DR.BABASAHEB AMBEDKAR MARATHWADA UNIVERSITY, CHHATRAPATI SAMBHAJINAGAR.



CIRCULAR NO.SU/ SCIENCE & TECHNOLOGY/B.Voc/NEP/64/2025.

It is hereby informed to all concerned that, in continuation circular No/SU./ IKS/ 2-credits/ curriculum-UG/ NEP-2020/ 05/ 2024/1219-28 dated on 19.06.2024 on the recommendation of Dean, Faculty of Science & Technology; the Hon'ble Vice-Chancellor has been accepted the addition of IKS Course entitled 'Introduction to Ancient Indian Technology' in the existing list of 'Indian Knowledge System' (a compulsory course of two credits for First Year First Semester) for all faculties of Graduate level in University Departments and all affiliated colleges under National Education Policy-2020 as per norms of university grants commission in his emergency powers under Section 12 [7] of the Maharashtra Public University Act, 2016 on the behalf of Academic Council.

This is effective from the Academic Year 2024-25 onwards as per appended herewith.

All concerned are requested to note the contents of this circular and bring notice to the students, teachers and staff for their information and necessary action.

University campus,

University campus;
Chhatrapati Sambhajinagar-431004.
Ref. No.SU/B.voc./syllabus./2024-25/
Date:-20.01.2025

Head, Syllabus Section.

Copy forwarded with compliments to:

- The Principals, affiliated concerned Colleges,
 Dr. Babasaheb Ambedkar Marathwada University.
- 2] The Director, University Network & Information Centre, UNIC, with a request to upload the curriculum along with this Circular on University Website. Copy to:-
- The Director, Board of Examinations & Evaluation, Dr. Babasaheb Ambedkar Marathwada University, Chhatrapati Sambhajinagar.
- 2 The Section Officer, [B.Voc Unit] Examination Branch, Dr.Babasaheb Ambedkar Marathwada University, Chhatrapati Sambhajinagar.
- 3 The Programmer, [Computer Unit-1] Examination Branch, Dr. Babasaheb Ambedkar Marathwada University, Chhatrapati Sambhajinagar.
- 4 The Programmer, [Computer Unit-2] Examination Branch, Dr.Babasaheb Ambedkar Marathwada University, Chhatrapati Sambhajinagar.
- 5| The In-charge, [E-Suvidha Kendra], Rajarshi Shahu Maharaj Pariksha Bhavan, Dr.Babasaheb Ambedkar Marathwada University, Chhatrapati Sambhajinagar.
- 6 The Public Relation Officer, Dr. Babasaheb Ambedkar Marathwada University, Chhatrapati Sambhajinagar.
- 7 The Record Keeper, Dr. Babasaheb Ambedkar Marathwada University, Chhatrapati Sambhajinagar.

Faculty of Interdiciplinery JK-2024-2026 Circulars Fi

DR. BABASAHEB AMBEDKAR MARATHWADA UNIVERSITY, CHHATRAPATI SAMBHAJINAGAR.



Circular No./SU./IKS/2-Credits/Curriculum-UG/NEP.2020/05/2024.

It is hereby inform to all concerned that, in Continuation of the Circular Ref.No.SU/Complusory/2-Credits/Curriculum-UG/NEP.2020/43/2023,20705-17 dated 18.12.2023, the revised syllabi recommended by the Board of Dean's meeting at it's held on 04.05.2024, and the Academic Council at it's meeting held on 05 June, 2024 has accepted the Following Revised Curriculum of as per the Norms of New Education Policy-2020 under the "Indian Knowledge system" as Compulsory Course of two Credits for all Faculties of Gradute Level for the all Affiliated Colleges.

Sr. No.	Courses/Curriculum Name							
01.		,	First	Year For First Semester.				
	B.S.W. & B.F.A	. etc.	1.	"Indian Knowledge system"				

This is effective from the **Academic Year 2024-2025** and Onwads as appended herewith.

This Circular is also available on the University Website www.bamu.ac.in
All concerned are requested to note the contents of this circular and bring notice to the students, teachers and staff for their information and necessary action.

University Campus, Chhatrapati Sambhajinagar.-431004. Ref.No.SU/IKS/2 Cret./2024/12/5-28 AC. AOB-I.No.-08 Date:- 19-06-2024. Deputy Registrar, Academic Section (Syllabus)

Copy forwarded with compliments to :-

- 1] **The Principals, All affiliated Colleges,** University Campus & Sub-Centere, Dharashiv, Dr. Babasaheb Ambedkar Marathwada University, Chhatrapati Sambhajinagar.
- The Director of Recognized Institutions, Dr. Babasaheb Ambedkar Marathwada University, Chhatrapati Sambhajinagar.
- 3] **The Director, Board of Examinations & Evaluation,** Dr. Babasaheb Ambedkar Marathwada University, Chhatrapati Sambhajinagar.
- 4] The Librarian, University Library, Dr. Babasaheb Ambedkar Marathwada University,
- 5] The Programmer [Computer Unit-1] Examinations,
- 6] The Director, University Network & Information Centre, UNIC, with a request to upload the Circular along with its enclosures on University Website.
- 7 The Public Relation Officer,
- 8| The Deputy Registrar, Under Graduate Section,
- 9] The In-charge, [E-Suvidha Kendra],
- 10] The Record Keeper,

JK*1906202

Indian Knowledge System UG-I Sem.IKS(Gerneral)

(All UG Programme of All Faculty)

Courses :-(Choose any one)

- १. मराठवाडयातील संत आणि संत साहित्य
- २. मराठवाडयातील ऐतिहासिक वास्तु वारसा (Historic Architectural Heritage in Marathwada)
- 3. Handicrafts of Marathwada.
- ४. मराठवाडयातील जागतिक सांस्कृतिक वारसा(अजिंठा, वेरुळ) स्थळे (World Heritage Sites of Marathwada)
- ५. मराठवाडयातील गड व किल्ले
- ६. मराठवाडा मुक्तीसंग्राम
- 9. Introduction to Ancient Indial Technology.

DR. BABASAHEB AMBEDKAR MARATHWADA UNIVERSITY, CHATRAPATI SAMBHAJINAGAR



Syllabus of Indian Knowledge System

For B.A., B. Sc., B.Com., B.S.W., & B.F.A. etc. (Common Across Faculty)

Two Credits
As Per National Education Policy- 2020

From the Academic Year 2024-2025 & Onwards.

Indian Knowledge System

UG- I Sem. IKS (General)

B.A./B.Com./B.Sc.

Courses:- (Choose any one)

- 1. मराठवाडयातील संत आणि संत साहित्य
- 2. मराठवाडयातील ऐतिहासिक वास्तु वारसा (Historic Architectural Heritage in Marathwada)
- 3. Handicrafts of Marathwada
- 4. मराठवाडयातील जागतिक सांस्कृतिक वारसा (अजिंठा, वेरुळ) स्थळं(World Heritage Sites of Marathwada)
- 5. मराठवाडयातील गड व किल्ले (Forts of Marathwada)
- 6. मराठवाडा मुक्ती संग्राम (Hyderabad Freedom Struggle (Marathwada Region)

- 01	Type: Theory No. of Credits: 02 Hours - 30	Semester-I
Course Code: KS 02	Type: Theory	Marks - 50
Course Title:	मराठवाडयातील संत आणि संत साहित्य १. मराठवाडयाची भौगोलिक, सामाजिक, सांस्कृतिक व राजकीय पार्श्वभूमी समजण्यास	मदत होईत्न.
Course Objectives:	 मराठवाडयाची भौगोलिक, सामाजिक, सास्कृतिक व राजपाय न व गुण्या न स्वाप्त क्षात्र क्	
	 मराठवाडयातील संताच्या साहित्यातुन अभिव्यकझालेले सामाजिक, सांस्कृतिक, धार्मि लक्षातघेण्यास मदत होईल. 	कजीवन
	४. मराठवाडयाच्या संत साहित्यातील मुल्य विचारावर प्रकाश टाकता येईल.	
	 मराठवाडयातील संत साहित्य व त्यातील आध्यात्मिकजाणिवा याबरोबरइतरजाणिवांच येईल. 	मा परिचयकरुनदेता
Course	 मराठवाडा भाषिक, संस्कृती, धर्म, समाज व संत साहित्य आदीचेआकलन. 	
Outcomes:	२. मुल्य संस्करणामुळे भार्वानकविकास,	
	३. विचार श्रीमंतीत बाढ.	
	४. वैज्ञानिक दृष्टीकोन रुजेल.	
	५. भाषिक व वाडःमयीनगुणाचे आकलन.	
		15 Hours
Unit - I	वाडयाचा परिचय:-	
	क्रमाना भौगोलिक परिचय	
2,2,3	. मराठवाडा सामाजिक सार्रकृतिक, धार्मिक आणि राजकीय पार्श्वभूमी २. मराठवाडाः सामाजिक, सांस्कृतिक, धार्मिक आणि राजकीय पार्श्वभूमी	
२. मराट	वाडयातील संत पुरुष	
2.8.	आद्यकवी मुकुंदराज	
2.2.	महात्मा चक्रधर	
2.3.	संतज्ञानेश्वर आणित्यांच्या परिवारातील संत	
1.4.	संतनामदेव आणित्यांचे समकालीन संत	

२.५. संत भानुदास व संता	र्कनाथ	
२.६. संतदासोपंत		
२.७. संत समर्थ रामदास		
२.८. संत संमर्थ स्वामी		
२.९. संत शेख महम्मद		
३. मराठवाडयातीलस्त्रि संत		
३.१. संत महदंबा		
३.२. संत मुक्ताबाई		
३.३. संत जनाबाई		
३.४. संत बहिणाबाई		
		15 Hours
nit – II		
४. मराठवाडयातील संत सा	हत्यः-	
४.१. संतज्ञानेश्वर यांच्या	परिवारातील संतांचे साहित्य	
४.२. संतनामदेव व समव	कालीन संतांचे साहित्य	
ं गंद भारतम् जन	र्दन स्वामी आणि संतएकनाथांचे साहित्य	
४.३. संत भानुदास, जना	संप्रदायातील साहित्य	
४.४. दत्त आणि धारशव	सप्रदायाताल साल्प	
४.५. समर्थ रामदास स्व		
४.६. संत शेख महम्मद	यांचे साहित्य	
४.७. स्त्री संतांचे साहित्य	1	

संदर्भसाहित्य-

- समग्र मराठी वाङमयाचा संक्षिप्तर्झतहास —खंड पहिला- डॉ. प्रशांतचौधरी
- मराठी संतकवियत्रींचाइतिहास —डॉ. विद्यासागर पारंगणकर
- वारकरी, संप्रदाय शंकर वासुदेव अभ्यंकर
- महाराष्ट्राचा भागवतधर्म—ज्ञानदेव आणिनामदेव श्री. शंकरदामोदर पेंडसे
- भागवोत्तम संतएकनाथ- श्री. शंकरदामोदर पेंडसे
- मराठवाडयाचा वाङमयीनइतिहास, प्रा. सितश बडवे आणि प्रा. प्रल्हाद लुलेकर

Course Title:	Historic Architectural Heritage in Marathwada 1. To Study the basic concept of Historic Heritage.	
Objectives:	to create awareness about architectural Heritage in Marathwest to put forth the importance of Historic architectural Heritage in Marathwest to put forth the importance of Historic architectural Heritage in Marathwest	ada
Course Outcomes:	to put forth the importance of Historic Architectural Heritage of Marathwada. To introduce the Historic Architectural Heritage & their important of Marathwada.	
	3. To acquaint the students with the relevance and scope of historic architecture.	15 Hours
Unit – I	Course Content Understanding Historic architectural Heritage in Marathwada	
	a. What is historical heritage?b. Type of historic heritagec. Importance of historic architectural heritage to understand history	of Marathwada
	Course Content	13 110013
Unit – II	Historic architectural Heritage in Marathwada a. Religious Architecture – Hindu, Buddhist, and Jain b. Mughal Architecture c. Non-religious historic architectural heritage	

- INATACH Aurangabad Chapter, 2010.
 - 2. DehejiaVidya, 'Early Buddhist Rock Temples: A Chronological Study. Thames and Hudson, 1972.
 - 3. Dhavalikar M. K. 'Cultural Heritage of Mumbai', ChhatrapatiShivajiMaharajVastuSangrahalaya, Mumbai, 2016.
 - 4. Feldhaus Ann, Connected Places: Region, Pilgrimage, and Geographical Imagination in India, Palgrave Macmillan, New York, 2003.
 - 5. Jamkhedkar A. P., Ajanta, Oxford University Press, 2009.
 - 6. Michell George, Buddhis Rock Cuit Monasteries of Western Ghats, Jaico Publishing
 - 7. Naravane M.S, 'Forts of Maharashtra', APH Publishing Corporation, New Delhi. 1995.
 - 8. PanditSuraj, Stories in Stone: Historic Caves of Mumabi, Mumbai, 2013.
 - 9. DeoPrabhakar, 'The Temple of Marathwada', Jaipur Publication Scheme, 1993.
 - 10. Deo S. B. &Dhavlikar M. K., 'Ajantha', Marathi Vishwakosh, Maharashtra RajyaVishwakoshNirmitiMandal, 1976.
 - 11. Deshpande S. R., 'Daulatabad', Marathi Vishwakosh Vol. 7, Marathi Vishwakosh. Maharashtra RajyaVishwakoshNirmitiMandal, 1976.
 - 12. Deshpande M. N., 'The Rock cut caves of Pitalkhora in the Deccan', 1959.
 - 13. Gupte R. S. & Mahajan V. D., 'Ajanta, Ellora and Aurangabad Caves, D. B. Taraporewala Sons & Co. Mumbai, 1965.

Marathi Books

- 1. Dalvi Dawood, 'Leni Maharashtrachi', Granthali Prakashan, Mumbai, 2004.
- 2. Deshpande D.G., 'Maharashtratil Kille', Diamond Publication, Pune, 2009. 3. Degalurkar G. B., Verul Darshan, Sneshal Prakashan, Pune, 2008.
- 4. Deglurkar G. B., 'Paithan: Sanskrutik Darshan, Bhartiya Itihas Sankalan Samiti, Pune. 2005.
- 5. PanditSuraj, 'Maharashtratil Bauddha Leni', Aparant, Pune, 2018.
- 6. Paradkar Milind, Prachin Bharatiya Durgashastra Aani Hindavi Swarajyachya Don Rajdhanya-EK Tulanatmak Abhyas, Neelchampa Prakashan, 2011.
- Jamkhedkar A. P., 'Maharashtra: Itihas Prachin Kaal, Vol. 1-Sec. 2) Sthapatya Va Kala. Mumbai DarshanikaVibhag, Maharashtra Rajya, 2002.
- 8. Mate M. S., 'Maraathwadyaache Kalavaibhav'.

Course	Type: Theory No. of Credits: 02 Hours - 30	Semester-1				
Code: IKS		Marks - 50				
Course Title: Course Objectives: Course Outcomes:	Handicrafts of Marathwada The main objective of the course is To develop understanding about handicrafts and their utility in the culture of Marathwada To inculcate value of handicrafts in the cultural and ecological nurturing of the region To inculcate appreciation and growth of handicrafts of Marathwada To nurture, document and develop historical contexts of handicrafts of Marathwada					
	Students will be enabled to develop critical research aptitude in understant traditions, cultural value, ecological strength and commercial utility of the Marathwada: 1. Relate principles of Indigenous knowledge to professional career field commercial and corporate sectors through handicrafts 2. Analyze the impact of new market systems on crafts and how we could handicrafts in the Marathwada 3. Explain the relationship between regional ecology, and its cultural ideal Indigenous handicraft systems 4. Compare Indigenous knowledge systems of crafts and its perceptions diversity	ding the historical chandicrafts of the in the drebuilt utility of entity within				

	COURSE CONTENT	PERIODS
UNIT		3+3=06
I	Theorizing Handicrafts its cultural and ecological dynamics: Handicrafts-Its definitions and constructions. Classification and nature of Crafts. Types of Handicrafts: Stone based Crafts, Earthern 'Clay' based Crafts, Agricultural and Forest based crafts, Metal based crafts.	
		3+3=06
П	Nature and prominent crafts of Marathwada Semi-precious stone beads crafts of Marathwada Classical potteries of Marathwada Textiles and wooden crafts of Marathwada	
Ш	d) Metal crafts of Marathwada Practical Assignments for the Learners: Projects, Field Reports, Prototype development and sample collections and methods of craft making reports of Marathwada	9+9=18
	TOTAL TEACHING-PRACTICAL AND CREDIT HOURS	30 hrs. (2 Credits

Textbook References

- 1. Mc. Gowan (2009) Crafting the Nation in Colonial India. Springer Aditi Ranjan, M.P. Ranjan (2009) Handmade in India: A Geographic Encyclopedia of India Handicrafts.
- 3. Ardhendusekhar Ray (1998) Crafts and Technology in Ancient India: From the Earliest Times to the
- 4. Arvind Kumar Jha (Forester). Robin D. Tribhuwan (2008) Tribal Handicrafts of Maharashtra: A Cultural and Transitional Perspective. Tribal Research & Training Institute, 2008
- 5. Jagadeesh (2023) Indian Handicrafts. Repro India Limited
- 6. Janice Helland (2017) Craft. Community and the Material Culture of Place and Politics, 19th-20th
- Century. Routleage
 Mrinal Kanti Pal (1978) Crafts and Craftsmen in Traditional India, Kanak Publications
 Nilkanth Maheshwar Joshi and D.R. Gadgil(1936) Urban Handicrafts of the Bombay Deccan
- 9. Tirthankar Roy (2020) The Crafts and Capitalism: Handloom Weaving Industry in Colonial India.
- 10. Wonning, Paul R. (2020) A Short History of Traditional Crafting: The Historic Origins of Popular Handicrafts. Independently Published

Weblinks

https://www.craftscouncilofindia.in/indian-crafts-map/maharashtra/

Cale	Type: Theory No. of Credits: 02	Hours - 30	Semester-I
Course Code:			Marks - 50
KS 02	World Heritage Sites of Marathwada		
Course Title: Course Objectives:	To understand the concept of cave temple, cave To create awareness about the cave architecture To know the importance of cave architecture &	sculptures in Ellora and	l Ajanta
Course Outcomes:	3. To Study the Basic concept of Cave temple. 4. To create awareness about Ellora and Ajanta C 5. To put forth importance of cave architecture &	Cave. c sculpture in Ellora and	Ajanta.
	Course Content		15
Unit – I	Hours Concept of Cave Temple, Objectives of Cave for		
	cave, Creation of Ajanta Caves, Ajanta Cave S 1. Concept of Cave Temple. Objectives of cave of cave. 2. Creation of Ajanta Caves 3. Buddha Deity Sculpture in Ajanta 4. Ajanta Cave Painting		
	Course Content		15
Unit – II	Hours Creation of Ellora Caves, Cave architecture & 1. Creation of Ellora Caves 2. Buddhist Cave architecture & sculpture in Ellora Caves	in Ellora Ellora	

	No. of Credits: 02	Hours - 30	Semester-1
Course Code:	Type: Theory		Marks - 50
KS 02 Course Title:	Forts of Marathwada		
Course Objectives:	To study the type of forts and their importance. To create awareness amongst the students. About the forts in Marathwada.		
Course Outcomes:	 Explain the importance of Forts. Study of Forts in Marathwada Creating public awareness about the fort in Marath 	wada.	15
Unit – l	Course Content		10
	Hours Definition of Fort, Type of Forts 1. Definition of Fort 2. Type of forts, 3. Importance of Forts		
	Course Content		15
Unit – II	Hours Forts in Marathwada 1. Forts in Marathwada. 2. Hill Forts and Bhuikot Fort forts in Marathwa 3. Daulatabad, Antur, Vetalwadi, Taltam, Mahu Paranda, Dharur.	nda. ır, Naldurg, Kha	ndar. Udgir, Ausc

	No. of Credits: 02 Hours - 30	Semester-I					
Course	Type: Theory No. of Credits. 02						
Code: IKS		50					
12	1. (Marothwada Region)	Marks - 50					
Course Title:	Hyderabad Freedom Struggle (Marathwada Region) 1. This course will orient students about the basic knowledge of Indian 1. This course will orient students about the basic knowledge of Indian 1. This course will orient students about the basic knowledge of Indian	liberation and					
Course	t critic source will orient students does	a region.					
Objectives:		miku odugami					
Objective	2. This course will engage the acids critical understanding them about the	ne varied nature					
	a r il and a liberation) il Will plovide ori						
	of freedom movement and Liberation is a cindividuals leaders and instituti	ons. It will also					
	of freedom movement and Liberation movement in princely states. 3. It will inform about the participation of individuals, leaders and institution of the princely states. bring out ideological contours involved in Hyderabad freedom struggle.	- Jant					
	bring out ideological contours arrest in a 1 Franchem struggle among the	Student.					
Course	1. To give basic Knowledge about 11, and Indian freedom struggle and	Hyderabad					
Outcomes:	To give basic Knowledge about Hyderabad Freedom struggle and To enable to locate the difference between Indian freedom struggle and						
—	liberation movement.	Sangram.					
	3. To make aware the student about heritage places of Marathwada Mukti	Sangram.					
	 To make aware the student about heritage places of Marathwada Mukti To make aware the student about heritage places of Marathwada Mukti To make aware the student about heritage places of marathwada Mukti 	Marathwada.					
	4. To make aware the student about heritage places of Matauritage5. To groom the student in knowing the importance of regional history of						
		15					
Unit-l	Course Content						
Onit-i	Hours S. J movement and the Strugg	le in Hyderabad					
	Hours Colonial Paramountey and Indian Freedom movement and the Struggle in Hyderabad						
	- impaly state	ncest and Diffish					
	 Princely state. A. Colonial Paramountcy: Concept of Narendra Mandal (Chamber of princes) and British policy towards princely state and question of liberation movement in Hyderabad region, 						
	policy towards princely state and question of						
	Early revolts against Nirzam. B. Different Location of freedom: Indian national movement and the lib	eration movement					
	p. Different Location of freedom: Indian national movement and the role	e towards princely					
	 Different Location of freedom: Indian national movement and the re- in princely state of Hyderabad. Indian National congress and the polic 	y (C					
	In princery state 4.7	- E-onomie and					
	state. C. Feudal regime of Nizam: Political social and cultural condition	S. Economic and					
	C. Feudal regime of Nizam: Political social and cultural conditions educational policies of Nizams. Socio-Cultural, religious, educational	il activates against					
	educational policies of Mizains.						
	Nirzam in Marathwada region.	15					
	Course Content	1.7					
Unit - II	Course	n Hyderahad					
	Hours Feudal regime of Nizam and final struggle for liberation movement	n Hyderabad					
	princely state: Marathwada region. princely state: Marathwada region. princely state: Marathwada region.	obtra sabba					
	princely state: Marathwada region. A. Aryasamaj, Hindu Mahasabha and its works, state congress, Mahara A. Aryasamaj, Hindu Mahasabha and its works, state congress, Mahara	Situa Saoria.					
	A. Aryasamaj, Hindu Mahasabha and its Works, state objections are stated and its Works, state objections and its Works, state objections are stated and its Works, stated objections are stated objections are stated objections are stated objections.	ation.					
	depressed class Associations, 19	tions with Nizam,					
	depressed class Associations, Hyderabad state scheduled class B. Various participation, Jungal Satyagraha, Umri bank event, Negotia main leaders in mukti Sangram, Ganrajya Andolan, National Schoo	, VyayamShala,					
	main leaders in mukti Sangram, Gamayya						
	National Libraries.	rious ideologies i					
	C. Final Surrender of Nizam: Military comps, Border Camps, vermovement, particiapation of workers, peasants, Dalit's and women movement, particiapation of workers, peasants, Dalit's and women movement, participation of workers, peasants, Dalit's and Dali	. Mass participatio					
	movement, particiapation of workers, peasants, Daint's and women in Hyderabad Freedom struggle, Communalism Hyderabad region I	t to townsloame					
	movement, participal	rehad-III-IIIIISIIIIIII					

Razakars violent. Police action and Nizam's surrender. Heritage in Hyderabad region about Marathwada Mukti Sangram.

Suggested Reading -

- 1. Dr. Jayram R. Administrative system of the Disticts of Marathawada under the nizams (1853-1935) unpublished thesis Dr. B.A.M.U. Aurangbaad.
- 2. Ramesan N. The freedom struggle in Hyderabad Vol. IV.
- 3. Kate P. V. Marathwada under the Nizam, 1724-1948, Mittal Publication, Delhi. 1987.
- 4. Dhengle B. S. Hyderabad Freedom Struggle, Kalpanaprakashan, Nandedfied 1998.
- 5. Menon V. P. The story of the Integration of take Indian States, Bombay, 1969.
- 6. Dr. M. A. Nayeem- Jaico publication, Bombay 1987, The splendor of Hyderabad. Lasthase of an oriental culture (1591-1948)
- 7. Regari- Highlights on Andhara Freedom struggle shiwaji press sunndrabad 1972.
- 8. Tirth Swami Ramanad- Memories of Hyderabad Freedom Struggle 1967.
- 9. Pagadi S.M. Freedom Struggle in Hyderabad: A connected Account Vol. I. II 1956.
- 10. Prasad M. N. OpeationPola, Police Action Against Hyderabad, Ministy of Defence
- 11. Rajendra Prasad- AsafJahas of Hyderabad: Their Rise & Decline Vikas Publication New Delhi 1948.

Additional Reference Books:

- अनंतभालेरात- हैदराचादचा स्यातंत्र्य संग्राम आणि मराठवाडा, मोज प्रकाशक, मुंबई, जानेवारी २००१.
- २. स्वामी रामानंदतिर्थं— (संपा), हैदराबादचा स्वातंत्र्य संग्रामाच्या आठवणी.
- दिगंबर कुलकणी-देदराबाद मुक्तिलख्यातील अग्निशिखा, रेणुका प्रकाशन, ओरंगाबाद, १९९७
- ४. यो. पा. देऊळगावकर- युगप्रवर्तक स्थामी रामानंदतीर्थ यांची देनींदनी म.सा.प. आणि संस्कृती मंडळ, मुंबई, २०००
- ५. लक्ष्मीकांतदेशमुख/ डॉ. वि. ल. धारुरकर— (संपा.) मुक्तीसंग्रामांकती प्रकाशन, औरंगाबाद, १९९८.
- ६. प्रा. नरहर कुरुंदकर-हेदराबाद विमोचन आणिवसर्जन, म.सा.प. हेदराबादण १९८५.
- डॉ. सामनाथ रोडे-हेदराबाद मुक्तिलढा आणि स्वामी रामानंदतीर्थ, अश्वीनी प्रकाशन, लातुर, २००८.
- ८. डॉ. अनिलकटारे, डॉ. किशनकेंद्रे- हेदराबादचा स्वातंत्र्य संग्राम आणि म. गांधीजी, पुनम प्रकाशन, कंधार, २००९.
- डां. अनिलक्तरारं, डां. महादेव वाधमारं- हेदराबादचा स्वातंत्र्य संग्राम आणि मराठवाडयातीलदिलन समाज, कल्पना प्रकाशन, गांदेड, २००५.
- १०. डॉ. गायकवाड नरेंद्र- मराठवाडयातीलदीलत चळवळ आणि हेदरावादचा स्वातंत्र्य संग्राम.
- ११. नरेंद्र चपळगावकर- कहाणी हेदराबाद लढयाची, देशमुख आणिकंपनी पव्लिशसंस पुणे, प्रथमावृती, १९९९.
- १२ अशोक परळीकर- हेदराबाद मुक्ती संग्रामातीलकथा, राजहंस प्रकाशन, गुणे, १९७५

IA/EKS/T/101: Introduction to Ancient Indian Technology

Total Credits: 02 Total Contact Hours: 30 Hrs

Maximum Marks: 50

Learning Objectives of the Course:

This course aims to provide important glimpses of the ancient Indian Technology which is hallmark of glorious Indian civilization, only living civilization of the world that exists till today. The main emphasis is placed on nature centric aspects of ancient Indian technologies that can be adopted in modern time. Materials will be presented in a gradual manner to instill confidence in the minds of the students and lead them to take exploratory route to learn more about it in future. Adequate emphasis will be given in this course for exposing the students to ancient science and technologies which can be adopted for modern technological development. The tenets of various technologies which are essential for human living will be discussed in detail.

Course Outcomes (COs):

On completion of the course, students should be able to -

- 1. Recognize the glorious heritage of Ancient Indian Technology in variant contextual domains.
- 2. Describe the tools and techniques of Ancient Technique that has present relevance and potency

CO-PO - PSO Articulation Matrix

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	P09	PO10	PO11	PO12	PSO ₁	PSO ₂	PSO3	P504
CO1	L				M	+	M									M
CO2	L				M		M									M

Module No.	Course Content	Contact Hours
	Introductory Concepts	
. 1	Relevance of Indian Knowledge System in Today's Perspective, Difference betweenscience and technology, Ancient Indian technology in contrast to modern technology, Ancient Indian Scientific methods, Glimpses of ancient Indian science and technology	10 Hrs
	Ancient Indian Knowledge in Technology – I	
11	Material Technology: Mining, Metals and Metallurgy, Iron Making and craftsmanship, Wootz Steel Technology, Extraction of Zinc in ancient India, Glass making, Bead making Technology	10 Hrs
	Ancient Indian Knowledge in Technology - II	
111	Water Harvesting Technology, Irrigation Systems, Town planning, Building construction, Sanitation, Agriculture and Textile Technology	10 Hrs

Text Books:

 B. Mahadevan, Nagendra Pavana, Vinayak Rajat Bhat, "Introduction To Indian Knowledge System: Concepts And Applications", First Edition, Prentice Hall of India, 2022

Online Reference:

https://archive.nptel.ac.in/courses/101/104/101104065/

and or prox