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#### DELHI TECHNOLOGICAL UNIVERSITY

(Formerly Delhi College of Engineering) Shahbad Daulatpur, Main Bawana Road, Delhi-42

#### Academic PG

F. No. DTU/Acad-PG/Ph.D Notification/7555-58

## Circular

Sub: - Audit Course for M.Tech (Full Time and Part Time) Program as per NEP 2020.

The Academic Council, DTU in its 39th Meeting held on 19.06.2024, has approved scheme for M.Tech as per NEP 2020. As per the approved sheme, first year M.Tech. students are required to take any one of the following AUDIT COURSES, (reference- AICTE Model Curriculum as per NEP 2020).

- 1. English for Research Paper Writing
- Disaster Management
- 3. Sanskrit for Technical Knowledge
- Value Education
- 5. Constitution of India
- 6. Pedagogy Studies
- Stress Management by Yoga
- Personality Development through Life Enlightenment Skills.

Kindly find enclosed the syllabus which has been prescribed by AICTE. All HoD's are required to take necessary action for the implementation of the aforementioned Audit Courses in 1st Semester of all M.Tech Programmes run by the departments from AY 2024-25 onwards.

(Prof. Rinku Sharma)
Dean (Academic-PG)

Dated: 06 /08/2024

#### Copy to:

- 1. PA to VC for kind information to the Hon'ble Vice Chancellor.
- 2. PA to Registrar for kind information to the Registrar.
- All Heads.
- Guard File.

Audit Courses (https://www.aicte-

india.org/sites/default/files/Vol.%201\_PG.pdf)

- 1. English for Research Paper Writing
- 2. Disaster Management
- 3. Sanskrit for Technical Knowledge
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- 8. Personality Development through Life Enlightenment Skills.

#### **AUDIT Course- 1: ENGLISH FOR RESEARCH PAPER WRITING**

#### Course objectives:

Students will be able to:

- 1. Understand that how to improve your writing skills and level of readability
- 2. Learn about what to write in each section
- 3. Understand the skills needed when writing a Title

Ensure the good quality of paper at very first-time submission

#### **Syllabus**

Units	CONTENTS	Hours
1	Planning and Preparation, Word Order, Breaking up long sentences, Structuring Paragraphs and Sentences, Being Concise and Removing Redundancy, Avoiding Ambiguity and Vagueness	4
2	Clarifying Who Did What, Highlighting Your Findings, Hedging and Criticising, Paraphrasing and Plagiarism, Sections of a Paper, Abstracts. Introduction	4
3	Review of the Literature, Methods, Results, Discussion, Conclusions, The Final Check.	4
4	key skills are needed when writing a Title, key skills are needed when writing an Abstract, key skills are needed when writing an Introduction, skills needed when writing a Review of the Literature,	4
5	skills are needed when writing the Methods, skills needed when writing the Results, skills are needed when writing the Discussion, skills are needed when writing the Conclusions	4
6	useful phrases, how to ensure paper is as good as it could possibly be the first-time submission	4

#### Suggested Studies:

- Goldbort R (2006) Writing for Science, Yale University Press (available on Google Books)
- Day R (2006) How to Write and Publish a Scientific Paper, Cambridge University Press
- Highman N (1998), Handbook of Writing for the Mathematical Sciences, SIAM. Highman'sbook.
- Adrian Wallwork, English for Writing Research Papers, Springer New York Dordrecht Heidelberg London, 2011

#### **AUDIT Course- 2: DISASTER MANAGEMENT**

#### Course Objectives: -Students will be able to:

 learn to demonstrate a critical understanding of key concepts in disaster risk reduction and humanitarian response.

2. critically evaluate disaster risk reduction and humanitarian response policy and

practice from multiple perspectives.

 develop an understanding of standards of humanitarian response and practical relevance in specific types of disasters and conflict situations.

4. critically understand the strengths and weaknesses of disaster management approaches, planning and programming in different countries, particularly their home country

or the countries they work in

	Syllabus		
Units	CONTENTS	Hours	
1	Introduction Disaster: Definition, Factors And Significance; Difference Between Hazard And Disaster; Natural And Manmade Disasters: Difference, Nature, Types And Magnitude.	4	
2	Repercussions Of Disasters And Hazards: Economic Damage, Loss Of Human And Animal Life, Destruction Of Ecosystem.  Natural Disasters: Earthquakes, Volcanisms, Cyclones, Tsunamis, Floods, Droughts And Famines, Landslides And Avalanches, Man-made disaster: Nuclear Reactor Meltdown, Industrial Accidents, Oil Slicks And Spills, Outbreaks Of Disease And Epidemics, War And Conflicts.	4	
3	Disaster Prone Areas In India Study Of Seismic Zones; Areas Prone To Floods And Droughts, Landslides And Avalanches; Areas Prone To Cyclonic And Coastal Hazards With Special Reference To Tsunami; Post-Disaster Diseases And Epidemics	4	
4	Disaster Preparedness And Management Preparedness: Monitoring Of Phenomena Triggering A Disaster Or Hazard; Evaluation Of Risk: Application Of Remote Sensing, Data From Meteorological And Other Agencies, Media Reports: Governmental And Community Preparedness.		
5	Risk Assessment Disaster Risk: Concept And Elements, Disaster Risk Reduction, Global And National Disaster Risk Situation. Techniques Of Risk Assessment, Global Co- Operation In Risk Assessment And Warning, People's Participation In Risk Assessment. Strategies for Survival.		
6	Disaster Mitigation Meaning, Concept And Strategies Of Disaster Mitigation, Emerging Trends In Mitigation. Structural Mitigation And Non-Structural Mitigation, Programs Of Disaster Mitigation In India.	4	

#### SUGGESTED READINGS:

 R. Nishith, Singh AK, "Disaster Management in India: Perspectives, issues and strategies "New Royal book Company.

- Sahni, PardeepEt.Al. (Eds.)," Disaster Mitigation Experiences And Reflections", Prentice Hall Of India, New Delhi.
- Goel S. L., Disaster Administration And Management Text And Case Studies", Deep &Deep Publication Pvt. Ltd., New Delhi.

#### AUDIT Course- 3: SANSKRIT FOR TECHNICAL

#### **KNOWLEDGE** Course Objectives

- To get a working knowledge in illustrious Sanskrit, the scientific language in the world
- 2. Learning of Sanskrit to improve brain functioning
- 3. Learning of Sanskrit to develop the logic in mathematics, science & other subjects
- 4. enhancing the memory power
- 5. The engineering scholars equipped with Sanskrit will be able to explore the
- 6. huge knowledge from ancient literature

#### Syllabus

Unit	Content	Hours
1	<ul> <li>Alphabets in Sanskrit,</li> <li>Past/Present/Future Tense,</li> <li>Simple Sentences</li> </ul>	8
2	<ul> <li>Order</li> <li>Introduction of roots</li> <li>Technical information about Sanskrit Literature</li> </ul>	8
3	☐ Technical concepts of Engineering-Electrical, Mechanical, Architecture, Mathematics	8

#### Suggested reading

- 1. "Abhyaspustakam" Dr.Vishwas, Samskrita-Bharti Publication, New Delhi
- 2. "Teach Yourself Sanskrit" Prathama Deeksha-VempatiKutumbshastri, Rashtriya Sanskrit Sansthanam, New Delhi Publication
- 3. "India's Glorious Scientific Tradition" Suresh Soni, Ocean books (P) Ltd., New Delhi.

#### Course Output

#### Students will be able to

- 1. Understanding basic Sanskrit language
- 2. Ancient Sanskrit literature about science & technology can be understood.
  - 3. Being a logical language will help to develop logic in students

## **AUDIT Course- 4: VALUE EDUCATION**

#### Course Objectives

Students will be able to

- 1. Understand value of education and self- development
- 2. Imbibe good values in students
- 3. Let the should know about the importance of character

Syllabus

<i>Syllabus</i> Unit	Content	Hours
1	□ Values and self-development –Social values and individual attitudes. Work ethics, Indian vision of humanism.	4
	<ul> <li>Moral and non- moral valuation. Standards and principles.</li> <li>Value judgements</li> </ul>	
2	<ul> <li>Importance of cultivation of values.</li> <li>Sense of duty. Devotion, Self-reliance. Confidence, Concentration. Truthfulness, Cleanliness.</li> <li>Honesty, Humanity. Power of faith, National Unity.</li> <li>Patriotism.Love for nature, Discipline</li> </ul>	6
3	Personality and Behavior Development - Soul and Scientific attitude. Positive Thinking. Integrity and discipline.  Punctuality, Love and Kindness.  Avoid fault Thinking.  Free from anger, Dignity of labour.  Universal brotherhood and religious tolerance.  True friendship.  Happiness Vs suffering, love for truth.  Aware of self-destructive habits. Association  and Cooperation.  Doing best for saving nature	6
1	Character and Competence –Holy books vs Blind faith.  Self-management and Good health.  Science of reincarnation.  Equality, Nonviolence, Humility, Role of Women.  All religions and same message. Mind your Mind, Self-control.  Honesty, Studying effectively	6

#### Suggested reading

1. Chakroborty, S.K. "Values and Ethics for organizations Theory and practice", Oxford University Press, New Delhi *Course outcomes* 

Students will be able to

- 1. Knowledge of self-development
- 2. Learn the importance of Human values
- 3. Developing the overall personality

#### **AUDIT Course- 5: CONSTITUTION OF INDIA**

#### Course Objectives:

Students will be able to:

 Understand the premises informing the twin themes of liberty and freedom from a civil rights perspective.

 To address the growth of Indian opinion regarding modern Indian intellectuals' constitutional role and entitlement to civil and economic rights as well as the emergence of nationhood in the early years of Indian nationalism.

To address the role of socialism in India after the commencement of the Bolshevik Revolution in 1917 and its impact on the initial drafting of the Indian Constitution.

	Syllabus	
Units	Content	Hours
1	□ History of Making of the Indian Constitution: History Drafting Committee, (Composition & Working)	4
2	□ Philosophy of the Indian Constitution: Preamble Salient Features	4
3	<ul> <li>Contours of Constitutional Rights &amp; Duties:</li> <li>Fundamental Rights</li> <li>Right to Equality</li> <li>Right to Freedom</li> <li>Right against Exploitation</li> <li>Right to Freedom of Religion</li> <li>Cultural and Educational Rights</li> <li>Right to Constitutional Remedies Directive Principles of State Policy</li> <li>Fundamental Duties.</li> </ul>	4
4	<ul> <li>Organs of Governance:</li> <li>Parliament</li> <li>Composition</li> <li>Qualifications and Disqualifications</li> <li>Powers and Functions</li> <li>Executive</li> <li>President</li> <li>Governor</li> <li>Council of Ministers</li> <li>Judiciary, Appointment and Transfer of Judges, Qualifications</li> <li>Powers and Functions</li> </ul>	4

5	<ul> <li>Local Administration:</li> <li>District's Administration head: Role and Importance,</li> <li>Municipalities: Introduction, Mayor and role of Elected Representative CEO of Municipal Corporation.</li> <li>Pachayati raj: Introduction, PRI: ZilaPachayat.</li> <li>Elected officials and their roles, CEO ZilaPachayat: Position and role.</li> <li>Block level: Organizational Hierarchy (Different departments),</li> <li>Village level: Role of Elected and Appointed officials,</li> <li>Importance of grass root democracy</li> </ul>	4
6	<ul> <li>Election Commission:</li> <li>Election Commission: Role and Functioning.</li> <li>Chief Election Commissioner and Election Commissioners.</li> <li>State Election Commission: Role and Functioning.</li> <li>Institute and Bodies for the welfare of SC/ST/OBC and women.</li> </ul>	4

#### Suggested reading

- 1. The Constitution of India, 1950 (Bare Act), Government Publication.
- 2. Dr. S. N. Busi, Dr. B. R. Ambedkar framing of Indian Constitution, 1st Edition, 2015.
- 3. M. P. Jain, Indian Constitution Law, 7th Edn., Lexis Nexis, 2014.
- 4. D.D. Basu, Introduction to the Constitution of India, Lexis Nexis, 2015.

#### **Course Outcomes:**

#### Students will be able to:

- Discuss the growth of the demand for civil rights in India for the bulk of Indians before the arrival of Gandhi in Indian politics.
- 2. Discuss the intellectual origins of the framework of argument that informed the conceptualization of social reforms leading to revolution in India.
- Discuss the circumstances surrounding the foundation of the Congress Socialist Party [CSP] under the leadership of Jawaharlal Nehru and the eventual failure of the proposal of direct elections through adult suffrage in the Indian Constitution.
- 4. Discuss the passage of the Hindu Code Bill of 1956.

#### AUDIT Course- 6: PEDAGOGY STUDIES

### Course Objectives:

Students will be able to:

 Review existing evidence on the review topic to inform programme design and policy making undertaken by the DfID, other agencies and researchers.

5. Identify critical evidence gaps to guide the development.

	Syllabus	••
Units	Content	Hours
1	<ul> <li>Introduction and Methodology:</li> <li>Aims and rationale, Policy background, Conceptual framework and terminology</li> <li>Theories of learning, Curriculum, Teacher education.</li> <li>Conceptual framework, Research questions.</li> <li>Overview of methodology and Searching.</li> </ul>	4
2	<ul> <li>Thematic overview: Pedagogical practices are being used by teachers in formal and informal classrooms in developing countries.</li> <li>Curriculum, Teacher education.</li> </ul>	2
3	<ul> <li>Evidence on the effectiveness of pedagogical practices</li> <li>Methodology for the in depth stage: quality assessment of included studies.</li> <li>How can teacher education (curriculum and practicum) and the school curriculum and guidance materials best support effective pedagogy?</li> <li>Theory of change.</li> <li>Strength and nature of the body of evidence for effective pedagogical practices.</li> <li>Pedagogic theory and pedagogical approaches.</li> <li>Teachers' attitudes and beliefs and Pedagogic strategies.</li> </ul>	4
4	<ul> <li>Professional development: alignment with classroom practices and follow-up support</li> <li>Peer support</li> <li>Support from the head teacher and the community.</li> <li>Curriculum and assessment</li> <li>Barriers to learning: limited resources and large class sizes</li> </ul>	4
;	Research design	2
:	Pedagogy Teacher education Curriculum and assessment Dissemination and research impact.	

#### Suggested reading

- 1. Ackers J, Hardman F (2001) Classroom interaction in Kenyan primary schools, Compare, 31 (2): 245-261.
- Agrawal M (2004) Curricular reform in schools: The importance of evaluation, Journal of Curriculum Studies, 36 (3): 361-379.

- 3. Akyeampong K (2003) Teacher training in Ghana does it count? Multi-site teacher education research project (MUSTER) country report 1. London: DFID.
- 4. Akyeampong K, Lussier K, Pryor J, Westbrook J (2013) Improving teaching and learning of basic maths and reading in Africa: Does teacher preparation count? International Journal Educational Development, 33 (3): 272-282.
- 5. Alexander RJ (2001) Culture and pedagogy: International comparisons in primary education. Oxford and Boston: Blackwell.
- 6. Chavan M (2003) Read India: A mass scale, rapid, 'learning to read' campaign.
- 7. www.pratham.org/images/resource%20working%20paper%202.pdf. Course Outcomes

## Students will be able to understand:

- 1. What pedagogical practices are being used by teachers in formal and informal classrooms in developing countries?
- 2. What is the evidence on the effectiveness of these pedagogical practices, in what conditions, and with what population of learners?
- 3. How can teacher education (curriculum and practicum) and the school curriculum and guidance materials best support effective pedagogy?

#### **AUDIT Course-7: STRESS MANAGEMENT BY**

#### **YOGA Course Objectives**

- 1. To achieve overall health of body and mind
- 2. To overcome stress

#### Syllabus

Unit	Content	Hours
1	☐ Definitions of Eight parts of yog. ( Ashtanga )	8
2	☐ Yam and Niyam.  Do`s and Don't's in life.  i) Ahinsa, satya, astheya, bramhacharya and aparigraha  ii) Shaucha, santosh, tapa, swadhyay, ishwarpranidhan	8
3	☐ Asan and Pranayam  i) Various yog poses and their benefits for mind & body  ii) Regularization of breathing techniques and its effects-Types  of pranayam	8

#### Suggested reading

- 1. 'Yogic Asanas for Group Tarining-Part-I" :Janardan Swami Yogabhyasi Mandal, Nagpur
- 2. "Rajayoga or conquering the Internal Nature" by Swami Vivekananda, AdvaitaAshrama (Publication Department), Kolkata Course Outcomes:

#### Students will be able to:

- 1. Develop healthy mind in a healthy body thus improving social health also
- 2. Improve efficiency

## AUDIT Course- 8: PERSONALITY DEVELOPMENT THROUGH LIFE ENLIGHTENMENT **Course Objectives**

- 1. To learn to achieve the highest goal happily
- 2. To become a person with stable mind, pleasing personality and determination
- 3. To awaken wisdom in students

#### Syllabus

Unit	Content	
1	Neetisatakam-Halistis I	Hours
	Neetisatakam-Holistic development of personality  Verses- 19,20,21,22 (wisdom)	8
	• Verses 20.21.22 (Wisdom)	
	Verses- 29,31,32 (pride & heroism)	
	Verses- 26,28,63,65 (virtue)	
	Verses- 52,53,59 (dont's)	
	• Verses- 71,73,75,78 (do's)	
2	Approach to day to day work and duties.	8
	Shrimad BhagwadGeeta : Chapter 2-Verses 41, 47,48,	0
	• Chapter 3-Verses 13, 21, 27, 35, Chapter 6-Verses 5,13,17, 23, 35, $\square$	
	Chapter 18-Verses 45, 46, 48.	
3	Statements of basic knowledge.	8
	Shrimad BhagwadGeeta: Chapter2-Verses 56, 62, 68	0
	• Chapter 12 -Verses 13, 14, 15, 16,17, 18	
	Personality of Role model. Shrimad BhagwadGeeta:	
	Chapter2-Verses 17, Chapter 3-Verses 36,37,42,	-
	<ul> <li>Chapter 4-Verses 18, 38,39</li> </ul>	
	<ul> <li>Chapter18 - Verses 37,38,63</li> </ul>	

#### Suggested reading

- 1. "Srimad Bhagavad Gita" by Swami SwarupanandaAdvaita Ashram (Publication
- 2. Department), Kolkata
- 3. Bhartrihari's Three Satakam (Niti-sringar-vairagya) by P.Gopinath,
- Rashtriya Sanskrit Sansthanam, New Delhi.

#### **Course Outcomes**

#### Students will be able to

- 1. Study of Shrimad-Bhagwad-Geeta will help the student in developing his personality and achieve the highest goal in life
- 2. The person who has studied Geeta will lead the nation and mankind to peace and prosperity
- 3. Study of Neetishatakam will help in developing versatile personality of students.