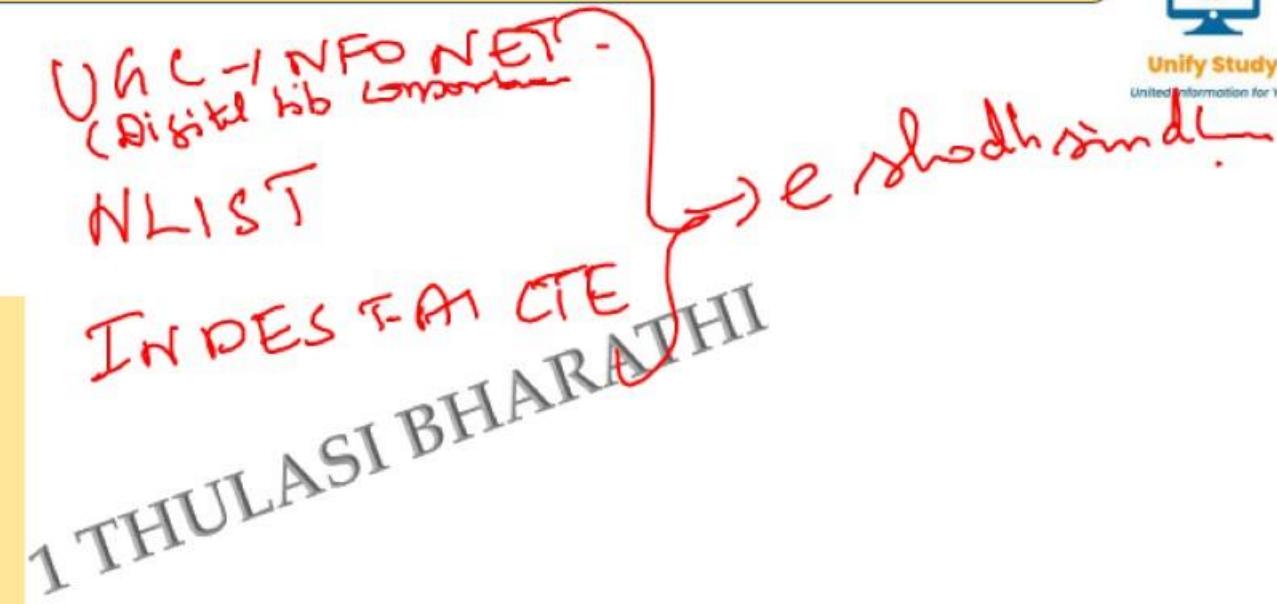
Being Executed by INFLIBNET Centre

[Read More](#)[Online e-Resources Requisition System](#)

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ESHODHSINDHU

- Ministry of Education merges UGC-INFONET, NLIST, and INDEST-AICTE Consortia to form e-ShodhSindhu.
- Provides access to 10,000+ core and peer-reviewed journals, databases.
- Available to member institutions including centrally-funded technical institutions, universities, and colleges under UGC Act.





N-LIST
National Library and Information Services
Infrastructure for Scholarly Content
extending access to e-Resources to colleges in India

College Admin Login Licences and Fair Use FAQs Downloads Awareness Programme

[HOME](#) [ABOUT](#) [MEMBERS](#) ▾ [REGISTER](#) [E-RESOURCES](#) [SEARCH](#)



A college component of e-ShodhSindhu consortium with access to 6,000+ journals, 1,99,500+ ebooks under N-LIST and 6,00,000 ebooks through NDL.

READ MORE

✓ Who are eligible?

All colleges covered under Sections 12(B) and 2(f) of the UGC Act.

Non-Aided colleges (except Agriculture, Engineering, Management, Medical, Pharmacy, Dentistry and Nursing).

JOIN

REGISTERED MEMBER'S LOGIN

Important for the colleges under firewall, the port nos 2048-3251 required to be open for login. Please ask your Network Admin/ISPs.

Login Help Manual

LOGIN

[HOME](#)[ABOUT](#)[BENEFICIARY INSTITUTIONS](#)[Reach Us : pds.help\[at\]inflibnet.ac.in](#)

shodhgeya → There's
gangotri → synopsis
sindhu → journals/resource
sardar → plagiarism

[SEARCH](#)[FAQs](#)[ShodhShuddhi-University Coordinator Login](#)

About

[Home / About](#)

About ShodhShuddhi

Based on the recommendation of Sub-Committee, National Steering Committee (NSC) of e-ShodhSindhu, The Ministry of Education, Govt. of India has initiated a programme "ShodhShuddhi" which provides access to Plagiarism Detection Software (PDS) to all Universities/Institutions in India since Sept 1, 2019. 1100+ institutions are identified which includes

- Central Universities
- State Universities
- Deemed to be University
- Private Universities
- Centrally funded Technical Institutions (CFIs)
- Inter-University Centre (IUCs) of UGC

Under the ShodhShuddhi initiative, Universities and Institutions across the country were provided access to Ouriginal (formerly Urkund), a web-based plagiarism detection software system. This initiative was officially inaugurated by the Former Minister of Education (formerly MHRD) on September 21, 2019, and it continued until the contract with M/s Ouriginal by Turnitin concluded on September 30, 2023. Starting from October 1, 2023, the INFLIBNET Centre now offers the 'DrillBit-Extreme Plagiarism Detection Software' to Higher Education Institutions (HEIs) as part of the same ShodhShuddhi initiative. The trial phase for this software was scheduled for October 2023, with full-



ShodhShuddhi

- ShodhShuddhi initiative provided access to Ouriginal (formerly Urkund) plagiarism detection software from September 21, 2019, to September 30, 2023.
- INFLIBNET Centre replaced Ouriginal with 'DrillBit-Extreme Plagiarism Detection Software' starting October 1, 2023.
- Trial phase for DrillBit-Extreme scheduled for October 2023; full service began on November 1, 2023.
~~DrillBit-Extreme~~



- **E-KALPA:** Online platform for architecture students.
 - Established: Developed by collaboratively developed by the three institutions - IDC at IIT Bombay, NID at Bangalore, and DOD at IIT Guwahati
- **E-YANTRA:** Hands-on robotics training initiative. - NMEICT
 - Established: Developed by IIT Bombay in 2002.
- **E-GRANTHALAYA:** e-Granthalaya is an Integrated Library Management Software developed by NIC for Automation and Networking of Government Libraries. – 2002
- **INFLIBNET:** Inter-University Centre for electronic resources sharing.
 - Established: Developed by UGC in 1991
- **E-ACHARYA:** Online learning platform for teachers. – NMEICT
 - MAINTAINED BY INFILBNET → integrated e-content portal

Swayo



Unify Study
United Information for You

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ICT

IIT(M), Google Plagiarism System
Unify Study
Unified Information for You



SWAYAM ✓	Study Webs of Active-Learning for Young Aspiring Minds - MOOC	2017, 4 QUADRANTS, ANU CNN IIN (12) - PM (evidya)
SWAYAM PRABHA ✓	DTH, GSAT-15 - INFLIBNET - BISAG - GUJARAT- 24/7, 5 TIMES - 4HRS/DAY ,	2017 , HE-40, SE-200,CE- 40 UGC,IIT,CEC, IGNOU,UOH → Satyamev Jayate
NDL- NATIONAL DIGITAL LIBRARY ✓	Access e-content on multiple disciplines IIT KHARAGPUR	2016, 2017 Just
E-VIDWAN ✓	EXPERT DATABASE University Expert Database (1999)+ Expert Database in Science and Technology (2001) = E-VIDWAN	(2012)
NAD - NATIONAL ACADEMIC REPOSITORY → digitallocker	digital issuance, storage, access and verification of Academic Awards	2017 NAD - stored data Digitalocker - fetch the data from NAD
FOSSEE	Free/Libre and Open Source Software for Education IIT BOMBAY	2017 2009 from NAD
VIRTUAL LAB ✓	remote access to Laboratories in various disciplines of Science and Engineering IIT Delhi - 11 paths -	?
SHODHGANGA ✓	SOFT COPIES OF PHD THESIS	2009
SHODH SUDHI ✓ @	PLAGARISM DECTECTION SOFTWARE Ouriginal	2019 2023 Drillbit Extreme
SHODHGANGOTRI ✓	synopsis of research topic submitted to the universities	
SHODH SINDHU ✓	e-ShodhSindhu was formed with merger of three consortia, namely UGC-INFONET Digital Library Consortium, NLIST and INDEST-AICTE Consortium – JOURNALS	2015



E-KALPA ✓	Creating Digital-learning Environment for Design (DSOURCE IIT Bombay, IIT Madras, NID Bangalore)	2015
E-YANTRA ✓	incorporate Robotics into engineering education – IIT BOMBAY	2002
E-GRANTALAYA ✓	transform traditional libraries to e-Library with Digital Library Services	4.0
INFLIBNET ✓	Information and Library Network - modernizing university libraries	1991, IUC-1996



Number Conversions

Binary → 0, 1

Base
2

Decimal → 0, 1, 2, 3, 4, 5, 6, 7, 8, 9 → 10

Octal → 0, 1, 2, 3, 4, 5, 6, 7 → 8

Hexa → 0 - 9, A, B, C, D, E, F $(0-15)$
 $\underline{(16)}$ → 16
 $(0-15)$



① Decimal to Binary:

$(10)_{10}$ → Decimal

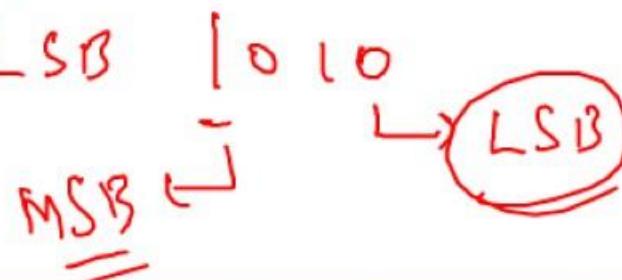
$(10)_2$ → Binary

$(10)_8$ → Octal

$(10)_{16}$ → Hexa.

MSB

LSB



① $(10)_{10} \rightarrow \text{Binary.}$

$$\begin{array}{r} 2 | 10 \\ 2 | 5 - 0 \\ 2 | 2 - 1 \\ \hline & 1 - 0 \end{array}$$

$$(10)_{10} = (1010)_2$$

even

$(11)_{10}$

$$\begin{array}{r} 2 | 11 \\ 2 | 5 - 1 \\ 2 | 2 - 1 \\ \hline & 1 - 0 \end{array}$$

$$(11)_2 = (1011)_2$$

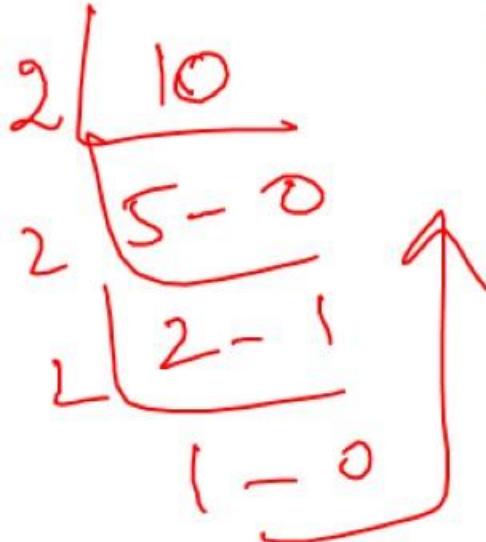


$(10.25)_{10} \rightarrow \text{Binary}$

$$.25 \times 2 = 0.50$$

1010

$$.50 \times 2 = 1.00$$



$(1010.01)_2$

$$\begin{array}{r}
 (10.625) \\
 1010 \\
 \times 2 \\
 \hline
 1010 \\
 \end{array}$$

$625 \times 2 = 1.250$
 $.250 \times 2 = 0.500$
 $.500 \times 2 = 1.000$

$(1010.101)_2$



Binary to Decimal

$$(1010)_2 = (?)_{10}$$

$$\begin{array}{r}
 1010 \\
 | \quad | \\
 0 \times 2^0 = 0 \\
 1 \times 2^1 = 2 \\
 0 \times 2^2 = \\
 1 \times 2^3 = 8 \\
 \hline
 \end{array}$$

$$2^0 = 1$$

$$(1011)_2 = (?)_{10}$$

1011	1	8	1	2	1
	1	1	2	4	1
	1	2	4	8	16
	1	4	8	16	32
	1	8	16	32	64
	1	16	32	64	128
	1	32	64	128	256

$$(1011)_2 = (?)_{10}$$

$$1 \times 2^0 = 1$$

$$1 \times 2^1 = 2$$

$$0 \times 2^2 = 0$$

$$1 \times 2^3 = 8$$

$$\underline{\underline{11}}$$



Binary to Decimal point

$$(11001 \cdot 101)_2 \rightarrow (?)_{10}$$

11001

$$\begin{array}{r} \cdot 101 \\ 16 \cdot 8 + 1 \\ (25) \end{array}$$

$$\begin{aligned} &= 1 \times 2^0 + 0 \times 2^1 + 1 \times 2^2 \\ &\quad + 1 \times \frac{1}{2} + 0 + \frac{1}{8} \end{aligned}$$

$$1 \times 0.5 + 0 \quad 1 \times 0 \cdot 125$$

$$0.5 + 0.125$$

$$= 0.625$$

$$8 \overline{)1.0} \quad .125$$

$$(25.625)_{10}$$

$$\begin{array}{r} 20 \\ 8 \end{array}$$

$$\begin{array}{r} 16 \\ 4 \end{array}$$

Dec \rightarrow Bin

Bin \rightarrow Dec

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Dec \rightarrow hexa

0-9, A-F

Hexa \rightarrow Deci

$$(AF)_{16} \rightarrow (?)_{10}$$

$$(175)_{10} = ?(AF)_{16}$$

$$\begin{array}{r} 175 \\ 16 \longdiv{175} \\ \quad 10 - 15 \\ \quad \quad \quad \swarrow \\ \quad \quad \quad AF \end{array}$$

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$$\begin{array}{r} AF \\ | \\ 15 \\ | \\ 10 \times 16^1 = 160 \\ \hline 175 \end{array}$$

$$10 \times 16^1 = 160$$

$$15 \times 16^0 = 15$$



Dec \rightarrow Oct

$$(10)_{10} \rightarrow (?)_8 \Rightarrow (12)_8$$

$$\begin{array}{r} 10 \\ 8 \longdiv{10} \\ \underline{8} \quad 2 \\ 2 \end{array}$$

$$(10)_{10} \rightarrow (12)_8 =$$

Oct \rightarrow Dec

$$(12)_8 \rightarrow (?)_{10} \Rightarrow (10)_{10}$$

$$\begin{array}{r} 12 \\ 2 \times 8^0 = 2 \\ 1 \times 8^1 - \underline{8} \\ \hline 10 \end{array}$$

Binary to Octal

$$(10)_{10} \Rightarrow (1010)_2 \Rightarrow (12)_8$$

$$\begin{array}{r} (00)(010) \\ 2 \ 2 \ 1 \ 0 \ 2 \ 1 \ 2 \ 0 \\ \underline{2 \ 2} \end{array}$$

$$(12)_8 =$$



Dec \rightarrow Binary to Octal

$$(64)_{10} \rightarrow \begin{array}{r} 2 | 64 \\ 2 | 32 - 0 \\ 2 | 16 - 0 \\ 2 | 8 - 0 \\ 2 | 4 - 0 \\ 2 | 2 - 0 \\ 1 - 0 \end{array}$$

$$8 | 64 \\ 8 | 8 - 0 \\ 8 | 1 - 0$$

$(0 \ 0 \ 0 \ 0 \ 0 \ 0 \ 0) \rightarrow \text{Oct}$

$2^6 \ 2^5 \ 2^4 \ 2^3 \ 2^2 \ 2^1 \ 2^0$

$(00)(0 \ 00)(000)$

$(1 \ 0 \ 0)_8$



Dec \rightarrow Binary \rightarrow Stem

$$(10)_{10} \quad (1010)_2 \rightarrow \begin{array}{c} (1010) \\ (10) \\ \downarrow \\ (A)_{16} \end{array}$$

$$\begin{array}{c} (0001\ 1101\ 011001\ 10) \\ \downarrow \quad \downarrow \quad \downarrow \quad \downarrow \\ 1 \ 6 \ 5 \ 4 \ 6 \end{array}$$

$$(16546)_8$$

Binary to Stem

$$\begin{array}{c} (0001\ 1101\ 011001\ 10) \\ \hline \hline \end{array}$$

THULASI BHARATHI

$$\begin{array}{c} 8421, 8421 \\ \downarrow \quad \downarrow \\ 13 \\ \downarrow \\ D \\ \downarrow \\ 6 \\ \downarrow \\ 6 \end{array}$$

$$SD6b$$