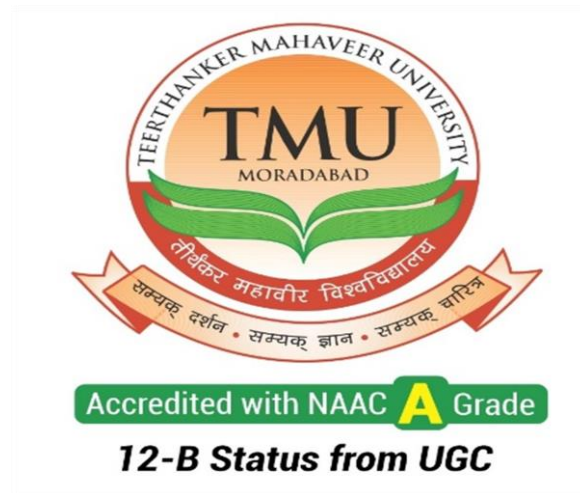


TEERTHANKER MAHAVEER UNIVERSITY, MORADABAD



VALUE ADDED COURSES

COURSES OFFERED UNDER -NEP-2020

VALUE ADDED COURSE

(VAC)

S.No.	Course Code	Course Name	Credit
1.	TMUVA240101	Indian Knowledge Systems	2
2.	TMUVA240201	Environmental Studies & Disaster Management	2
3.	TMUVA240301	Digital Technology in Education	2
4.	TMUVA240401	Human Values and Professional Ethics	2

<u>Course Code:</u> TMUVA24010 1	Value Added Courses 1Semester-I Indian Knowledge Systems	L-2 T-0 P-0 C-2
Course Outcomes:	On completion of the course, the students will be :	
CO1.	Understanding Indian Civilization, Geography, Natural Resources & Culture.	
CO2.	Understanding Constitution of India	
CO3.	Understanding & applying the contribution of Bharat Varsha in Mathematics & other Sciences to the present age.	
CO4.	Understanding and applying ideals of Indian Philosophy In their life.	
CO5	Understanding origin of Medicine & importance of Environment.	
Unit-1:	BHARATVARSHA – THE LAND OF CIVILIZATION & CULTURE: The Aryavart, Indus Valley Civilization, Harappa, Mohenjo-Daro, Fine Arts & Dance Forms, Varnashrama System, Education System, Occupations & Rituals. RICH GEOGRAPHY: Mountains, Rivers, Deserts, Coast Line, Soil Types, Natural Resources, Minerals, Seasons & Weathers, Agriculture & Major crops.	6Hours
Unit-2:	BHARATVARSHA – CONSTITUTION OF INDIA: Drafting of Constitution, Drafting Committee, Articles & amendments, Fundamental duties, Fundamental Rights, Creation of States & Union Territories, Appointment of The President & Governor, Prime Minister & Chief Minister, Upper House & Lower House in Parliament, Appointment of Supreme Court Judges, High Court Chief Justice & Chief Justice of India.	6 Hours
Unit-3:	BHARATVARSHA – LAND OF SCIENCE, MATHEMATICS, ASTRONOMY & ASTROLOGY: Vedic Mathematics, Contribution of Ancient Indian Mathematicians, Scientists & thinkers to the modern age of Science, Mysteries of Astronomy and Astrology as per ancient Indian literature	6 Hours
Unit-4:	BHARATVARSHA- VEDAS, UPNISHADS, EPICS – Indian Education System, Languages, Elementary idea of all 4 Vedas & Upanishads & their teachings, Schools of Vedic Philosophy.	6 Hours
Unit-5:	BHARATVARSHA – HEALTH & ENVIRONMENT: Health & Disease, description in Vedas, Ayurveda- Charaka, Surgery- Susruta, Yoga- Patanjali. Importance of Environment & Message To Protect Environment as per Vedas.	6 Hours

Text Book	<ol style="list-style-type: none"> 1. Mahadevan, B., Rajat Bhai, Vinayak, & Nagendra Pavana, R.N. (2022) <i>Introduction to Indian Knowledge System</i>. PHI Learning 2. Jha, A. (2023) <i>Traditional Knowledge System in India</i>. New Delhi Atlantic 3. Pole, P. (2021). <i>Treasure Trove of Indian Knowledge</i>. Prabhat Prakashan Pvt. Ltd. 4. Chauhan, B. C. (2023). <i>IKS: The Knowledge System of Bharata</i> (A Textbook Based On NEP 2020 Guidelines). Garuda Prakashan 5. Sengupta, N. (2019). <i>Traditional Knowledge in Modern India</i> Springer, India, Private Ltd 	
<u>Reference Books:</u>	<ol style="list-style-type: none"> 1. Rao, Sheshgiri K.L (2021). <i>Encyclopedia of Hinduism</i>. Vol. II, Vol. III, and Vol. IV. Mandala Publishing 2. Kapoor, K. (2012). <i>Encyclopedia of Hinduism</i>. Rupa Publishing 3. Mishra, A. (2019) <i>Hinduism: Ritual, Reason & Beyond</i>. 4. Vatsyayan, K. (2006). <i>The Cultural Heritage of India</i>. Vedanta Press & Bookshop 	
Additional Electronic Reference Material	https://en.wikipedia.org/wiki/GeographyofIndia https://amritmahotsav.nic.in/blogdetail.htm?69 https://en.wikipedia.org/wiki/Constitution_of_India https://prepp.in/news/e-492-appointment-of-judges-of-high-court-collegium-system-indian-polity-upsc-notes https://timesofindia.indiatimes.com/vedic-perspective-on-environment/articleshow/4613346.cms	

<u>Course Code:</u> TMUVA240201	Value Added Course- 2 Semester-2 Environmental Studies & Disaster Management	L-2 T-0 P- C-2
<u>Course Outcomes:</u>	On completion of the course, the students will be :	
CO1.	Understanding environmental problems arising due to constructional and developmental activities.	
CO2.	Understanding the natural resources and suitable methods for conservation of resources for sustainable development.	
CO3.	Understanding the importance of ecosystem and biodiversity and its conservation for maintaining ecological balance.	
CO4.	Understanding the types and adverse effects of various environmental pollutants and their abatement devices.	
CO5.	Understanding the general concept in the dimensions of disasters caused by nature beyond the human control as well as the disasters and environmental hazards induced by human activities with emphasis on disaster preparedness, response and recovery, etc.	
Course Content:		
Unit-1:	Introduction of Environmental Studies: Definition and Scope of environmental studies, multidisciplinary nature of environmental studies, Concept of sustainability & sustainable development. Ecology and Environment: Concept of an Ecosystem-its structure and functions, Energy Flow in an Ecosystem, Food Chain, Food Web, Ecological Pyramid & Ecological succession, Study of following ecosystems: Forest Ecosystem, Grass land Ecosystem & Aquatic Ecosystem & Desert Ecosystem.	6 Hours
Unit-2:	Natural Resources: Renewable & Non-Renewable resources; Land resources and land use change; Land degradation, Soil erosion & desertification. Deforestation: Causes & impacts due to mining, Dambuilding on forest biodiversity & tribal population. Energy Resources: Renewable & Non-Renewable resources, Energy scenario & use of alternate energy sources, Case studies	6 Hours
Unit-3:	Biodiversity: Hot Spots of Biodiversity in India and World, Conservation, Importance and Factors Responsible for Loss of Biodiversity, Biogeographical Classification of India Environmental Pollutions: Types, Causes, Effects & control; Air, Water, soil & noise pollution, Nuclear hazards & human health risks, Solid waste Management; Control measures of urban & industrial wastes, pollution Climate change & Global Warming (Greenhouse Effect), Ozone Layer -Its Depletion and Control Measures, Photo chemical Smog, Acid Rain	6 Hours

Unit-4:	Environmental Policies & Practices: Environmental laws: Environment protection Act (overview); Air Prevention & Control of Pollution Act (Overview), Water Prevention & Control of Pollution Act (Overview), Wild Life Protection Act (Overview), Forest Conservation Acts (Overview), International Acts: Montreal & Kyoto Protocols & Convention on biological diversity, Nature reserves, tribal population & Rights & human wild life conflicts in Indian context	6 Hours
Unit-5:	Disaster Management: Introduction on Disaster, Definition and types of disaster, Study of Important disasters, Causes, effects and practical examples for all disasters, Risk and Vulnerability Analysis, Disaster Preparedness and Response, Rehabilitation, Reconstruction and Recovery, Mitigation and Management techniques of Disaster, Training, awareness program and project on disaster management.	6 Hours

<u>Text Books:</u>	<ol style="list-style-type: none"> 1. De, A. K (2016). <i>Environmental Chemistry</i>. New Age Publishers Pvt. Ltd. 2. Masters, G. M. (1991) <i>Introduction to Environmental Engineering and Science</i>. Prentice Hall India Pvt. Ltd. 3. Odum, E. P. (1971) <i>Fundamentals of Ecology</i>. W. B. Saunders Co. 4. <i>Disaster Management Guidelines</i>. GOI-UND Disaster Risk Program (2009-2012). 5. Coppola, Damon P. (2006). <i>Introduction to International Disaster Management</i>. Butterworth-Heinemann. 	
<u>Reference Books:</u>	<ol style="list-style-type: none"> 1. Bryant, P. J. (1997) <i>Biodiversity and Conservation: Hypertext Book</i>. School of Biological Sciences, University of California, Irvine 2. Tiwari, Khulbe, and Tiwari. (2013) <i>Textbook of Environmental Studies</i>. I.K. Publication. 3. "Biodiversity." National Geographic. https://www.nationalgeographic.org/encyclopedia/biodiversity. <p><i>Note: Latest editions of all the suggested books are recommended.</i></p>	

Course Code: TMUVA24030 1	Value Added Course –3 Semester-III	L-2 T-0 P-0 C-2
	Digital Technology in Education	
Course Outcomes:	On completion of the course, the students will be:	
CO1.	Understanding the meaning of digital education	
CO2.	Understanding the potential of digital technologies to support learning and teaching	
CO3.	Understanding and identifying different tools of digital education available in India.	
CO4.	Understanding the e-governance Digital India and initiatives.	
CO5.	Developing sense of responsibility as citizen in digital growth in India.	
Course Content:		
Unit-1:	Introduction to Digital Education Meaning & Evolution of Digital Systems. Role & Significance of Digital Technology, digital education vs traditional education, advantages and disadvantages of digital education.	6 Hours
Unit-2:	Digital Education Tools Information & Communication Technology & Tools Interactive tools- Microsoft Teams, Google Classroom, LinkedIn Creative Tools - Google Slides, Google Spreadsheets, Google form, YouTube)	6 Hours
Unit-3:	Digital Education in India Government initiatives for Digital education in India: SWAYAM, E-Path Shala, National digital library of India (NDL India), Digi-Locker. Advantages & challenges in digital education in India.	6 Hours
Unit-4:	E- Governance Introduction of E-Governance in India, Types of E-Governance- G2C (Government to Citizen), G2E (Government to Employee), G2B (Government to Business), G2G (Government to Government)	6 Hours
Unit-5:	Emerging Technologies in Education <ul style="list-style-type: none"> AI and machine learning applications in education. Blockchain technology and its implications for credentialing. Augmented reality (AR) and mixed reality (MR) in educational contexts. 	6 Hours
Text Books:	1. Visvanathan, G., and S. K. Panneer Selvam. (2014) <i>Technologies in Education</i> . Random Publications 2. Maddux, Cleborne D. (2003) <i>Technology in Education</i> . (English, Paperback). Haworth Press Inc.	

	<ol style="list-style-type: none"> 3. Aggarwal, J. C. (2018) <i>Essentials of Educational Technology</i>. Vikas Publisher 4. Pal, A. (2021) <i>Digital Education for the 21st Century</i>. 1st ed.. Apple Academic Press 	
Reference Books:	<ol style="list-style-type: none"> 1. Vardhan, Peeta Bobby, and Dwarapudi Bhanu Priya.(2022) <i>Digital Education in India: A Virtual Reality</i>. Kanishka Publishers 2. Zeimer, N. (2020) <i>Education in the Digital Age: How We Get There</i>. Nadav Zeimer 3. Ng, Wan. (2016) <i>New Digital Technology in Education: Conceptualizing Professional Learning for Educators</i>. Springer International Publishing AG 	
Additional Electronic Reference Material:	<ul style="list-style-type: none"> • www.slideshare.net • www.lisportal.com/en/lis-blog 	

Course Code: TMUVA230401	<p align="center">Value Added Course-</p> <p align="center">4</p> <p align="center">Semester-IV</p> <p align="center">Human Values and Professional Ethics</p>	L-2 T-0 P-0 C-2
Course Outcomes:	On completion of the course, the students will be :	
CO1.	Understanding the core values that shape the ethical behavior of a manager in functional areas of an organization.	
CO2.	Understanding the morals & values that ought to guide the management and resolve the moral issues in the profession	
CO3.	Analyzing the role of morals and values in technological development and its challenges.	
CO4.	Developing value based management system and work environment in organization.	
CO5.	Developing framework for management ethics and human Values.	
Course Content:		
Unit-1:	Evolution and introduction of Human Values in Indian context: Values: Introduction, sources of value system, Types of values, Significance of values, Indian value system, values of Indian manager, Teaching from Indian scriptures like Mahabharata, Bhagwad Gita, Ramayana, Quran and its applications in management.	6 Hours
Unit-2:	Business Ethics: Definition of Ethics, nature of ethics, types of ethics, Ethics and morality, Need and significance of business Ethics, code of conduct and Ethics for manager.-	6 Hours
Unit-3:	Ethical Dilemmas: Ethical Dilemmas- sources and their resolutions. Ethical decision making, Work ethics, Ethical and unethical practices in India.	6 Hours
Unit-4:	Impact of Ethics: Ethical issues related with marketing, Human resource management, Finance, Intellectual property rights. Environmental ethics.	6 Hours
Unit-5:	Understanding Harmony in the Family and Society – harmony in Human -Human Relationship and Gender issues: Understanding Harmony in the Family and Society-Harmony in Human- Human Relationship; Understanding harmony in the Family- the basic unit of human interaction; Understanding values in human-human relationship; meaning of Nyaya and program for its fulfillment to ensure Ubhay - tripti; Trust (Vishwas) and Respect (Samman) as the foundational values of relationship. Gender Issues and Biases: Gender Stereotyping and Gender Discrimination, Male Gaze and Objectivity, Remedial measures of gender biasness.	6 Hours
Text Books:	1. Bhatia, S.K. (2002) <i>Business Ethics and Managerial Values</i> . Deep and Deep Publications Pvt. Ltd.	

	2. Sharma, R. K., and Puneeta Goel (2021) <i>Business Ethics and Corporate Governance</i> New Delhi: Kalyani Publications.	
<u>Reference Books:</u>	<ol style="list-style-type: none"> 1. Velasquez, M. G.(2006) <i>Business Ethics: Concepts and Cases</i>. New Delhi: Prentice Hall. 2. Mathur, U.C. (2012) <i>Corporate Governance & Business Ethics</i>. New Delhi: Macmillan. 3. Govindarajan, M. (2015) <i>Professional Ethics and Human Values</i>. New Delhi: Learning Pvt. Ltd. 4. Hartman, Laura P., and Abha Chatterjee.(2017) <i>Business Ethics</i>. New Delhi: McGraw-Hill. <p><i>Note: Latest editions of all the suggested books are recommended.</i></p>	