





VALUE ADDITION COURSES: 2022-23

UNIVERSITY OF DELHI

VALUE ADDITION COURSES

Ethical, Cultural & Constitutional Values

Scientific Temperament **Critical Thinking**

Creative Writing, Communication and Presentation Skills Indian Knowledge Systems

Physical Education, Sports &Teamwork

Value Addition Courses List

S.No	COURSE TITLE	Credits	Credit	Distribution Course	n of the	Eligibility Criteria	Prerequisite of the Course	Remarks
			Lecture	Tutorial	Practical		10:	G REST
1.	Gandhi and Education	2	1	0	1	Pass in Class 12 th	NIL	5-6
2.	NCC - I	2	1	0	1	Pass in Class 12 th	Enrolled as NCC Cadet	A- d
. 3.	Sports for Life - I	2	0	0	2	Pass in Class 12 th	NIL	10-12
4.	Art of Being Happy	2	1	0	1	Pass in Class 12 th	NIL	13-15
5.	Vedic Mathematics - I	2	1	0	1	Pass in Class 12 th	NIL	16-18
6.	Emotional Intelligence	2	1	0	1	Pass in Class 12 th	NIL	19-21
7.	Digital Empowerment	2	1	0	1	Pass in Class 12 th	NIL	99-24
8.	Yoga: Philosophy and Practice	2	1	0	1	Pass in Class 12 th	NIL	25-27
9.	Swachh Bharat	2	1	0	1	Pass in Class 12 th	NIL	28-30
10.	Ethics and Culture	2	1	. 0	1	Pass in Class 12 th	NIL	31-37
11.	Ayurveda and Nutrition	2 .	. 1	0	1	Pass in Class 12 th	NIL	38-40
12.	Social and Emotional Learning	2	1	0	1	Pass in Class 12 th	NIL	41-55
13.	Science and Society	2	1	0	1	Pass in Class 12 th	NIL	56-63
14.	Panchakosha: Holistic Development of Personality	2	1	0	1	Pass in Class 12 th	NIL	64-66
15.	Ethics and Values in Ancient Indian Traditions	2	1	0	1	Pass in Class 12 th	NIL	67-69

16.	सृजनात्मक लेखन के आयाम (Srijnatmak Lekhan Ke	2	1	0	1	Pass in Class 12 th	NIL	70-72
17.	Ayam) साहित्य,संस्कृति और सिनेमा (Sahitya, Sanskriti aur Cinema)	2	1	0	1	Pass in Class 12 th	NIL	73-75
18.	भारतीय भक्ति परंपरा और मानव मूल्य"	2	1	0	1	Pass in Class 12 th	NIL	76-78
19.	Fit India	2	Ö	0	2	Pass in Class 12 th	NIL	79-81
20.	Financial Literacy	2	1	0	1	Pass in Class 12 th	NIL	82-83
21.	Culture & Communication	2	1	. 0	1	Pass in Class 12 th	NIL	84-86
22.	Ecology and Literature	2	1	0	1	Pass in Class 12 th	NIL	87-89
23.	Reading Indian Fiction in English	2	1	0	1	Pass in Class 12 th	NIL	9092
24.	Constitutional Values and Fundamental Duties	2	1	0	1	Pass in Class 12 ^t	NIL	93-94

GANDHI AND EDUCATION

Course Title and	Credits	Credi	t Distribution	of the Course	Eligibility	Prerequisite
Code		Lecture	Tutorial	Practical/Practice	Criteria	of the Course
Gandhi and Education	02	1	0	1	Pass in Class 12th	NIL

Course Objectives

- 1. Seek inspiration from Gandhi's thoughts on education.
- 2. Analyse Gandhian education philosophy for moral and character development.
- 3. Understand Gandhi's Idea on Self-reliant education (Swavalambi Shiksha)
- 4. Relate Gandhi's educational thoughts to NEP 2020

Learning Outcomes

- 1. Value Gandhian perspective on education
- 2. Appreciate the significance of education in Indian languages
- 3. Evaluate the application of Gandhian thoughts in NEP 2020
- 4. Realise the principles of NEP 2020 in vocational and skill oriented education.

Unit I: Gandhi's Philosophy and education	(No. of lectures)		
	5		
 Gandhi's Philosophy on education Education for character building and moral development Education relating to health, hygiene, heritage, and handicraft 			
Unit II: Gandhi's Experiment in Education	5		
 Gandhi's educational ideas on use of Indian Language as a medium of Instruction, TextBook and Teacher. Gandhi's educational thought on Elementary and Adult Education. Gandhi's vision on Higher Education 			
Unit III: Gandhi's Educational Thought on Skill and Vocational Education	5		

- Rural development through Skill and Local Need Based education
- Skill education in NEP 2020 and Gandhi
- Gandhi's Idea on Self-reliance (Swavalambi Shiksha) and its reflection in contemporary educational policy.

Practical/ Practice Component

(15 sessions of 2 hours each= 30 hours)

- Regular visits to Gandhi Museum and library to gain insight on Gandhi
- Excursion to Gandhi Ashrams located in different places like Sewagram, Wardha, Sabarmati, Ahmedabad etc.
- Workshops/projects in collaboration with Gandhi Bhawan, Gandhi Smriti and Darshan, Gandhi Peace Center. Ashrams based on innovation in village & cottage industry, Khadi, handicrafts, organic farming etc.
- Adoption of one place for Swachhta Mission or Skill Education
- If required, students can share their experiences in the form of a Project Report.
- Any other Practical/Practice as decided from time to time

ESSENTIAL READINGS

- महात्मा गांधी. (2014). बुनियादी शिक्षा. वाराणसी: सर्व सेवा संघ प्रकाशन.
- गांधी, मो. क. (2010). मेरें सपनों का भारत. अहमदाबाद : नवजीवन प्रकाशन मंदिर. नवजीवन प्रकाशन मंदिर. (1960). शरीर-श्रम. अहमदाबाद: मो. क. गांधी. pp- 196-231
- प्रभु, आर. के. व राव, यू. आर. (1994). महात्मा गांधी के विचार. इंडिया: नेशनल बुक ट्रस्ट.
- Anand T. Hingorani, ed.] Gandhi, M.K. Our Language Problem (Bombay:
- Bharatiya Vidya Bhavan,), pp. 53-55
- TOWARDS NEW EDUCATION written by M. K. Gandhi Edited by Bharatan Kumarappa

SUGGESTED READINGS:

- गांधी, मो.क. (2012). सत्य के प्रयोग अथवा आत्मकथा (त्रिवेदी, काशीनाथ,अनुवादक) अहमदाबाद: नवजीवन प्रकाशन मंदिर.
- गांधी, मो.क. (2012). हिंद स्वराज (नणावती, अमृतलाल ठाकोरदास, अनुवादक). अहमदाबाद.नवजीवन प्रकाशन मंदिर
- Coomaraswamy, Anand K. (1910). Art and Swadeshi. Munshi Ram Manoharalal. Delhi

Assessment Methods*

Internal Assessment: 25%

End Semester Theory Exam: 25%

Practical: 50%

*Subject to directions from the Examination Branch/University of Delhi from time to time

NATIONAL CADET CORPS - I

(This Course can be offered only to students enrolled in NCC)

National Cadet Corps -I (NCC-I) is a Value Addition Course (VAC) offered only to those students who have enrolled in the NCC as Cadets. The course comprises theory and practical classes. The details of the course are as follows:

Credit distribution, eligibility criteria and pre-requisites of the course

Course title &	Credits	Credi	t distributi	Eligibility criteria	Pre-requisite		
title & Code		Lecture	Tutorial	Practical/Practice	criteria	of the course (if any)	
National Cadet Corps -I	2	1	0	1	Pass in Class 12th	Enrolled as NCC Cadet	

Learning Objectives:

The course aims to:

- (a) Provide knowledge about the history of NCC, its organization, and incentives of NCC for their career prospects.
- (b) Inculcate spirit of duty and conduct in NCC cadets.
- (c) Provide understanding about different NCC camps and their conducts.
- (d) Provide understanding about the concept of national integration and its importance.
- (e) Provide understanding about the concept of self-awareness and emotional intelligence.
- (f) Provide understanding about the concept of critical & creative thinking.
- (g) Provide understanding about the process of decision making & problem solving.
- (h) Provide understanding about the concept of team and its functioning.
- (i) Provide understanding about the concept and importance of Social service.

Learning Outcomes:

After completing this course, the cadets will be able to: -

- (a) Understand the basic concept of NCC.
- (b) Respect the diversity of different Indian culture.
- (c) Practice togetherness, teamwork and empathy in all walks of their life.
- (d) Do their own self-analysis and will work out to overcome their weakness for better performance in all aspects of life.
- (e) Critically think and analyse.

Medium of Instruction: Hindi and English

Syllabus of NCC-I

Unit I: NCC General	4 Lectures
Subtopics:	

Aires Objectives and Occamination - SNGC	
Aims, Objectives and Organization of NCC	
Incentives for NCC Cadets	
Duties of NCC Cadets	
NCC Camps: Types and Conduct	
Unit II: National Integration	4 Lectures
Subtopics:	
National Integration: Importance and Necessity	
 Factors affecting National Integration 	
Unity in Diversity	
Threats to National Security	
Unit III: Personality Development	5 Lectures
Subtopics:	
• Factors	
 Self-Awareness 	
Empathy	
Critical and Creative Thinking	
Decision Making and Problem Solving	
	2 Lectures
Unit IV: Social Service and Community Development	
Subtopics:	
 Basics of Social Service 	
 Rural Development Programmes 	
NGO's	
Contribution of Youth	

Practical/ Practice Component

(15 sessions of 2 hours each= 30 hours)

- Drill
- Field Craft & Battle Craft
- Map Reading
- Weapon Training
- Social Service & Community Development
- Any other Practical/Practice as decided from time to time

Suggested Readings:

- DGNCC Cadet's Hand Book Common Subjects -All Wings (in English)
- DGNCC Cadet's Hand Book Common Subjects -All Wings (in Hindi)
- DGNCC Cadet's Hand Book Specialised Subjects –Army, Navy and Air Wing

Examination Scheme Assessment Methods*

Internal Assessment: 25%

End Semester Theory Exam: 25%

Practical: 50%

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*Subject to directions from the Examination Branch/University of Delhi from time to time

Sports for Life - I

Course Title and Code	Credits	Cred	it Distributio	n of the Course	Eligibility Criteria	Prerequisite of the
Code		Lecture	Tutorial	Practical/Practice	Criteria	Course
Sports for Life - I	02	0	0	2	Pass in Class 12th	NIL

Course Objectives

- To imbibe the significance of sports to promote health, fitness and wellness in life.
- To understand the values of teamwork, tolerance, goal-setting and decision making.
- · To learn the strategies and tactical moves while playing a sport.
- To understand the importance of physical activity in reference to 3S: strength, speed and suppleness.

Learning Outcomes

- Acquire values of cooperation, team spirit, determination, and endurance.
- Acquire good health and psychological well-being through sports participation.
- Apply the decision making-ability and goal-setting skills acquired through sports participation in everyday life.
- Acquire skills for engaging in moderate or vigorous physical activity and sports participation.
- Reduce exposure to screen time on electronic gadgets and channelising energy through sports participation.

Syllabus of Sports for Life - I

Unit I: Rules and Techniques	Practical/Practice hours (30 x 2 =60 hours)
Concept	16 hours
 Rules of the Sport Techniques / skills in the sport/ Aerobic Skills Practical	
 Marking of the court / field Outdoor Adventure Activity Skills learning in sports Group Games / Relays Participation in Intramural competitions 	

Unit l	II: Components of Fitness	
Conce	epts	16 hours
• Practi	Meaning and Development of Strength, Speed, Endurance, Flexibility and Coordinative Abilities. ical	
•	Skills learning and Participation in sports Group Games / Relays / Minor games Participation in Intramural competitions	
Unit l	II: Benefits of sports and physical activity	
Conce	epts	16 hours
• • • Practi	Effect of exercise on the body Organizing of a sports competition Balanced Diet ical	
:	Skills learning and participation in sports Group Games, / Relays /Step Aerobics Participation in Intramural competitions	
Unit l	V: Sports in Contemporary Times	
Conce	epts	12 hours
•	Honours and Awards associated with sports and sportspersons	
Practi	ica l	
•	Skills learning and Participation in sports Participation in Intramural competitions	

Note

- The concepts are to be dealt with during the practical/practice classes.
- The list of suggestive sports: Aerobics and Physical Activity, Athletics, Archery, Badminton, Basketball, Boxing, Chess, Carrom, Cricket, Football, Handball, Hockey, Kabaddi, Kho-Kho, Swimming, Shooting, Squash, Table-Tennis, Tennis, Taekwando, Volleyball, Wushu, Wrestling etc.

Suggested Readings

 James R Morrow Jr., Dale P. Mood, James G. Disch, Minsoo Kang - Measurement and Evaluation in Human Performance-Human Kinetics Publishers (2015)

- W.Larry Kenney, Jack H. Wilmore, Devid L.Costil (2015). Physiology of Sports and Exercise, Second Edition. USA. Human Kinetics.
- Wener W.K. Hoeger, Sharon A. Hoeger Fitness and Wellness-Cengage Learning (2014).
- Kansal DK (2012). A practical approach to Measurement Evaluation in Physical Education &Sports selection. Sports & Spiritual Science Publications, New Delhi.
- Websites of International Sports Federations, Ministry of Youth Affairs and Sports Govt. of India

Assessment Methods*

Internal Assessment: 25%

End Semester Theory Exam: 25%

Practical: 50%

^{*}Subject to directions from the Examination Branch/University of Delhi from time to time

The Art of Being Happy

Course Title and Credits		Credit	Distribution	Eligibility Criteria	Prerequisite of the	
Code		Lecture	Tutorial	Practical/Practice	Criteria	Course
The Art of Being Happy	02	1	0	1	Pass in Class 12th	NIL

Course Objectives

- To synthesize the insights developed by Human Development experts, Psychologists, Anthropologists on one hand, and the intellectual traditions of Vedantic Philosophy and Indology on the other towards the experience of happiness.
- To illustrate various factors that determine the subjective experience of happiness in a cross cultural context.

Learning Outcomes

- The students shall be able to evaluate the factors contributing to the phenomenon of happiness in the personal, familial and community life of an individual in different cultures in the Indian context
- They will be able to develop healthy interpersonal relationships and wellbeing, cherishing the values of Indian culture and philosophy.
- They will be able to relate to the global phenomenon of sustainable development and become sensitive to the needs of the planet.
- They will be able to apply the experience of *Aananda* at a personal level.

Syllabus of The Art of Being Happy

Unit 1:Human Ecology and Happiness	Lectures
 Definitions/Factors of Happiness: Environmental and Social Physical, emotional and psychological well-being for happiness Physiological and hormonal basis of happiness Coping with Stress: A life saving skill 	3
Unit 2:Indological Theories of Happiness	
 Panch Kosh Theory & Idea of Well-Being Idea of Self and other Hierarchy and stages of happiness 	4

Unit 3 : Happiness: Cross-cultural Contexts	
 Culture and Happiness Interpersonal Relationship: Comparative Perspective Towards Self-Actualization 	4
Unit 4:Local and Global Perspective of Happiness	4
Measuring happiness: Key indicators	
Happiness Index	
 India in Global Happiness Indices 	

Practical/ Practice Component

(15 sessions of 2 hours each= 30 hours)

The course will be based on students' identification and operationalization of the concept of happiness and well-being. Students will explore the indicators and actualization of these concepts in everyday life.

- Community surveys on the facilities promoting positive mental health practices such as Yoga and Meditation Centres, Recreation clubs, and Parks for youth and senior citizens shall be carried out by the students.
- Extending help and social service by visiting old age homes/ hospitals/slum areas or any other disadvantaged groups.
- Students can undertake a field work / project independently or work as an Intern with NGOs working in the area of happiness and well-being.
- Critical appreciation of a documentary/ film based on Happiness and Well-being can be undertaken by the students.
- Workshops/ Sessions for the actualization of innate creative potential- (Music, Drawing, Calligraphy, Dramatics)
- Hands-on Happiness: Gardening, Cleaning, Washing, Cooking, etc.
- If required, students can share their experiences in the form of a Project Report.
- Students may share their experiences in the form of Audio-video presentations of 15-20 minutes.
- Any other Practical/Practice as decided from time to time

Essential Readings

- Banavathy, Vinayachandra & Choudry, Anuradha. (2013). Understanding Happiness: A Vedantic Perspective. Psychological Studies. 59. 141-152. 10.1007/s12646-013-0230-x.
- Leontiev, Dmitry. (2012). Anthropology of Happiness: the state of Well-Being and the way of Joy, In Social Science, sVol43. No 2 P93-104.
- Snyder .C.R. S.J. Lopez & J.T. Pedrotti. (2015). Positive Psychology (The Scientific and Practical Explorations of Human Strengths): Sage Publication. (Chapter 5: Subjective Well-being: The Science of Happiness and Life Satisfaction, Page 63 to 73)
- WorldDevelopmentIndicators2016. (2016). United States: World Bank Publications.
- Zelenski, John. (2019).

PositivePsychology:TheScienceofWell-Being,-CarletonUniversity,Ottawa, Canada, Sage Publications Chapter3:Happiness;page 77 to 110)

Suggested Readings

- Baumgardner,S&Crothers,M.(2014).Positive Psychology. New Delhi: Pearson Education, India.
- Goleman, D. (2007). Social Intelligence: The new science of human relationships, RHUK
- Mathews, Gordon and Carolina Izquierdo. (eds). (2010). Pursuits of Happiness: Well being in Anthropological Perspective. Berghan Books
- Seligman,M.(2002). Authentic happiness: Using the new positive psychology to realize your potential for lasting fulfillment.NewYork:FreePress.
- Sri Aurobindo, The Synthesis of Yoga, Part Three: The Yoga of Divine Love, Chapter 7, The Ananda Brahman, pp. 569-570

Assessment Methods*

Internal Assessment: 25%

End Semester Theory Exam: 25%

Practical: 50%

^{*}Subject to directions from the Examination Branch/University of Delhi from time to time

Value Addition Course Vedic Mathematics - I

Course Title and	Credits	Cred	it Distributio	n of the Course		Prerequisite
Code		Lecture	Tutorial	Tutorial Practical/Practice	Criteria	of the Course
Vedic Mathematics- I	02	1	0	1	Pass in Class 12th	NIL

Course Objectives:

- · Foster love for maths and remove its fear through Vedic Mathematics
- Enhance computation skills in students through Vedic Mathematics
- · Develop logical and analytical thinking
- · Promote joyful learning of mathematics
- · Discuss the rich heritage of mathematical temper of Ancient India

Learning Outcomes:

- · Overcome the fear of maths
- Improved critical thinking
- · Familiarity with the mathematical underpinnings and techniques
- · Ability to do basic maths faster and with ease.
- Appreciate the Mathematical advancements of Ancient India.

Syllabus of Vedic Mathematics - I

nit I: Vedic Maths- High Speed Addition and Subtraction	Sessions/Lectures
 Vedic Maths: History of Vedic Maths and its Features Vedic Maths formulae: Sutras and Upsutras Addition in Vedic Maths: Without carrying, Dot Method Subtraction in Vedic Maths: Nikhilam Navatashcaramam Dashatah (All from 9 last from 10) 	5
Fraction – Addition and Subtraction Init II: Vedic Math - Miracle Multiplication and Excellent Division	

 Multiplication in Vedic Maths: Base Method (any two numbers upto three digits) Multiplication by <i>Urdhva Tiryak Sutra</i> Miracle multiplication: Any three-digit number by series of 1's and 9's Division by <i>Urdhva Tiryak Sutra</i> (Vinculum method) 	4
Unit III: Vedic Maths-Lightening Squares and Rapid Cubes	
 Squares of any two-digit numbers: Base method Square of numbers ending in 5: Ekadhikena Purvena Sutra Easy square roots: Dwandwa Yoga (duplex) Sutra Square root of 2: Baudhayana Shulbasutra 	3
Cubing: Yavadunam Sutra Unit IV: Vedic Maths-Enlighten Algebra and Geometry	
Factoring Quadratic equation: Anurupyena, Adyamadyenantyamantya	
Sutra	3
 Concept of Baudhayana (Pythagoras) Theorem Circling a square: Baudhayana Shulbasutra 	
Concept of pi: Baudhayana Shulbasutra	
 Concept angle (θ) 0°, 30°, 45°, 60° and 90°: Baudhayana number 	

Note: Some of the theoretical concepts would be dealt with during practice hours.

Practical/ Practice Component

(15 sessions of 2 hours each= 30 hours)

The students are expected to demonstrate the application of Vedic Maths: Sutra and Upsutra

- Conduct workshops under the supervision of the course teacher to spread awareness on the utility of Vedic Mathematics.
- Students are required to visit nearby retail shops/local vendors to purchase stationery/vegetables/bread and butter and use tricks of Vedic maths of addition and subtraction to calculate the amount to pay and receive the difference.
- Students may share their experience with the class teacher in the form of audio-video presentations of 15 minutes.
- If required, students can share their experiences in the form of a Project Report.
- Any other Practical/Practice as decided from time to time

Essential Readings

- The Essential of Vedic Mathematics, Rajesh Kumar Thakur, Rupa Publications, New Delhi 2019.
- Vedic Mathematics Made Easy, Dahaval Bathia, Jaico Publishing, New Delhi 2011
- Vedic Mathematics: Sixteen Simple Mathematical formulae from the Vedas, Jagadguru Swami Sri Bharati Krishna Trithaji, Motilal Banarasidas, New Delhi 2015.
- Learn Vedic Speed Mathematics Systematically, Chaitnaya A. Patil 2018.

Suggested Readings

- A Modern Introduction to Ancient Indian Mathematics, T S Bhanumurthy, Wiley Eastern Limited, New Delhi
- Enjoy Vedic Mathematics, S M Chauthaiwale, R Kollaru, The Art of Living, Bangalore
- Magical World of Mathematics, VG Unkalkar, Vandana publishers, Bangalore

Assessment Methods*

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End Semester Theory Exam: 25%

Practical: 50%

*Subject to directions from the Examination Branch/University of Delhi from time to time

Unit I: Fundamentals of Emotional Intelligence	4
 Nature and Significance Models of emotional intelligence: Ability, Trait and Mixed Building blocks of emotional intelligence: self-awareness, self-management, social awareness, and relationship management 	
Unit II: Personal Competence	5
 Self Awareness: Observing and recognizing one's own feelings, Knowing one's strengths and areas of development. Self Management: Managing emotions, anxiety, fear, and anger. 	
Unit III: Social Competence	3
 Social Awareness: Others' Perspectives, Empathy and Compassion Relationship Management: Effective communication, Collaboration, Teamwork, and Conflict management 	
Unit IV: Emotional Intelligence: Measurement and Development	3
 Measures of emotional intelligence Strategies to develop and enhance emotional intelligence 	

Practical/ Practice Component

(15 sessions of 2 hours each= 30 hours)

Students will practice self-management techniques to regulate emotions such as

- Mindfulness
- Conditioned relaxation response
- Boundary setting
- Any other

Students will practice various techniques of relationship management such as engaging with:

- · Display of empathy
- Effective communication
- Teamwork
- Conflict resolution
- Any other
- If required, students can share their experiences in the form of a Project Report.
- Any other Practical/Practice as decided from time to time

Essential Readings

- Bar-On, R., & Parker, J.D.A.(Eds.) (2000). The handbook of emotional intelligence.
 San Francisco, California: Jossey Bros.
- Goleman, D. (2005). Emotional Intelligence. New York: Bantam Book.
- Sternberg, R. J. (Ed.). (2000). Handbook of intelligence. Cambridge University Press.

Suggested Readings

- HBR's 10 Must Reads on Emotional Intelligence (2015)
- HBR's 10 Must Reads on Managing Yourself (2011)
- Self Discipline : Life Management, Kindle Edition, Daniel Johnson.

Assessment Methods*

Internal Assessment: 25%

End Semester Theory Exam: 25%

Practical: 50%

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Digital Empowerment

Course Title and	Credits	Credit Distribution of the Course Eligibility Criteria			Eligibility	Prerequisite of the
Code		Lecture	Tutorial	Practical/Practice	Criteria	Course
Digital Empowerment	02	1	0	1	Pass in Class 12th	NIL

COURSE OBJECTIVES:

- Understand the digital world and need for digital empowerment
- Create awareness about Digital India.
- Explore, communicate and collaborate in cyberspace.
- · Building awareness on cybersafety and security.

LEARNING OUTCOMES:

- Use ICT and digital services in daily life.
- Develop skills to communicate and collaborate in cyberspace using social platforms, teaching/learning tools.
- Understand the significance of security and privacy in the digital world.
- Evaluate ethical issues in the cyber world.

Syllabus of Digital Empowerment	Lecture Hours
Unit I: Digital inclusion and Digital Empowerment	5
 Needs and challenges Vision of Digital India: DigiLocker, E-Hospitals, e-Pathshala, BHIM, e-Kranti (Electronic Delivery of Services), e-Health Campaigns Public utility portals of Govt. of India such as RTI, Health, Finance, Income Tax filing, Education 	
Unit II: Communication and Collaboration in the Cyberspace	4

 Electronic Communication: electronic mail, blogs, social media Collaborative Digital platforms Tools/platforms for online learning Collaboration using file sharing, messaging, video conferencing 	
Unit III:Towards Safe and Secure Cyberspace	4
Online security and privacy	
 Threats in the digital world: Data breach and Cyber Attacks 	
Blockchain Technology	
Security Initiatives by the Govt of India	
Unit IV: Ethical Issues in Digital World	2
 Netiquettes 	
 Ethics in digital communication 	
Ethics in Cyberspace	

Note: Concepts are to be taken up during the practical/practice hours.

Practical/ Practice Component (15 sessions of 2 hours each= 30 hours)

The course should be conducted in an interactive mode through demonstration, using appropriate tools.

- Conduct workshops on e-services initiated under Digital India.
- Spread digital literacy/awareness amongst the vulnerable groups and marginalised sections of the society like street vendors, domestic help, security guards, senior citizens.
- Students will take up team activities/ projects exploring digital services in the areas such as education, health, planning, farming, security, cyber security, financial inclusion, and justice, e-Kranti.
- · Any other Practical/Practice as decided from time to time

Essential Readings /Online Resources

- Rodney Jones and Christoph Hafner. "Understanding digital literacies: A practical Introduction". Routledge Books, 2nd edition, 2021.
- 2. https://www.digitalindia.gov.in
- 3. https://www.digilocker.gov.in
- 4. https://www.cybercrime.gov.in
- 5. https://www.cybersafeindia.in
- 6. https://www.meity.gov.in/cyber-surakshit-bharat-programme

Suggested Readings:

- David Sutton. "Cyber security: A practitioner's guide", BCS Learning & Development Limited, UK, 2017.
- 2. https://www.mha.gov.in/document/downloads/cyber-safety-handbook

Assessment Methods*

Internal Assessment: 25%

End Semester Theory Exam: 25%

Practical: 50%

*Subject to directions from the Examination Branch/University of Delhi from time to time

Yoga: Philosophy and Practice

Course Title and	Credits	Credi	t Distributio	n of the Course	Eligibility	
Code	Lecture	Tutorial	Practical/Practice	Commission of the Commission o	of the Course	
Yoga: Philosophy and Practice	02	1	0	1	Pass in Class 12th	NIL

Course Objectives

- To learn the fundamentals of Yoga for harmonising the body, mind and emotions.
- To demonstrate the value and the practice of holistic living.
- To value the heritage of Yoga for self and society.

Learning Outcomes

- Understanding ways to harmonise the body and mind through Yoga.
- · Disciplining the mind through practicing Yoga.
- Understanding of consciousness through practical training.

Syllabus of Yoga: Philosophy and Practice

Unit I: Yoga: Asana, Prāṇāyāma and Dhyana	Lectures
 History of Yoga Significance of Asana Effect of Pranayama Importance of <i>Dhyana</i> 	5
Unit II: Patanjali's Yogasūtra and Chakra	
 Patanjali's Yogasūtra: a summary 	

Unit III: Understanding Asana and Pranayama	
 Asana: the basics SuryaNamaskara Nadishodhana Praṇayama 	4

Practical/ Practice Component

(15 sessions of 2 hours each= 30 hours)

- Surya Namaskar
- Selected Asana
- Praṇayama
- Relaxation exercises for the eyes (7 steps) neck (4 steps)
- Concentration on Bhrumadhya
- Project Work (effect of everyday concentration on breath for 15 minutes: reflections to be compiled in the form of a Project report.
- · Any other Practical/Practice as decided from time to time

Essential Readings

- Āsanas, Prāṇāyāmaand Mudra Bandh, Swami SatyanandaSaraswati, Yoga Publications Trust, Munger, Bihar, India, 2004.
- Patanjali Yogasutras, Commentary by Swami Vivekanand, Rajyoga

Suggested Readings

- Patanjal Yog Pradeep- Swami Omanand Saraswati, Gita Press, Gorakhpur, 2013.
- Science of Pranayama-Swami Sivananda, Edition by David De Angellis, 2019, All Rights Reserved.
- Udayveer Shastri Granthavali,4, Patanjal- Yoga Darshanam, Udayavir Shastri, Govindram Hasanand, Delhi 6.

Assessment Methods*

Internal Assessment: 25%

End Semester Theory Exam: 25%

Practical: 50%

*Subject to directions from the Examination Branch/University of Delhi from time to time

Swachh Bharat

Course Title and	Credits			Credit Distribution of		Eligibility Criteria	Prerequisite of the
Code		Lecture	Tutorial	Practical/Practice	ice	Course	
Swachh Bharat	02	1	0	1	Pass in Class 12th	NIL	

COURSE OBJECTIVES:

- To understand the developmental challenges with reference to sanitation infrastructure and practices.
- To build values of cleanliness, hygiene and waste management in diverse socio-economic contexts
- To understand planning of social policy and programmes.
- To use waste management techniques at community level.
- To instill a sense of service towards society and the Nation.

LEARNING OUTCOMES:

- Understanding the significance of the Swachh Bharat Abhiyan.
- · Ability to analyse and predict the sanitation challenges of India
- Determine the link between sanitation and development.
- Contribute to the Swachh Bharat Abhiyan through real time projects/fieldwork.

Syllabus of Swachh Bharat

Unit I: Introduction to Swachh Bharat Abhiyan	Lectures 4
 Gandhian philosophy of Cleanliness Swachh Bharat Abhiyan (SBA) Hygiene, Sanitation & Sustainable Waste Management Agencies and nodal Ministries for SBA Different phases of the SBA and its evaluation Citizens' Responsibilities: Role of Swacchagrahi 	
Unit II: Swachh Bharat: Rural and Urban Facets	8
 Indicators for Swachh Bharat Rural Sanitation coverage across households (2014 vs. 2022) Open Defecation Free (ODF) Villages: Parameters ODF plus model: Key indicators Urban Sustainable sanitation Waste/water and solid waste management Garbage Free Cities 	
 Unit III: Prospects and Challenges Attitudes and Perceptions Operational and Financial issues Monitoring & Supervision Community Mobilization 	3

Note: Some of the theoretical components will be dealt with during the practical/practice hours.

Practical/ Practice Component

(15 sessions of 2 hours each= 30 hours)

Suggested Activities: List of activities to be undertaken:

- Identify plastic and e-waste in and around the institution and suggest innovative technologies to minimize wastage.
- · Identify events/fests that generate maximum waste and ways to minimize it.
- Visit canteen/shops and track the lifecycle of wet/dry waste in and around the institution and document the findings in the form of a Project Report.
- · Conduct interviews of stakeholders to understand the level of awareness.
- Conduct a Clean Audit of the Institution and identify areas for action.
- · Conduct cleanliness drives

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- Organise Swachhata Pakhwada meetings, rallies, and mobilization camps within the identified communities.
- Students may participate in the Swachh Bharat Internship programme.
- If required, students can share their experiences in the form of a Project Report.
- Any other Practical/Practice as decided from time to time

Essential Readings

- "Swachh Bharat Mission Gramin, Department of Drinking Water and Sanitation, Ministry of Jal Shakti"
- India 2021, Ministry of Information & Broadcasting
- http://swachhbharatmission.gov.in/SBMCMS/swachhta-pakhwada.htm
- https://swachhbharatmission.gov.in/SBMCMS/about-us.htm
- https://www.communityledtotalsanitation.org/sites/communityledtotalsanitation.org/files/ODF verification_checklist.pdf
- https://sbm.gov.in/phase2dashboard/PhaseII/NationDashboard.aspx
- https://www.niti.gov.in/sites/default/files/2019-08/Report%20of%20Sub-Group%20of%20Ch ief%20Ministers%20on%20Swachh%20%20Bharat%20Anhiyaan.pdf

Suggested Readings

- https://swachhbharatmission.gov.in/SBMCMS/writereaddata/Portal/Images/pdf/brochure/Greywatermanagement.pdf
- https://swachhbharatmission.gov.in/SBMCMS/writereaddata/Portal/Images/pdf/brochure/PWMB5_28th_June.pdf
- GoI (2020). Swachh Bharat Mission (Grameen) Phase 2: Operational guidelines. Department of Drinking Water and Sanitation, Ministry of Jalshakti.
- MoHUA (2017). Guidelines for Swachh Bharat Mission Urban (PDF). Ministry of Housing and Urban Affairs, Government of India.

Assessment Methods*

Internal Assessment: 25%

End Semester Theory Exam: 25%

Practical: 50%

*Subject to directions from the Examination Branch/University of Delhi from time to time

Ethics and Culture

Course Title and	Credits	Credit Distribution of the Course			Eligibility Criteria	Prerequisite of the
Code		Lecture	Tutorial	Practical/Practice	Cincia	Course
Ethics and Culture	02	1	0	1	Pass in Class 12th	NIL

Course Objectives

- The course aims to help students explore ethical and cultural dimensions of their lives.
- The course provides a forum for students to pause, revisit their assumptions and beliefs, and become mindful of their thoughts, emotions and actions.
- It gives the students an opportunity to express themselves and inquire into their decision making processes. This will enable them to cultivate ethical values and participate in the creation of a society based on acceptance, compassion, and justice.

Learning Outcomes

- Explore perspectives on ethics in thoughts, words and actions
- Evolve ethical decision making practises
- Understand the need for an ethical society and culture
- Introspect, become conscious of and assess one's stance in life
- Cultivate empathy, tolerance and compassion
- Apply the values learnt in the course to everyday life.

Syllabus of Ethics and Culture

Unit I: Introduction The Basis of Ethics	Lectures
 Getting to Know Each Other What to Expect from the Course? Recognition of Our Common Humanity Empathy, Compassion and Justice 	3
Unit II: The Role of Intelligence, Reason and Emotions	

 Discernment: What Is The Right Thing To Do? The Art of Conflict Resolution 		
Destructive and Constructive Emotions		
The Need for Emotional Balance	4	
Unit III: Cultivating Inner Values Ethics in the World of Work and Play		
 Training the Mind: Mindfulness and Kindness Meditation Discovering your Vocation and Interests Self-discipline, Integrity, Commitment, Creativity Work-Life Balance 	4	
Unit IV: Striving for a Better World Outreach Activities		
 Means and Ends 		
Debate and Dialogue		
 Culture as Shared Values 	4	
 Creating and Sustaining Ethical Cultures: The Role of Philosophy, 		
Religion, Literature, Theatre, Cinema, Music, Media		
Outreach Activities		

Practical/ Practice Component

(15 sessions of 2 hours each= 30 hours)

- The teacher may ask students to introduce themselves, sharing their regional and cultural roots. They may be asked to reflect on those aspects of their identities that reflect their cultural roots.
- 2. After a round of initial introduction, the teacher may ask students to list down a set of values that they think they have developed through their parents and grandparents. Are these values unique to their families, regional and/or ethnic backgrounds? Of these, which are the values they would like to sustain and which are the ones they would wish to modify?
- The teacher may draw upon the values discussed by students in the previous lesson. Using these as the base, the teacher may ask students to think of ethical values that form the basis of their decisions.
- 4. The teacher may ask students to think of people who they think have lived an 'ethical life'. These may be people who they know from their personal lives or people known for upholding ethical values in the face of adversity.

- Students are encouraged to identify what are common human values necessary to realise shared common humanity—the feeling of interconnectedness/interdependence.
- Class to be divided in small groups to discuss how each would make an effort to cultivate new morals/ethical values for betterment of their local environment.
- 7. Celebrating 'Sharing and Caring' based on regional diversity can be encouraged.
- Engage students to do activities of 'being in the shoes of others' (peers, parents, siblings, house help/support or in any local community grappling with problems) to understand the problems empathetically.
- The students can be asked to make bookmarks/cards to remind them about virtues pertaining to empathy versus sympathy, need versus greed, just versus unjust or compassion versus insensitivity.
- 10. Compassion is about cultivation of it as a daily value so students can in small groups undertake compassion based activities of looking after animals, birds, needy, elderly, differently abled, non-privileged etc. and share their thoughts in the class.

- 1. Make the student think of a hard decision they have made. What made it hard? How did you make the decision? How do you assess it retrospectively?
- 2. Encourage students to think of judgements and decisions based on the dilemmas and challenges they faced? How do they go about making these decisions?
- The teacher may introduce any well known story and ask the students to discuss the story from the point of view of the different characters.
- 4. Ask students how willing they are to deal with a conflict when it occurs. What strategies do they adopt to resolve the conflict?
- 5. The teacher may ask students to prepare posters with captions like "avoidance", "competition", "cooperation" and "adaptation" and then may ask students to identify with one of these styles which according to them best represents their style of dealing with conflict.
- The students may be asked to discuss different such similar situations that they may
 have encountered and a discussion may be initiated on how they resolve those
 conflicts.

- 7. The students can be asked to write down certain destructive emotions that they are experiencing presently. How would they work to make them constructive? A classroom discussion could follow around this.
- 8. Ask the students to note down a list of constructive emotions experienced by them recently. Were the constructive emotions less powerful as compared to the destructive ones experienced by them? Discussion in class can follow.
- How do you (i) express, (ii) handle anger/ disgust/ distress/ fear (any destructive emotion can be taken up). A healthy discussion in the class can take place around this.
- 10. Students may be asked to practice a simple breathing exercise. They can sit straight with eyes opened or closed in a comfortable position to just observe their breathing. They can repeat this exercise six to eight times and share (if they like) their experience of silence.
- 11. To identify your interests and develop a meaningful hobby.
- 12. Have an open conversation in the class about happiness.

- The students could observe various emotions that bottle-up in their minds and be asked to watch the flow of emotions non-judgmentally.
- 2. Students may be asked to recall their journey to the college that morning. Do they remember road signs, faces of people they crossed, the roads that they took, the people they interacted with, the sights and smells around them, or anything else?
- Students could be asked to cultivate the habit of simple greeting as practice of gratitude and celebrate a day of joyful giving.
- 4. The students can close their eyes for 2-3 minutes and be asked to observe their thoughts, list them and categorise them into 'to be kept' or 'to let go'.
- The teacher may ask students to close their eyes and imagine a situation in which they are truly happy. Students could wish for the well-being of two students in the same classroom in their meditative state.
- Students could meditate on who has been their inspiration and the qualities of the person who has inspired them and then express gratitude to the person concerned.
- 7. The teacher may ask the students to think retrospectively about what they thought they would take up as a vocation when they were younger. How and why their choices were influenced and changed, if at all.

- The teacher may ask the students to imagine and chart a journey and destination for themselves. They may also talk about the challenges they foresee.
- 9. The teacher may encourage the students to maintain a daily diary of their scheduling of time or a worklog and see how much time they effectively give to their work. The teacher may help the students identify the distractors and where one may be 'wasting' time and energy. The activity is designed to help students understand the value of effective time utilisation.
- 10. In this lesson, the teacher may ask the students to draw up a list of team ethics. They may build this based on their experiences of working with each other in groups.
- 11. The teacher may ask the students to share an incident each where they felt pressurised/bored to complete some work. How did they deal with their stress and monotony of work?

- Students will be asked to work in pairs and develop situations that pose ethical dilemmas and how to resolve them.
- Students may be asked to look at a film or at an advertisement and discuss what they think about the question/s posed in them. The teacher may ask them if they can think of an alternative ethical approach to the problem posed.
- 3. Students will be asked to think of situations in which they lost their temper. Have they ever felt that in a fit of emotion they said something that they regretted later? If they had paused to listen and then respond, what would the other person have said? How would the outcome of the situation have been different?
- 4. A debate on any relevant topic may be conducted in the class. After the first round the students may be asked to adopt and argue their opponents point of view. At the end of this exercise the students can have an open discussion on which position finally appealed to them.
- 5. The teacher may give a short story to the students and ask them to change the ending. They may be asked to observe how characters and their views may have undergone change in the process.
- 6. There can be a discussion around a topic such as, the idea of corporal punishment, euthanasia etc. Students can be given a sheet of paper and can be asked to write for or against the theme. The idea is to enable them to understand that the positions they have taken vis-a-vis the theme are a result of different value orientations.

- Popular foods from many parts of India can be discussed. Their origins can be traced to chart a kind of food history.
- 8. The teacher on the basis of discussions with students can draw from Philosophy, Religion, Literature, Theatre, Cinema, and Media to highlight that the choices people/characters make are grounded in their culture.
- 9. The students can discuss classical/folk dances that are performed in their respective groups. Details can be drawn based on the number of dancers, music (live or recorded) and costumes. 3. The role of oral traditions and literature in indicating the importance of ethics in our everyday lives can be discussed.

Suggested Activities for Outreach: Social/ Community Engagement and Service

In the weeks that follow, students will be expected to engage in outreach activities that shall enable them to put into practice some of the ethical considerations deliberated upon and imbibed in the previous modules. A list of suggested outreach activities is as follows:

- · Adopt a village with the aim of cultural and ethical learning
- Discussing health and hygiene issues in a community
- Tutoring students
- Gender sensitisation
- Working on environmental issues
- Working with Child Care Centres such as Anganwadis and Balwadis
- Working with differently abled students
- Preserving cultural and heritage sites
- Spending time with senior citizens including in a Senior Citizens Home
- · Extending care to animals in animal welfare shelters
- Addressing issues relating to Reproductive Health
- Spreading awareness about adolescent health
- Addressing issues relating to mental health
- Health and nutrition awareness
- Swacchata Abhiyaan
- Sensitisation towards disease awareness
- Vriksharopan
- If required, students can share their experiences in the form of a Project Report.

Any other Practical/Practice as decided from time to time

Suggested Readings:

- Aristotle. Nichomachean Ethics. London: Penguin Classics, 2004
- Swami Vivekananda. The Complete Works of Swami Vivekananda. Advaita Ashrama, 2016.
 - ---https://www.ramakrishnavivekananda.info/vivekananda/complete_works.html
- Panch Parmeshwar in English translation as The Holy Panchayat by Munshi Premchand
- The Silas Marner by George Eliot
- · We are Seven by Wordsworth
- · The Chimney Sweeper by William Blake

Assessment Methods*

Internal Assessment: 25%

End Semester Theory Exam: 25%

Practical: 50%

*Subject to directions from the Examination Branch/University of Delhi from time to time

Ayurveda and Nutrition

Course Title and	Credits	Credit	Distribution	of the Course	Eligibility Criteria	Prerequisite of the Course
Code		Lecture	Tutorial	Practical/Practice		
Ayurveda and Nutrition	02	1	0	1	Pass in Class 12th	NIL

COURSE OBJECTIVES:

- To introduce the basic principles of nutrition in Ayurveda
- To link the Ayurvedic nutrition with modern dietary practices for health
- To analyse basic tenets of traditional diets and health recipes
- · To understand the contemporary food habits in everyday life

LEARNING OUTCOMES:

- · Awareness of traditional food cultures of India
- · Evaluate changing food patterns and lifestyle over the years
- Understand Indian Knowledge Systems (IKS) and key Vedic principles with respect to Food and Nutrition
- Apply basic tenets of traditional diets for health and disease
- Prepare selected healthy recipes based on Ayurvedic principles

Syllabus of Ayurveda and Nutrition

Unit 1: Introduction to Ayurvedic Nutrition	Lectures
 Ayurveda and Indian food cultures Nutrition and lifestyle transition over the years Regional Food Traditions of India 	4
Unit II: Basic principles of Food and Nutrition and Ayurveda	6

 Understanding rich sources of nutrients Concept of <i>Doshas</i> & assessment Ayurvedic Principles of food habits and factors determining quality of food (<i>Ahara vidhi visheshaayatana</i>) 	
FSSAI regulations on Ayurvedic Aahar Unit III: Ayurvedic Diets	5
 Principles of Diet: Aharavidhi vidhan, Sattvic, Rajasi, Tamasic foods Incompatible food (Viruddha Ahara), Pathya; Apathya; Viprita Ahaar 	
 Lifestyle Management with <i>Dincharya</i> and <i>Ritucharya</i> Application of Ayurvedic diets to stress linked food behaviour 	

Practical/ Practice Component

(15 sessions of 2 hours each= 30 hours)

- Visit your local market and classify the available food items according to Sattvic, Rajasi, Tamasic foods
- Conduct a survey of 10-15 households in your locality:
 - o to study food behaviour and analyse them in light of Ayurvedic dietary principles of Sattvic, Rajasi, Tamasic
 - o to study the food consumption patterns and intake of incompatible food: Viruddha Ahara, Pathya; Apathya; Viprita Ahaar
 - o To know about their adopted lifestyle Dincharya and Ritucharya
- Students are required to visit available e-resources of University of Delhi, Ministry of Ayush with regard to Ayurveda and Nutrition.
- If required, students can share their experiences in the form of a Project Report.
- The students may share their experiences in the form of audio-visual presentations of 15-30 minutes.
- Any other Practical/Practice as decided from time to time

Essential Readings

- Rastogi S (2014) Ayurvedic Science of Food and Nutrition. ASIN: BOOHWMV094, Springer: ISBN-13:978-1461496274
- Rastogi S (2010) Building bridges between Ayurveda and modern science. Int J Ayurveda Res. 1(1):41-46.
- FSSAI regulations on Ayurveda Aahar Regulations 2022. Gazette of India CG-DL-E-07052022-235642. New Delhi, Friday, May 6, 2022/ Vaisakha 16, 1944.
- Frawley D (2012) Ayurvedic healing: A comprehensive guide. Lotus Press, India.
- https://iksindia.org/: Indian Knowledge Systems

Suggested Readings

 Charaka Samhita, Charaka (1998) In: Tripathi BN (ed) Sutra Stahan Maharashitiya Adhyay. Chaukhamba Orientelia, Varanasi. Kapoor Kapil & Singh AK Indian Knowledge Systems Volume – 1. Indian Institute of Advanced Study Shimla Published by DK Printworld (P) Ltd, N.Delhi. https://www.lkouniv.ac.in.

Assessment Methods*

Internal Assessment: 25%

End Semester Theory Exam: 25%

Practical: 50%

^{*}Subject to directions from the Examination Branch/University of Delhi from time to time

Social and Emotional Learning

Course Title and Code	Credi ts	Credit Dist	ribution of the	e Course	Eligibility Criteria	A THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS N
	ts .	Lecture	Tutorial	Practical/Practice	Cincia	
Social and Emotional Learning	02	1	0	1	Pass in Class 12th	NIL

Course Objectives

- This course aims to develop social and emotional awareness in students and initiate them towards better personal and social well-being.
- To create an awareness towards self, others, the environment and their harmonious coexistence.

Learning Outcomes

- Students will be able to become aware of oneself and the society.
- · Make informed lifestyle choices and extend the self in the joy of giving.
- Develop empathy, compassion, connect with nature and evolve emotionally to create a more harmonious society.
- Cultivate sensitivity towards discriminatory practices and explore possible solutions.

Syllabus of Social and Emotional Learning	Lectures
Unit I: Introduction Self-Awareness and Happiness	3
Getting to Know Each Other	
What to Expect from this Course?	
Getting to Know Oneself	

What Makes One Happy/ Unhappy? Outer vs Inner Sources of Happiness, Joy of Giving	
Unit II: Social Relationships Mindfulness	4
 Sharing vs Power: Peers, Family and Society Going Beyond Power Relationships Through Open Conversation The Value of Silence and Reflection Practice of Mindfulness 	
Unit III: Identity, Self-Image, Status, Self-Worth Digital Identity	4
Identity Construction and Expression: Individual and Collective	
Accepting and Valuing Oneself	
Understanding the Gendered World	
Identifying and transcending stereotypes	
 Identity Formation and Validation in the Digital World Discrimination and its Forms 	
Unit IV : Lifestyle Choices Stress and Its Management	4
What Choices Does One Get To Make?	
Is Choice influenced? Relationships, Career Choices	
Career Pressures, Examinations	
Dealing with Disappointment, Coping Skills, Health and Fitness	
Connect With Nature: Sensitivity Towards Other Sentient Beings	

Practical/ Practice Component

(15 sessions of 2 hours each= 30 hours)

Unit 1

Getting to Know Each Other

In this lecture, the teacher will facilitate social engagement and personal reflection through a round of introductions. This also provides an opportunity for the teacher and students to recognise the deeper meanings that lie underneath routine exercises of introduction. For example, the adjectives that people use to describe themselves are indicative of the image that they wish others to hold of them. But do they hold the same image about themselves?

Teachers may begin the class by introducing themselves. Any introductory exercise that serves as an ice breaker and creates the classroom space as one of vibrant and open discussions, may be used. Teachers should try and ensure participation of all students in this exercise.

Activities

1. Who is in your circle?

Students may be asked to draw three concentric circles on their notebooks. The central circle is for the topic, the second for 'Love', and third for 'Like'. The space outside the circles is for 'Don't like'. The class decides on one topic, such as food, movies, web series, books, music, interests, etc. Each topic is taken up in turn and students are asked to write what they love, like, and don't like in the circles and share it with others. The exercise helps students to identify with their peers in commonalities and differences. The teacher may use prompts such as 'Why do you like this show?', 'Why do you dislike this food?' etc.

2. I am...

Students are asked to complete the sentences. The teacher may take turns and ask random students to answer it or the teacher may write these on the board and ask every student to write the answer in their notebooks. Some suggested prompt sentences are:

I am excited about
I wish I could
I am wondering
I am feeling anxious about

Students can choose to share some of the answers with the class. The purpose of the exercise is to bring most students to speak in class and share their honest feelings and thoughts.

3. Introduce Yourself... Know Yourself

In this exercise, the teacher asks all students to take turns to introduce themselves. It is likely that most students will talk about their names, previous qualifications and hobbies. At the end of the introductions, the teacher can identify commonalities such as previous courses undertaken, regional identities, age, or similar common factors. The teacher may then use the following prompts to facilitate discussion:

Do these define you? Are you something more?

Would you like to change any of these qualifiers?

Is there something about you that you would like to share with us? Do you ever wonder about your identity/ identities?

What to Expect from this Course?

In this class, the focus is on understanding the relevance of the course and providing a course overview. Students will be able to explore the various dimensions of their lives and develop insights about themselves and their relationships. By discussing the outline of the course and the suggested activities, the teacher shall bring to the fore the exploratory journey that the students will embark upon. The students' questions relating to the course contents will also be addressed in this lecture.

Activities

In this class, the teacher may undertake an overview of the course, discussing each week's themes briefly. The nature of assignments and evaluation can also be detailed out. The teacher may hold a discussion with students on the following:

1. Why is social and emotional learning important?

the field, mindfulness exercises, etc.

- 2. What can the teacher do to make the classroom a more welcoming and open space for you?
- What would be some of the activities that you would like to undertake during the course? Such as watching movies, reading books, maintaining a reflective journal, engagement in

Self Awareness and Happiness

The aim of this module is to help students develop awareness about themselves – who they are, what their strengths and limitations are, and how they can develop themselves. This will help them to learn interlinkages and distinctions between thoughts, emotions and behaviours. This module will make them aware of the differences between happiness and pleasure and help them ponder on sources of happiness.

Self Awareness

Self-awareness is the experience and understanding of one's own personality – how an individual understands his own feelings, motives, desires, and behaviour, and the triggers for the same. Hence, self-awareness can be considered to be vital for personal development. Students would thereby become more grounded and confident. This lesson will focus on the student's intrapersonal and interpersonal awareness through discussions and activities.

Activities

- Students are asked to make a timeline of important events in their life and how each one affected them at that time. Do they see it differently today?
- SWOT Analysis can be done by each student Strengths, Weaknesses, Opportunities and Threats.
- 3. How do they envision their ideal person What does your ideal person look like? What characteristics do they possess? Identify the gap. How do they plan to fill/reduce the gap?

Happiness

The term 'happiness' includes pleasant and positive emotions which can range from deep satisfaction and contentment to pleasure and excitement. The focus of this session would be to discuss techniques to develop the long-lasting feelings of contentment rather than momentary and short-lived emotions of excitement and pleasure. This will encourage and foster feelings of wellbeing and life satisfaction. The teacher will use activities in order to inculcate the ways of developing and sustaining happiness.

Activities

Writing a gratitude Journal – include in it what you are grateful for.

Mindfulness exercises and developing a mindful way of doing things.

"As one door closes, another door opens". A discussion based on the three opportunities that they think they lost and consider what it was they gained in the process.

Unit 2

Social Relationships

In this module, students will be asked to turn their gaze towards the society in which they are located and where they form social relations. They will be asked to introspect and understand the ways in which they connect with their immediate and extended social surroundings. In this context, peers and family exercise a significant influence on the identities of adolescents and young adults. The students will be asked to assess the nature of their relationship with friends and family and explore these negotiations in the context of sharing versus power. The teacher will help students broaden their understanding by extending the discussion to include other social relationships, beyond peers and family. They will be encouraged to think about how they are influenced and how they in turn influence the people around them. The class shall explore the importance of open conversation as a means to resolve conflicts and contradictions.

Sharing vs Power: Peers

Identity formation and development is significantly dependent on the peer group with which the individual interacts. During this class, the students may pose the following question to themselves and to each other- What is the nature of the relationships that they share with their peers? Adolescents and young adults like to conform to peer expectations. Students may explore whether relationships between peers are equal. What forces mediate these relationships? By posing examples from real life, the teacher will encourage the students to closely examine their relationships with their friends and family.

Activities

Ask the students to describe their close friends with fictitious names. They should then be asked why they are close to them and what is the one quality about their friends that they appreciate.

Divide students into groups of 5 each. This can vary depending on the class size. Each group can discuss how they were influenced by their friends in decision making processes.

The class/ group can share a story from their life about how they made a decision based on peer pressure. They should also share the result. Were they happy or unhappy about it? The findings can be discussed in the class.

Sharing vs Power: Family

The family is often considered to be a given and stable construct in which one is born or placed. As the relationships of adolescents with people outside the home grow, their interactions with their families evolve and take on a new and sometimes difficult character. Discussions and activities in the class should help the students objectively analyse their family space and the way in which they negotiate with it at different points of time. Through examples from day to day life, the teacher will help the students understand such spaces and the role they play.

Activities

Describe the ideal family. The students can think about the nature of the ideal created by them. What is the role played by siblings in your personal development?

Role play can be used to perform the different roles in a family so as to understand the different points of view within it.

Sharing vs Power: Society

The individuals generally extend the nature of their relationships with the family to the larger social world. In their pursuit to seek autonomy and independence, they may form new kinds of relationships in the larger social context. These relationships may be characterised by imbalances in power. This lecture will try to help the students strike a balance between self and society and stress the role of dialogue, sharing and cooperation.

Activities

The teacher can ask the students to describe any one constructive social role performed by them. (Any way in which they helped people around them). They can draw, speak, share a photograph or write a creative piece about it.

In the years to come what kind of role do you see yourself performing in society?

Share any one story about a person that has really influenced you? It can be about a public figure or anyone around you.

Going Beyond Power Through Open Conversation

In the previous lectures, the discussion has been around family, peer groups and society. In this session, the focus will be on the ways to build a more egalitarian society—one that is more collaborative, inclusive and takes into account different points of view. Open Conversation is suggested as a way by which acceptance, active listening and empathy can be encouraged.

Activities

The students can be asked to present a brief performance showing the way in which open conversation can help in conflict resolution.

Movies in line with classroom discussions held in the past few weeks can be shown to the students. Movie screening should be followed by a discussion.

A short story, poem or a play can be used to build on classroom discussions.

Mindfulness

This module focuses on the significance of silence, introspection and non-judgmental awareness of the present moment. These mental practices are for understanding and building humane connection with self and others. The students are sometimes unable to spare time for their inner growth. Mindfulness practices aim at self-awareness and self- acceptance for overall well being. Valuing and practicing silence helps in the process of deeper reflection and builds inner strength to face conflicts with calmness. It hones the ability to develop mental equanimity and equipoise.

The Value of Silence and Reflection

The students will learn to understand the value of silence in the noise around. The practice of silence helps in self-reflection and connecting the inner and outer worlds. It enables one to experience joy, contentment and peace. Silence is a way of understanding how to enjoy one's own company and not to confuse being alone with loneliness. The students will appreciate that silence and solitude are positive and constructive.

Activities

The students can be asked to maintain silence and watch the flow of thoughts and emotions. In the process of silence the students can identify what gives them happiness and what they can do to create happiness for others.

The students can visit natural spaces to understand how silence runs in the sounds of nature which can help them realise peace.

Practice of Mindfulness

Through this lesson, the students will understand the significance of mindfulness as a daily practice for understanding that happiness depends on the self-training of mind. The joy of living in the moment with full awareness and steadiness of mind are important for accepting and cherishing all experiences positively and non-judgmentally.

Suggested Activities

Mindful walk/trek in the garden/forest/mountains or at a monument. Mindful eating while enjoying all elements of tastes in different types of food can also be done.

The students can be engaged in groups for non-judgmental listening

The class can be divided to discuss what activities of the day they engage with full awareness and where the moments go unnoticed

Unit 3

Identity, Self-image, Status, Self-worth

The module is designed to help the learners revisit the constructs of identity, self and personhood. It builds on questions such as 'who am I', 'how do others and I see myself', 'does status and self-image affect my sense of self-worth'. Specifically, it deals with how one's identity takes shape and thereon begins to be an integral part of oneself. It encourages the students to think about what factors influence their self-worth, such as achievements and accumulations, wealth, career or popularity. The students learn to accept and appreciate self and others.

Identity Construction and Expression: Individual and Collective

This lesson is aimed to help the learners deconstruct their sense of identity and rechart the signifiers/ markers and processes which have played a pivotal role in constructing their sense of identity and self. Itunfoldshowprocessesofsocialisationwithinfamily,school,community and society at large have played a role in making students who they are. How do these processes shape our notions of self-concept, self-evaluation, and self-esteem? The students will be able to become aware of their individual and collective sense of identity and self.

Activities

The teacher may ask the students to imagine one's identity in different contexts that are significant for identity construction. For instance, what does identity of being someone's 'child' entail; likewise what kind of an identity does one expect of oneself as a sibling, student and as a friend.

The teacher may ask the students to read from biographies/autobiographies of people from other cultures and discuss excerpts from the books. The teacher may elaborate the qualities of these people.

The teacher may organise a field visit with the students to different places. Ask the students to survey people from those locales about their experiences.

Accepting and Valuing Oneself

This lesson builds on the previous lesson by unpacking how concerns revolving around selfimage and status may affect one's sense of self. It aims to make one aware why a challenge to one's identity may lead to discomfort and conflict. Students will be encouraged to accept their physical appearance and identity and to value self-worth. This lesson invites them to undertake an inward journey.

Activities

The teacher may ask students to respond to different characters in a movie where challenges to their identity lead to different kinds of responses.

What will change after 10 years in terms of your identity and what according to you will not change?

The teacher may ask the students to identify an 'open space' and 'sit alone' and write a reflective essay on the theme, 'remember what makes you, you'.

Gender Roles

The objective of this module is to enable the students to differentiate between biological and psychological context of gender in order to understand how their gendered identities are socially constructed. Gender refers to the characteristics of men and women and includes norms, behaviour and roles associated with being man or woman, girl or boy. Further, this will enable the students to become aware that their destiny need not be determined by biology.

Understanding a Gendered World

The objective of this lecture is to enable the students to understand that gender roles are taught by the process of socialization, beginning with the family. Everyday things that we do like eating, speaking, walking, our gestures and even the professions that we think we choose are all often influenced by societal norms.

Activities

The teacher may ask the students to list things associated under the heading; men and women. Once listed, the headings can be interchanged and a discussion may follow.

Ask students to bring an artefact from home, it can be a childhood picture. On the basis of the picture students can share childhood experiences. Through the narrative of their oral history students can share experiences of how they acquired gender.

Identifying and Transcending Stereotypes

In the previous lecture, students have been made aware that gender stereotypes are socially constructed, that the ways in which we interact with others and with ourselves are shaped by gender. The objective of this lecture is to explain the importance of thinking beyond the stereotypes and to reinforce that biological differences between genders should not lead to social discrimination.

Activities

Movie viewing: Students and teachers can choose any movie for discussion.

Quiz cards: On the cards the following can be written and the student can be asked to identify which is socially constructed and which refers to biology.

Men are Breadwinners, Women are homemakers.

Males have XY chromosomes, Females have XX chromosomes.

Women give birth to babies, men don't.

Boys don't cry

Digital Identity

It may be constricting to identify exclusively with ideas like region, ethnicity, language, gender, nationality. For, in this increasingly interconnected world, students find themselves at the intersection of many ideas - evolving and fixed, dominant and marginalised. This rainbow of ideas provides an opportunity to appreciate the diversity in the constitution of an individual's identity. But what happens when one is given a chance to construct a digital identity for oneself? Digital platforms and social networking sites arguably provide an individual the choice to portray oneself the way one likes. Do we choose to present our authentic selves or do we prefer to present highly curated versions of ourselves? Do social media posts reflect self- respect and self-love?

Identity Formation and Validation in the Digital World

Through this session, students are expected to realise the ways in which they construct themselves digitally and how that construction is a manifestation of conformity, resistance and/or subversion, of the dominant ideologies. Students should be encouraged to reflect on what exactly they are seeking from engaging with social media. They need to think how the joy of sharing ideas may be different from the egoic need for compulsive validation.

Activities

Think of the digital filters that you use before sharing your photographs with others. Why do you think you need to do that?

We often feel happy about being validated in the form of 'likes' and positive comments on our social media posts. However, do you feel sad when that does not happen? What could be the possible reason for your mind to have this line of thought?

Digital Identities: Impact on the Self

The students will carry forward the learnings from the previous session and continue their inquiry in the realm of motivations for curating a digital self and its relation to self-esteem. They would be encouraged to engage in a non-judgemental conversation which would motivate them to inquire whether their digital activities are a result of anxiety which may be emanating from their self-image.

Activities

Do you think the use of digital filters is disrespectful to your self? Is not using them a source of anxiety for you? Can this have anything to do with your self-esteem?

Think of situations that make you feel sad on social media. Note them down. Do you think not exposing yourself to such a situation is a solution or do you think you also need to locate the issue within yourself?

Try spending a day without doing any activity on social media like posting anything or surfing other people's accounts for their activities. At the end of the day observe how you feel.

Unit IV

Lifestyle Choices

How we choose to live and behave influences our social and emotional wellbeing. In this module we analyse our lifestyle choices relating to material and cultural consumption, relationships and career. Students will be encouraged to inquire whether our everyday choices are based on a culture of passive consumption and conformism. We will seek to explore possibilities of alternative forms of living premised on ethical consumption, altruism, simple and sustainable living.

What Choices Does One Get to Make?

In this session, the attempt will be to explore the extent to which consumerism impacts our lifestyle choices and the repercussions of these on our natural and social environment. Today we live in an era of mass consumption and consumer culture fostered by advanced technologies and global production systems. Overt materialism, wasteful and conspicuous consumption unmindful of the larger implications are key aspects of this phenomenon. In this lecture, we explore our lifestyle choices such as our physical image, attire, dietary choices, desire for dream homes and destination weddings. This would be the starting point for a re-imagination of a world based upon choices that would lead to simple and sustainable living.

Suggested Activities

Students may be asked to work through their consumption history right from their childhood. A discussion may then be initiated by asking the students to reflect on their consumption choices and their motives behind the same.

The teacher may identify a few products like tea, coffee, coca-cola, jeans etc and ask the students to trace product histories and geographies.

The students may be asked to discuss a strong desire to possess an object and then deconstruct that desire. Discussion may emphasise upon why they wanted it?

Is Choice Influenced? Relationships, Career Choices

In this lecture, we examine the extent to which lifestyle choices, regarding relationships and career, get influenced and by what factors. Do we really have a choice as regards the career that we intend to pursue? Often factors like family, gender, the need for security and stability influence our choices. Recognizing and mapping the space of freedom and unfreedom with respect to our choices is a necessary life skill that would enable a more self-aware and harmonious living.

Activities

Reflect on an instance where you may have inflicted pain on someone and also think of a moment when you felt someone was insensitive in their conduct of a relationship.

The teacher may divide the class into small groups and hold a discussion on what constitutes a successful career.

Reflect on the various career options available in your society and discuss what you would prefer to pursue and why?

Discrimination

The module is designed to help the learners understand the origin and nature of discrimination and the effects thereof. Discrimination can be on various grounds such as ethnicity, religion, caste, race, gender, disability, or place of birth. One's discriminatory actions can lead to social fragmentation. The module encourages the learners to introspect their actions and seeks to celebrate diversity.

Why and How? Forms of Discrimination

The objective of this lesson is to make learners aware of different forms of discrimination. On the one hand, an individual can be a victim of discrimination, and on the other, the same person

may harbour prejudice or discriminate against others. It is pertinent to understand our own biases and introspect our actions.

Activities

The teacher can ask students to count their friends who belong to different backgrounds. They can reflect on what they have learned by interacting with these friends.

Ask students to learn about their neighbourhood and document what groups live there, what has been the nature of their relationships.

An exercise on privilege using nothing but wadded up papers and a trash can. Students Learn A Powerful Lesson About Privilege. https://youtu.be/2KlmvmuxzYE

Stress and Its Management

This module is designed to give students an opportunity to articulate the pressures and

challenges that one experiences in life. It gives students a chance to spell out how pressure to perform well can become a source of stress. The module is aimed to equip the learners with ways of dealing with disappointments with regard to the choice of career path and with performance related stress. It brings to fore skills of coping with stress and disappointments. It also highlights the role of physical well-being in keeping oneself mentally healthy.

Career Pressures, Examinations

This lesson is designed to help students have a relook at the challenges and pressures they have recently faced or are facing on account of career choices and examinations. It gives them a space to articulate what they might have faced while making these choices. This lesson also gives them an opportunity to highlight the uncertainties and challenges they foresee in their future lives.

Activities

The teacher may ask the students to organise themselves in groups of 4-6. Each of the groups have to do a role-play around the themes on career pressures.

Show images of different people and ask the students to quickly jot down impressions. The collective answers serve as a springboard for discussions. Students may learn about their own

biases through this activity.

The teacher may ask the students to identify movies where struggles related to career and performance pressure stand out.

The teacher may ask the students to share their experiences about the following:

- First few months into an academic programmes
- 2 months before examinations
- On the day of examination
- 15 days after examinations get over

Dealing with Disappointments, Coping Skills, Health and Fitness

This session aims to equip the learners with coping skills to manage stress and deal with disappointments. Furthermore, it makes them aware of the importance of health and fitness for maintaining mental health.

Activities

The teacher can ask the students to write how they come to know they are stressed and what they do when they are stressed? The teacher may engage them in a discussion on coping skills and channelize students' energies into positive ways of resolutions of conflict and stress.

The teacher may ask the students to discuss the lives of high achievers and low achievers and

how performance pressures drive their lives. Can they draw similarities and differences in the sources of stresses and how they deal with these stresses?

Ask each of the students to share their daily regime to keep themselves physically fit. The students may also share how each one mentally 'feels/experiences' when one is engaged in physical exercises.

Connect with Nature

This module is designed to strengthen bonds with nature while understanding its intrinsic value as opposed to its instrumental value. Issues of global warming and environmental degradation are the consequences of a disconnect between humans and nature. The aim is to cultivate environmental awareness through virtues of altruistic responsibility, empathy, cohesiveness, and mutual sustainability between nature, flora-fauna, animals and humans. The students may be engaged in activities to build bridges between the inner environment (one's self) and external environment (nature). In this way, they can celebrate oneness with nature and perceive nature not as a means but an end in itself.

Sensitivity Towards Other Sentient Beings

The students, in this session, would participate in group based environmental activities as a way of building social responsibility towards all sentient beings. Any action against even a part of nature impacts the whole. Thus, it is the responsibility of all, to create a safe environment for all sentient beings to live in harmony.

Activities

Students can be encouraged for Nature walks, nature drives, treks and hikes, nature photography, adopting natural spaces in local areas, plantation drives, visiting biodiversity parks, adopting spaces for greening etc.

Visits to animal shelters can be organised to sensitise the students.

Films can be screened on environmental sustainability, environmental consciousness etc

Any other Practical/Practice as decided from time to time

Suggested Readings

- Black, Donna Lord (2022). Essentials of Social and Emotional Learning (SEL). NJ:
 Wiley.
- Goleman, Damiel (2005). Emotional Intelligence. USA: Bantam.

 Swami Vivekanand. (2016). The complete works of Swami Vivekanand. Advaita Ashrama. (https://www.ramakrishnavivekanand.info/vivekanand/complete works.html)

Assessment Methods*

Internal Assessment: 25%

End Semester Theory Exam: 25%

Practical: 50%

*Subject to directions from the Examination Branch/University of Delhi from time to time

Science and Society

Course Title and	Credits	Credit	Distribution	of the Course	Eligibility	Prerequisite of the Course
Code		Lecture	Tutorial	Practical/Practice	Criteria	
Science and Society	02	Ī	0	1	Pass in Class 12th	NIL

Course Objectives and Learning Outcomes:

This paper is interdisciplinary in nature and would provide students with basic exposure to scientific methods, technologies and developments that have played a significant role in the evolution of human society from ancient to modern times. The primary objective of this course is to instill in students an appreciation for science and a scientific outlook and temper. The course further aims to increase awareness about fundamental scientific concepts that play an important role in our daily life using various examples and case studies. Students would also be made aware of the scientific rationale of technological developments that would enable them to make informed decisions about their potential impact on society.

Pedagogy:

- Pedagogy in this course should largely rely on learning by enquiry, observations, experimentation and group discussions using case studies/examples.
- Efforts should be made to instill an interest in students for science. Students should be
 encouraged to understand and appreciate scientific concepts and their applications
 rather than solely memorizing factual information.
- The faculty may refer to books/ articles/ reviews/ documentaries/ films etc. from academic institutions or other reliable sources. A few suggestive links are provided in the Suggested Reading/Resources Section below.
- In the spirit of exposition of popular science, Subject/Domain experts may also be invited for lectures and interactions with students.

Course Outline:

The course is divided into three major sections:

- 1. Science and Technology from Ancient to Modern Times
- 2. Scientific Principles and Concepts in Daily Life
- 3. Contemporary Developments

1. Science and Technology - from Ancient to Modern Times

 Philosophy of science, the scientific method, importance of observation, questions and experimental design, rational thinking, myths vs. facts

- (ii) Science, Technology and Traditional Practices: Suggestive areas include:
 - · Water harvesting structures and practices
 - Construction, architecture and design use of natural environment-friendly designs and materials
 - · Agriculture including domestication of plants and animals

(iii) Science and Technology in Modern Times: Suggestive areas include:

- Public Health: Nutrition, Hygiene, Physical and Mental Health, Vaccines and Antibiotics, Anti-microbial resistance
- Food Security: Green Revolution, White Revolution
- IT Revolution, eGovernance
- Clean Energy, Renewable Energy
- Space Science and Exploration
- Evolution, Ecology and Environment

In this section, students should also be made aware about the contributions of Indian scientists since ancient times and the contributions of women in science.

2. Scientific Principles and Concepts in Daily Life

This section aims to encourage appreciation of the scientific method through observation, experimentation, analysis and discussions. Students are required to participate in activities and experiments. A suggestive list is given below:

Suggested Activities:

- Observing and documenting flora and fauna of College campus/city.
- Visits to science laboratories in the College or neighbouring College/Institute.
- Visits to science museums, planetarium.
- Visits to biodiversity parks and nature walks.
- Participation in a citizen science project/initiative.

Suggested Experiments:

- Measuring the height of the college building using a stick.
- Measuring the curvature of earth, using distance and shadow length.
- Isolation of DNA (DNA Spooling)
- Observing transpiration and photosynthesis in plants
- The blood typing game (online)
- Are fruit juices, soap, carbonated drinks acidic or alkaline? (using pH strips or developing your own Litmus Test)
- Do plants learn and remember?
- Experiments on how migratory birds find their way. (Online)
- How can a mosquito sit on a water surface or a blade float on water?
- How does a submarine dip or rise in the ocean?
- How and why does the path of the sun in the sky change with the seasons?
- Identification of celestial objects with the naked eye
- Types of clouds
- Science of musical sounds
- Science of splitting of colours from white light: rainbow, CD-rom, prism, oil films
- · Lenses, mirrors and the human eye

3. Contemporary Developments:

This section would focus on current topics of major interest. Suggestive areas include:

- Climate change and global warming
- Threats to biodiversity and habitat degradation
- · Genomics and modern medicine
- · Genetically engineered crops
- Artificial intelligence and robotics
- Big Data Analytics
- Citizen science and science communication
- · Science of natural disasters and their management
- Any other Practical/Practice as decided from time to time

Suggested Books / Resources:

The list given below comprises only suggestive references. Faculty members conducting this course are encouraged to explore and use other resources subject to the condition that these are updated, authentic and are derived from sources with strong academic credentials or expertise and are supported by strong evidence.

Suggested Books:

- Basu and Khan (2001). Marching Ahead with Science. National Book Trust
- Gopalakrishnan (2006). Inventors who Revolutionised our Lives. National Book Trust
- Yash Pal and Rahul Pal (2013) Random Curiosity. National Book Trust
- Hakob Barseghyan, Nicholas Overgaard, and Gregory Rupik (****) Introduction to History and Philosophy of Science (licensed under a Creative Commons Attribution 4.0 International License)
- John Avery (2005). Science and Society, 2nd Edition,
- Dharampal (2000). Indian Science and Technology in the Eighteenth Century,

Suggested Online Resources:

Section 1:

(i) Philosophy of science:

https://blogs.scientificamerican.com/doing-good-science/what-is-philosophy-of-science-and-should-scientists-care/

http://abyss.uoregon.edu/~js/21st_century_science/lectures/lec01.html

https://wps.ablongman.com/wps/media/objects/1449/1483820/18 2.pdf

Myths vs. facts:

https://www.sciencelearn.org.nz/resources/415-myths-of-the-nature-of-science

History of technology:

https://www.visualcapitalist.com/history-of-technology-earliest-tools-modernage/

Water harvesting:

https://worldwaterreserve.com/introduction-to-rainwater-harvesting/

Public Health:

https://www.ajpmonline.org/article/S0749-3797(11)00514-9/fulltext

https://study.com/academy/lesson/public-health-vs-medicine-differences-similarities.html

https://www.deepc.org.in/video-tutorials/public-health-workshop

Food Security:

https://www.concern.net/news/what-food-security

IT Revolution, eGovernance:

Energy:

https://www.nrdc.org/stories/renewable-energy-clean-facts

Space Science:

https://www.isro.gov.in/spacecraft/space-science-exploration

https://www.isro.gov.in/pslv-c11-chandravaan-1

https://www.isro.gov.in/chandrayaan2-home-0

https://www.britannica.com/science/space-exploration

Contribution of Indian Scientists & Women Scientists:

https://www.tifr.res.in/~outreach/biographies/scientists.pdf

https://indiabioscience.org/media/articles/ISTI.pdf

https://www.thebetterindia.com/63119/ancient-india-science technology/

https://ncsm.gov.in/indian-women-in-science-technology/

Evolution:

ttps://www.livescience.com/474-controversy-evolution-works.html

https://www.ibiology.org/evolution/origin-of-life/

Section 2:

Measuring buildings, earth curvature:

https://www.youtube.com/watch?v=hrwL3u2Z4Kg https://www.youtube.com/watch?v=khRMzxONpLg https://www.youtube.com/watch?v=YaPa4esJJx4

Isolation of DNA

https://melscience.com/US-en/articles/home-dna-extraction/?irclickid=2hh2pqRY8xyLTbawUx0Mo3ENUkBwlX3pGQDJSc0 &utm_source=impact&irpid=2201352&irmpname=Science%20Journal%20for%20Kids&irgwc=1

Transpiration & Photosynthesis

https://www.youtube.com/watch?v=JQvdXX7hGqI

https://www.youtube.com/watch?v=U4rzLhz4HHk

https://www.youtube.com/watch?v=pFaBpVoQD4E

Online game on blood typing

https://educationalgames.nobelprize.org/educational/medicine/bloodtypinggame/gamev3/1.html

Determination of pH

https://www.voutube.com/watch?v=BEz6t_e6gpc

Plant behaviour

https://youtu.be/KyoeCFTIXKk https://youtu.be/gBGt5OeAOFk

Migratory Birds

https://www.scienceabc.com/nature/how-migrating-birds-geese-navigate-long-distance-earth-magnetic-field.html

Section 3:

Climate change and global warming

https://letstalkscience.ca/educational-resources/backgrounders/introduction-climate-change

Biodiversity

https://india.mongabay.com/2020/09/nature-in-peril-as-biodiversity-losses-mount-alarmingly-states-the-living-planet-report/

Genomics and Modern Medicine

https://www.nationalgeographic.com/science/article/partner-content-genomics-health-care

https://www.mja.com.au/journal/2014/201/1/impact-genomics-future-medicine-and-health

https://www.nature.com/scitable/topicpage/pharmacogenomics-and-personalized-medicine-643/

Genetically modified crops

https://www.nature.com/scitable/topicpage/genetically-modified-organisms-gmostransgenic-crops-and-732/

https://factly.in/explainer-what-is-the-status-of-gm-crops-in-india/

https://www.fda.gov/food/agricultural-biotechnology/how-gmo-crops-impact-our-world

Artificial Intelligence and Robotics

https://www.ohio.edu/mechanical-faculty/williams/html/PDF/IntroRob.pdf https://nptel.ac.in/content/storage2/courses/106105078/pdf/Lesson%2001.pdf

Big Data Analytics

https://www.researchgate.net/publication/328783489 Big Data and Big Data Analytics Concepts Types and Technologies

Citizen Science

<u>https://www.nationalgeographic.org/idea/citizen-science-projects/?page=1</u>
<u>https://blogs.scientificamerican.com/guest-blog/effective-communication-better-science/</u>

http://www.dialogue.ias.ac.in/article/30161/citizen-science-in-india-introduction-challenges-and-way-forward
https://www.societyforscience.org/research-at-home/citizen-science/

Suggested Weekly Plan:

Weeks 1-4: Section 1

Weeks 5-8: Section 2

Weeks 9-12: Section 3

Weeks 13-14: Presentations

Assessment Methods*

Internal Assessment: 25%

End Semester Theory Exam: 25%

Practical: 50%

*Subject to directions from the Examination Branch/University of Delhi from time to time

Panchakosha: Holistic Development of Personality

Course Title and	Credits	Cred	it Distributio	n of the Course	Eligibility Criteria	Prerequisite of the Course
Code		Lecture	Tutorial	Practical/Practice		
Panchakosha: Holistic	02	1	0	1	Pass in Class 12th	NIL
Development of Personality						

Course Objectives

- To introduce Five Koshas five levels of mind-body complex Annamaya, Pranayama, Manomaya, Vigyanamaya and Anandamaya Kosha; for a holistic development of personality.
- To generate awareness about physical and mental wellbeing through the Indian concept of Panchkosha.
- To develop a positive attitude towards self, family and society amongst students.
- To guide students build personalities based on the understanding of *Panchkosha*.

Learning Outcomes

- Enhanced physical and mental health.
- Coping with peer pressures and stress.
- Improved concentration leading to better overall performance.
- Manage life situations through a balanced and mature approach.

Syllabus of Panchkosha: Holistic Development of Personality

Unit I: Elements of Personality	Lectures
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 PanchaKosha: Introduction Five aspects of Human Personality: Annamaya Kosha (Physical body), Pranamaya Kosha (Vital life force energy), Manomaya Kosha (Psychological wellness), Vijnanamaya Kosha (Intellect), Anandamaya Kosha (Happiness and Blissfulness) Health: Mental and Physical 	4
Unit II: Annamaya Kosha and Pranamaya Kosha	
 Human Body and Pancha Karmendriyas Annamaya Kosha: Balanced diet and exercise for healthy body Pranamaya Kosha: Development of life force, Pranayam Charucharya: Social Etiquettes 	4
Unit III: Manomaya Kosha and Vijnanamaya Kosha	
 Antahkarana and its functions Pancha Gyanendriyas Manomaya Kosha: Controlling the Mana (mind) Vijnanamaya Kosha: Ability of discretion and decision making 	4
Unit IV: Anandamaya Kosha and Beyond	
 Anandamaya Kosha: Experience of happiness and bliss Self-realisation, Nature of Consciousness: Sat-Chit-Ananda 	3

Practical/ Practice Component

(15 sessions of 2 hours each= 30 hours)

- Recitation of select verses from Taitiriyopansid
- Asana
- Pranayama
- Meditation
- Visit to a Yog shivir or meditation centres
- Students are required to watch documentaries and films on the subject-related topics.
- If required, students can share their experiences in the form of a Project Report.
- Any other Practical/Practice as decided from time to time

Essential Readings

• पंचकोश विवेक,स्वामी परमहंस योगनान्द, https://ndl.iitkgp.ac.in/पर उपलब्ध

- विवेक चूड़ामणि, आदि शंकराचार्य द्वारा लिखित, अरविन्द आनंद द्वारा अनुदित, चौखम्भा प्रकाशन, वाराणसी, 2015
- Vivek Chudamani, Adi Shankaracharya, Swami Turiyananda (Sanskrit and English), Sri Ramakrishna Math, Mylapore, 2019
- सभी के लिए योग,बी के एस. आयंगार, प्रभात प्रकाशन, 2018
- Yoga The Path to Holistic Health: The Definitive Step-by-step Guide, B.K.S. Iyengar, Dorling Kingsley, London, 2021
- The Sacred Science of Yoga & The Five Koshas, Christopher Sartain, CreateSpace Independent Pub, 2015

Suggested Readings

- PanchaKosha: The five sheaths of the human being, Swami Nishchalanand, Kindle edition.
- Upanisadvakya Mahakosa. (An Upanishadic Concordance, taken from 239 Upanishads, G. S. Sadhale (Compiled by). Chowkhamba Vidyabhawan, Varanasi, 2014
- The Pentagon of Creation: As Expounded in the Upanishads, Ajai Kumar Chhawchharia, CreateSpace Independent Pub, 2015

Assessment Methods*

Internal Assessment: 25%

End Semester Theory Exam: 25%

Practical: 50%

*Subject to directions from the Examination Branch/University of Delhi from time to time

Ethics and Values in Ancient Indian Traditions

Course Title and	Credits	Credit	Distribution	Eligibility Criteria	Prerequisite of the	
Code		Lecture	Tutorial	Practical/Practice	Criteria	Course
Ethics and Values in Ancient Indian Traditions	02	1	0	1	Pass in Class 12th	NIL

COURSE OBJECTIVES:

- To understand the rich cultural traditions relating to discourses on life and its purpose, instilling of values relating to ethical and moral propriety.
- To make students more engaged with the past traditions of the country.
- To introduce students to early epics: Puranic, Buddhist and other traditions.

LEARNING OUTCOMES:

- Students will develop an overview of indigenous philosophies.
- Understanding the richness of Indian heritage leading to greater sensitivity.
- Inspiration from history to deal with contemporary issues.
- Appreciate the traditions of diversity, discussions, debates and knowledge transmission.

Syllabus of Ethics and Values in Ancient Indian Traditions

Unit I The idea of India and Bharat	Lectures 5
 'Jambudvipa'; 'Aryavrata'; 'Bharat'; India Early discourse on moral order- rta in Vedic traditions Debates in the Upanishads and the Shramanic traditions 	
Unit II State, Society and Dharma	5
 Kingship and Society: <i>Dharma, Neeti</i> and <i>Danda</i> Rashtra, Sanskar and making of socio-cultural milieu 	
Unit III The 'Purpose of Life' in Texts	5

- 1. 'Right Conduct': Buddhist, Jaina and Shramanic Traditions
- 2. Puruṣārtha Chatushtaya: Dharma, Artha, Kāma and Mokṣa
- Assimilation and Assertion: Ethical issues in Epics and Puranic traditions

Practical/ Practice Component

(15 sessions of 2 hours each= 30 hours)

 Discuss in your locality, in 10-15 households with regard to Ethics and Values in Indian traditions:

> Vedic traditions Puruṣārtha Chatushtaya Buddhist, Jaina and Shramanic Traditions Jambudvipa; Aryavrata; Bharat; India

- Students are required to explore e-resources available with University of Delhi and other academic institutions.
- Students are required to watch documentaries and films on the subject-related topics.
- If required, students can share their experiences in the form of a Project Report.
- Students may share their experiences in the form of audio-visual presentations of 15-30 minutes.
- · Any other Practical/Practice as decided from time to time

Essential Readings

Buietenen, J.A.B. Van, *The Bhagwadgita in the Mahabharata: Text and Translation*. Chicago: Chicago University Press, 1981. Bhagwadgita by Geeta Press Gorakhpur.

Bhasham, A.L, Wonder that was India: A Survey of the Culture of the Indian Subcontinent Before the Coming of the Muslims. London, Sidgwick and Jackson, 1954

Dasgupta, S. N. History of Indian Philosophy. Cambridge University Press, 1923, Vol. I-II.

Hiltebeital, Alf. Rethinking the Mahabharata: A Reader's Guide to the Education of the Dharma King. Chicago: Chicago University Press, 2001.

Kane, P.V. *History of Dharmashastra (Ancient and Medieval Religious and Civil Law)*, vol. II, parts 1-2; vol. III 3rd ed. Pune: Bhandarkar Oriental Research Institute,[1941, 1946].

Olivelle, Patric. King, Governance, and Law in Ancient India: Kautilya's Arthashastra. Oxford: Oxford University Press, 2013.

Sharma, Arvind. 'On Hindu, Hindustan, Hinduism and Hindutva'. Numen, 49(1), 2002, p. 1-36.

Suggested Readings

Olivelle, Patric. (text and trans.) Manu's Code of Law: A Critical Edition and Translation of the Manava-Dharmashastra. New Delhi: Oxford University Press, 2006.

Rocher, Ludo. 'The Concept of Boundaries in Classical India', in Peter Gaefkke and David A. Utz (eds.), *The Countries of South Asia: Boundries, Extensions, and Interrelations.*

Philadelphia: University of Pennsylvania, Department of South Asia Regional Studies (Proceedings of The South Asia Seminar, III, 1982-1983), 1988, p. 3-10.

Sukthankar, V.S., S.K. Belvalkar, and P.L. Vaidya(ed.). *The Mahabharata*. Poona: Bhandarkar Oriental Research Institute, 1933-66.

Tripathi, Radhavallabh, ed. *India's Intellectual Traditions: A Revealed Through Sanskrit Sources*. New Delhi: Sahitya Akademi, 2016.

Assessment Methods*

Internal Assessment: 25%

End Semester Theory Exam: 25%

Practical: 50%

^{*}Subject to directions from the Examination Branch/University of Delhi from time to time

स्जनात्मक लेखन के आयाम

Course Title and Code	Credits	Credit	Distribution	Eligibility	Prerequisite	
Code		Lecture	Tutorial	Practical/Practice	Criteria	of the Course
सृजनात्मक लेखन के आयाम	02	1	0	1	Pass in Class 12th	NIL

पाठ्यक्रम का उद्देश्य (Course Objectives):

- 1. सृजनात्मकता और भाषायी कौशल का संक्षिप्त परिचय कराना
- 2. विचारों का प्रभावी प्रस्तुतिकरण करना
- 3. सृजनात्मक चिंतन और लेखन क्षमता को विकसित करना
- 4. मीडिया लेखन की समझ विकसित करना

पाठ्यक्रम अध्ययन के परिणाम (Learning Outcomes):

- 1. सृजनात्मक चिंतन और लेखन क्षमता का विकास हो सकेगा
- 2. लेखन और मौखिक अभिव्यक्ति की प्रभावी क्षमता विकसित हो सकेगी
- 3. मीडिया लेखन की समझ विकसित होगी
- 4. विद्यार्थी में अपने परिवेश, समाज तथा राष्ट्र के प्रति संवेदनशीलता का विकास होगा

Syllabus: सृजनात्मक लेखन के आयाम

इकाई - 1 (Unit I):सृजनात्मक लेखन	(No. of lectures)
 सृजनात्मक लेखन : अर्थ, स्वरूप और बोध सृजनात्मक लेखन और परिवेश सृजनात्मक लेखन और व्यक्तित्व निर्माण 	
इकाई - 2 (Unit II): सृजनात्मक लेखन : भाषिक संदर्भ	05

 भाव और विचार का भाषा में रूपान्तरण साहित्यिक भाषा की विभिन्न छवियाँ प्रिंट तथा इलेक्ट्रोनिक माध्यमों की भाषा का अंतर 	
इकाई 3 (Unit III): सृजनात्मकता लेखन - विविध आयाम	05
 कविता, गीत, लघु कथा हास्य - व्यंग्य लेखन, पल्लवन, संक्षेपण, अनुच्छेद 	

Practical/ Practice Component

(15 sessions of 2 hours each= 30 hours)

- कक्षा में प्रत्येक विद्यार्थी द्वारा 'मेरी पहली रचना' शीर्षक से किसी भी विधा में लेखन
- किसी भी साहित्यिक रचना का भाषा की दृष्टि से विश्लेषण
- इकाई- 3 में उल्लिखित विधाओं में विद्यार्थियों द्वारा लेखन एवं सामूहिक चर्चा
- प्रत्येक इकाई से संबन्धित परियोजना कार्यः
 - उसमसामयिक विषयों पर किसी भी विधा में लेखन बदलते जीवन मूल्य, महामारी, राष्ट्र निर्माण में छात्र की भूमिका, युवाओं के कर्तव्य, पर्यावरण संरक्षण, लोकतन्त्र में मीडिया की भूमिका, ऑनलाइन शॉपिंग अथवा अन्य समसामयिक विषय
 - किसी उत्सव, मेला, प्रदर्शनी, संग्रहालय और किसी दर्शनीय स्थल का भ्रमण तथा उस पर परियोजना कार्य
- प्रिंट माध्यम के खेल, राजनीति, आर्थिक और फिल्म जगत आदि से जुड़ी सामग्री का भाषा की दृष्टि से विवेचन
- इलेक्ट्रोनिक माध्यम के समाचार, धारावाहिक, विज्ञापन आदि का भाषा की दृष्टि से विवेचन
- आवश्यक हो, तो छात्र प्रोजेक्ट रिपोर्ट के रूप में अपने अन्भव साझा करें
- Any other Practical/Practice as decided from time to time

अनिवार्य पाठ (ESSENTIAL READINGS)

लेखन एक प्रयास, हरीश चन्द्र काण्डपाल

- रचनात्मक लेखन, सं. रमेश गौतम
- साहित्य चिंतनः रचनात्मक आयाम, रघुवंश

सुझावात्मक पाठ (SUGGESTED READINGS):

- अग्नि की उड़ान, अबुल कलाम आज़ाद
- टेलीविजन की भाषा हरीश चन्द्र बर्णवाल, राधाकृष्ण प्रकाशन, नई दिल्ली
- छोटे पर्दे का लेखन, हरीश नवल
- काव्यभाषा : रचनात्मक सरोकार, प्रो. राजमणि शर्मा
- कविता रचना प्रक्रिया, कुमार विमल

Assessment Methods*

Internal Assessment: 25%

End Semester Theory Exam: 25%

Practical: 50%

^{*}Subject to directions from the Examination Branch/University of Delhi from time to time

साहित्य, संस्कृति और सिनेमा

Course Title and Code	Credits	Credit Distribution of the Course			Eligibility Criteria	Prerequisite of the
Cour		Lecture	Tutorial	Practical/Practice	Criteria	Course
साहित्य , संस्कृति और सिनेमा	02	1	0	1	Pass in Class 12th	NIL

Course Objectives

- 1.साहित्य , संस्कृति और सिनेमा के माध्यम से छात्रों का सर्वांगीण विकास करना
- 2. छात्रों को नैतिक, सांस्कृतिक और संवैधानिक मूल्यों के प्रति जागरूक करना
- 3. भारतीय ज्ञान परंपरा, वैज्ञानिक दृष्टिकोण और तार्किक क्षमता को प्रोत्साहित करना
- 4. साहित्य, संस्कृति और सिनेमा के माध्यम से राष्ट्र प्रेम की भावना जागृत करना
- 5. सामूहिक कार्यों के माध्यम से सम्प्रेषण,प्रस्तुतीकरण एवं कौशल दक्षता विकसित करना

Learning Outcomes

- साहित्य ,संस्कृति और सिनेमा के माध्यम से नैतिक,सांस्कृतिक और संवैधानिक मूल्यों की समझ विकसित होगी
- 2. भारतीय ज्ञान परंपरा और नैतिक मूल्यों के प्रति सकारात्मक दृष्टिकोण बनेगा
- 3. वैचारिक समझ एवं तार्किक क्षमता का विकास होगा
- 4. परियोजना के माध्यम से संप्रेषण एवं प्रस्तृतिकरण दक्षता का विकास होगा
- 5. छात्रों के व्यक्तित्व का सर्वांगीण विकास होगा

Syllabus: साहित्य ,संस्कृति और सिनेमा

Unit I: साहित्य,संस्कृति और सिनेमा का सामान्य परिचय	(No.of lectures)
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 साहित्य, संस्कृति और सिनेमा : परिभाषा और स्वरूप साहित्य , संस्कृति और सिनेमा का अंत:संबंध 	2
Unit II: साहित्यिक कृतियों पर आधारित सिनेमा:	6
 साहित्यिक कृतियों पर आधारित सिनेमा में परिकल्पना साहित्यिक कृतियों पर आधारित सिनेमा की प्रासंगिकता साहित्यिक कृतियों पर आधारित सिनेमा — आनंदमठ 1952, तीसरी कसम 1966, रजनीगंधा 1974, पद्मावत 2016 	
Unit III: हिन्दी सिनेमा में सामाजिक — सांस्कृतिक मूल्यों की अभिव्यक्ति	7
 सामाजिक - सांस्कृतिक मूल्य सामाजिक - सांस्कृतिक मूल्य के शिक्तशाली उपकरण के रूप में सिनेमा हिन्दी सिनेमा में अंतर्निहित सामाजिक- सांस्कृतिक मूल्य – मदर इंडिया 1957, बंदिनी 1963, पूरब और पश्चिम 1970, हम आपके हैं कौन 1994, टॉयलेट: एक प्रेमकथा 2017 	

Practical/ Practice Component (प्रायोगिक क्रियाकलाप) (15 sessions of 2 hours each= 30 hours)

- भारतीय सांस्कृतिक मूल्यों पर आधारित लघु फिल्म हेतु पटकथा लेखन (8-10 मिनट)
- साहित्यिक रचनाओं का फिल्मांतरण (8-10 मिनट); यह साम्र्हिक क्रियाकलाप होगा
- राष्ट्रप्रेम, कुटुंब, शांति, पर्यावरण, जल-संरक्षण, स्वच्छता, मित्रता, सत्यनिष्ठा, कर्मनिष्ठा, समरसता में से किसी एक विषय पर मूक फिल्म निर्माण (8-10 मिनट)
- आवश्यक हो, तो छात्र प्रोजेक्ट रिपोर्ट के रूप में अपने अनुभव साझा करें
- · Any other Practical/Practice as decided from time to time

- 'संस्कृति क्या है' (निबंध) संस्कृति,भाषा और राष्ट्र, रामधारी सिंह दिनकर,लोक भारती प्रकाशन,2008,पृष्ठ संख्या 60-64.
- साहित्य का उद्देश्य(निबंध) ,प्रेमचंद ,एस.
 के.पब्लिशर्स,नईदिल्ली,1988,पृष्ठसंख्या 7-18.
- भारतीय संस्कृति के स्वर,महादेवी वर्मा, राजपाल एंड संस प्रकाशन 2017.
- हिंदी सिनेमा ; भाषा ,समाज और संस्कृति(लेख), पृष्ठ संख्या 11-18 भाषा ,साहित्य ,समाज और संस्कृति खंड 6,प्रो. लालचंद राम,अक्षर पब्लिशर्स एंड डिस्ट्रीब्यूटर्स,2020
- सिनेमा और साहित्य का अंत:संबंध (लेख)पृष्ठ संख्या 30-34,साहित्य और सिनेमा ,पुरुषोतम कुंदे (संपा.) साहित्य संस्थान,2014
- साहित्यिक रचनाओं का फिल्मांतरण(लेख)पृष्ठ संख्या206-212,लोकप्रिय सिनेमा और सामाजिक यथार्थ,जवरीमल पारख,अनामिका पब्लिशर्स एंड डिस्ट्रीब्यूटर्स प्रा.लि.,2019

Suggested Readings

- सिनेमा और संस्कृति,राही मासूम रजा, वाणी प्रकाशन, प्रकाशन वर्ष, 2018.
- जीवन को गढ़ती फिल्में, प्रयाग शुक्ल
- सिनेमा और संसार, उदयन वाजपेयी
- साहित्य,संस्कृति और समाज परिवर्तन की प्रक्रिया(निबंध)अज्ञेय, संपा0कृष्णदत्तपालीवाल, सस्तासाहित्यमंडल,नईदिल्ली, 2010, पृष्ठसंख्या 25-41
- सिनेमा समकालीन सिनेमा ,अजय ब्रह्मात्मज,वाणी प्रकाशन,2006
- कल्चर इन्डस्ट्री रिकन्सिडर्डः पृष्ठसंख्या- 98-106.
 कल्चरइन्डस्ट्रीःथ्योडोरएडोर्नो, राउटलेज(भारतीयसंस्करण)
- दि सिग्निफिकेन्स ऑफ कल्चर इन अन्डर्स्टैंडिंग ऑफ सोशल चेंज इन कन्टेम्परि इंडियाः पृष्ठसंख्या- 25-39.
- कल्चर चेंज इन इंडियाःआइडेन्टिटी एंड ग्लोबलाइजेशनःयोगेन्द्रसिंह. रावतपब्लिकेशन, जयपुर,भारत.

Assessment Methods*

Internal Assessment: 25%

End Semester Theory Exam: 25%

Practical: 50%

^{*}Subject to directions from the Examination Branch/University of Delhi from time to time

भारतीय भक्ति परंपरा और मानव मूल्य

Course Title and	Credits	Credi	Distribution	of the Course	Eligibility Criteria	Prerequisite of the Course	
Code		Lecture	Tutorial	Practical/Practice		of the Course	
भारतीय भक्ति परंपरा और मानव मूल्य	02	1	0	1	Pass in Class 12th	NIL	

COURSE OBJECTIVES

- भारतीय भक्ति की महान परंपरा, प्राचीनता और इसके अखिल भारतीय स्वरूप से छात्रों का
- भारतीय भक्ति परंपरा के माध्यम से छात्रों में मानव मूल्यों और गुणों को जगाकर उनका चारित्रिक विकास करना और एक अच्छे मनुष्य का निर्माण करना ।
 • छात्रों को भारतीय नैतिक, सांस्कृतिक और सामाजिक मूल्यों के प्रति जागरूक करना ।
- भारतीय भक्ति परंपरा के माध्यम से राष्ट्रीयता और अखिल भारतीयता की भावना जागृत करना।

LEARNING OUTCOMES

- भारतीय भक्ति परंपरा के माध्यम से छात्रों में मानव मूल्यों और गुणों को विकास होगा और वे एक अच्छे और चरित्रवान मनुष्य बन सकेंगे।

 • भारतीय भक्ति परंपरा के सांस्कृतिक और सामाजिक पक्षों की जानकारी हो सकेगी।
- भक्ति की प्राचीनता और अखिल भारतीय स्वरूप की जानकारी से राष्ट्रीयता और अखिल भारतीयता की भावना जागृत और मजबूत होगी।
- प्रमुख भक्त कवियों का परिचय और उनके विचारों की जानकारी हो सकेगी।

SYLLABUS

Unit I: भारतीय भक्ति परंपरा	Lectures
	(in hours)
	05

भक्तिः अर्थ और अवधारणा भक्ति के विभिन्न संप्रदाय और सिद्धांत भारत की सांस्कृतिक एकता और भक्ति भक्ति का अखिल भारतीय स्वरूप	
Unit II: भारत के कुछ प्रमुख भक्त और उनके विचार	05
संत तिरुवल्लुवर , आण्डाल, अक्कमहादेवी, ललद्यद , मीराबाई, तुलसीदास, कबीरदास, रैदास, गुरु नानक, सूरदास, जायसी, तुकाराम, नामदेव, नरसिंह मेहता, वेमना, कुंचन, नम्बियार, चैतन्य महाप्रभु, चंडीदास, सारला दास, शंकरदेव	
Unit III: मानव मूल्य और भक्ति	05
मानव मूल्य का अर्थ चयनित भक्त कवियों की जीवन मूल्यपरक कविताएँ	

(15 sessions of 2 hours each= 30 hours)

- पाठ्यक्रम में उल्लिखित कवियों में से किसी एक किव की रचनाओं में विभिन्न मानव मूल्यों के आधार पर प्रोजेक्ट
- वर्तमान समय में भक्ति की प्रासंगिकता को समझना; सर्वे और साक्षात्कार पद्धित के आधार पर.
- जीवन में मानव मुल्यों के प्रतिपालन पर सर्वे और साक्षात्कार के आधार पर एक रिपोर्ट बनाना.
- उल्लिखित कवियों में से किसी एक किव से संबंधित किसी मठ, आश्रम या मंदिर आदि, अथवा कोई फिल्म/ डॉक्य्मेंट्री के आधार पर रिपोर्ट बनाना.
- आवश्यक हो, तो छात्र प्रोजेक्ट रिपोर्ट के रूप में अपने अन्भव साझा करें
- Any other Practical/Practice as decided from time to time

Essential Readings

- 'भिक्त का उद्भव और विकास तथा वैष्णव भिक्त के विविध रूप', भारतीय साहित्य का समेकित इतिहास, संपादक- डॉ नगेंद्र, हिंदी माध्यम कार्यान्वयन निदेशालय, दिल्ली विश्वविद्यालय, दिल्ली, पृष्ठ संख्या 215-250
- कुछ प्रमुख कवियों के चयनित पद
- 'भिक्त आंदोलन और भिक्त काव्य', शिव कुमार मिश्र, अभिव्यक्ति प्रकाशन, इलाहाबाद, 1994
- 'मानव मूल्य और साहित्य', डॉ धर्मवीर भारती, भारतीय ज्ञानपीठ, नई दिल्ली, 1999

Suggested Readings:

- 'भिक्त के आयाम', डॉ. पी. जयरामन, वाणी प्रकाशन, नई दिल्ली
- 'हिंदी साहित्य का इतिहास', आचार्य रामचंद्र शुक्ल, लोक भारती प्रकाशन, इलाहाबाद

- 'मध्यकालीन हिंदी काव्य का स्त्री पक्ष', डॉ. पूनम कुमारी, अनामिका पब्लिशर्स एंड
- डिस्ट्रीब्युटर्स, नई दिल्ली

 'मध्यकालीन हिंदी भिक्ति काव्यः पुनर्मूल्यांकन के आयाम', डॉ. पूनम कुमारी, अनामिका पब्लिशर्स एंड डिस्ट्रीब्युटर्स, नई दिल्ली

Assessment Methods*

Internal Assessment: 25%

End Semester Theory Exam: 25%

Practical: 50%

*Subject to directions from the Examination Branch/University of Delhi from time to time

Value Addition Course FIT INDIA

Course Title and	Credits	Credit Distribution of the Course			Eligibility Criteria	Prerequisite of the
Code		Lecture	Tutorial	Practical/Practice	Criteria	Course
Fit India	02	0	0	2	Pass in Class 12th	NIL

Course Objectives:

- Encourage physical activity through engaging the students in sports and yoga.
- Understand the importance of a balanced diet
- Build skills for self-discipline, self-confidence, cooperation and teamwork.
- Promote fitness as a joyful activity.

Learning Outcomes:

- · Adopting a healthy lifestyle.
- Knowledge of nutrition, diet and psycho-physiological aspects of fitness.
- Develop Self-esteem, Self-confidence, Self-discipline and team spirit as indicators of fitness.

Syllabus of Fit India	Practical/Practice hours
	(30 x 2 = 60 hours)
Unit I: Participation in Physical Activity	16 hours
 Fit India Protocol Physical Activity, Health and Fitness Indicators of Fitness 	
Practical/Practice • Aerobic Work Out / Physical Activity (Walking)	
 Yoga – Asanas (Lying, Sitting and Standing positions) and Pranayama Cardiovascular Testing by 12min/9 min Cooper Run/Walk test 	

 Unit II: Health Related Fitness and their Components Muscular Strength and Endurance Body Composition and Flexibility Practical/Practice Flexibility Training: Back Saver Sit and Reach test Muscular Strength Training: Curl Ups / Standing Broad Jump/ Vertical Jump/ Plyometric Endurance Training: 1 Mile RockPort Test or 12 /9 minute Cooper run/walk test. Ideal Body Weight, Body Mass Index (BMI), Waist-Hip Ratio, Waist-Height Ratio (Data of at least 10 persons to be collected) 	16 hours	
Ratio, Waist-Height Ratio (Data of at least 10 persons to be		

Unit III. Nataritian and Fita	16 hours
Unit III: Nutrition and Fitness	
Healthy Eating Plate	
Balanced Diet	
Caloric Content of Food	
Practical/Practice	
Preparing Daily Diet and Calorie Chart	
 Aerobic Work Out / Physical Activity (Walking) 	
 Assessment of Physical Activity with the Calorie intake. 	
Asanas for:	
digestive systemexcretory system	
excretory system	
Unit IV: Psycho-physiological aspects of Fitness	12 hours
Sports Dhysiology and Dayshology	
 Sports Physiology and Psychology Depression, Anxiety and Stress Scale (DASS) 	
Rosenberg Self Esteem Scale	
Practical/Practice	
Skills learning and Participation in sports	
Group Games / Relays/ Minor Games	
Meditative Asanas and Pranayama Fit Latin Production (Appendix Appendix App	
 Fitness component testing (as per Fit India Protocol and Norms) and Analysis of Results 	
Data of at least 10 persons to be collected on DASS and	
The second of th	

self-esteem scale

Note: Concepts are to be taken up during the practical/practice hours.

Essential Readings:

- Fit India Website: https://fitindia.gov.in
- Wener W.K. Hoeger, Sharon
- A. Hoeger Fitness and Wellness-Cengage Learning (2014).

SUGGESTED READINGS:

- Charles B. Corbin, Gregory J Welk, William R Corbin, Karen A Welk Concepts of Fitness And Wellness A Comprehensive Lifestyle Approach-McGraw-Hill (2015)
- W.Larry Kenney, Jack H. Wilmore, Devid L.Costil(2015). Physiology of Sports and Exercise, Second Edition. USA. Human Kinetics.
- · Websites of International Sports Federations
- Website of Ministry of Youth Affairs and Sports

Assessment Methods*

Internal Assessment: 25%

End Semester Theory Exam: 25%

Practical: 50%

^{*}Subject to directions from the Examination Branch/University of Delhi from time to time

Financial Literacy

Course Title and	Credits	Credi	t Distribution	of the Course	Eligibility Criteria	Prerequisite of the
Code		Lecture	Tutorial	Practical/Practice	Criteria	Course
Financial Literacy	02	1	0	1	Pass in Class 12th	NIL

Course Objectives

- Familiarity with different aspects of financial literacy such as savings, investment, taxation, and insurance
- · Understand the relevance and process of financial planning
- · Promote financial well-being

Learning Outcomes

- · Develop proficiency for personal and family financial planning
- · Apply the concept of investment planning
- · Ability to analyse banking and insurance products
- · Personal tax planning

Syllabus of Financial Literacy	No. of Lectures
Unit I: Financial Planning and Financial products	3
Introduction to Saving	
 Time value of money 	
 Management of spending and financial discipline 	

Unit I	I: Banking and Digital Payment	4
•	Banking products and services	
•	Digitisation of financial transactions: Debit Cards (ATM Cards) and Credit	
	Cards. Net banking and UPI, digital wallets	
•	Security and precautions against Ponzi schemes and online frauds	

Unit l	Unit III: Investment Planning and Management	
:	Investment opportunity and financial products Insurance Planning: Life and non-life including medical insurance schemes	
Unit l	Unit IV: Personal Tax	
:	Introduction to basic Tax Structure in India for personal taxation Aspects of Personal tax planning	
•	Exemptions and deductions for individuals e-filing	

Note: Some of the theoretical concepts would be dealt with during practice hours.

Practical/ Practice Component

(15 sessions of 2 hours each= 30 hours)

- Regular class activities to enhance students' understanding of topics and the application of concepts. The case study method may be followed as a teaching pedagogy.
- Numerical questions pertaining to each unit wherever applicable should be practiced.
- For the second unit, students may be assigned a project wherein they can log on to the website of various banks and conduct an in-depth analysis and comparison of various financial products offered.
- For Unit III, a Project related to building a dummy portfolio of stocks and tracking their returns may be given.
- An investment budget may be given to the students to select investment options that maximize the return and minimize the tax implications.
- For the last unit, students may also file a dummy IT return to get hands-on experience with e-filing.
- Students may conduct a financial literacy survey among at least 25 respondents to measure the level of financial literacy and share the findings in the awareness in the form of a report.
- Any other Practical/Practice as decided from time to time

References

- Introduction to Financial Planning (4th Edition 2017) Indian Institute of Banking & Finance.
- Sinha, Madhu. Financial Planning: A Ready Reckoner July 2017, McGraw Hill.

Additional Resources

- Halan, Monika. Lets Talk Money: You've Worked Hard for It, Now Make It Work for You July 2018 Harper Business.
- Pandit, Amar The Only Financial Planning Book that You Will Ever Need, Network 18 Publications Ltd.

Assessment Methods*

Internal Assessment: 25%

End Semester Theory Exam: 25%

Practical: 50%

*Subject to directions from the Examination Branch/University of Delhi from time to time

CULTURE AND COMMUNICATION

Course Title and	Credits	Credit Distribution of the Course			Eligibility Criteria	Prerequisite of the
Code		Lecture	Tutorial	Practical/Practice	Criteria	Course
Culture and Communication	02	1	0	1	Pass in Class 12th	NIL

Learning Objectives:

- To focus on traditional values disseminated from Indian cultural heritage.
- To understand the interconnections between the legacy of our past and needs of our contemporary society.
- To learn to adapt, interact and celebrate our diversity and pluralistic culture.
- To develop communication skills in speaking, listening, reading and writing and apply them in our quotidian life as young citizens of contemporary India.
- To integrate ethical values and life skills.

Course Outcomes:

- Students will be able to appreciate the relevance of ancient Indian wisdom and core ethical values in our contemporary life.
- Students will be able to engage in a dialogue between the past and the present and inculcate the best principles towards a meaningful life.
- Students will be encouraged to involve themselves in team work and group activities to address challenges faced in metropolitan cities.
- Students will be able to develop communication skills, that is, analytical reading, empathetic listening, considerate speaking as well as informed writing.
- Extension activities will equip the students, drawn from diverse backgrounds, with life skills and confidence to integrate with a multicultural environment and work towards an inclusive community.
- Students will be encouraged to envisage and work towards an ethically robust society and thereby strengthen the nation.

 Unit I: Ethical Values from Indian Cultural Heritage Vasudhaiva Kutumbakam United We Stand, Divided We Fall Ek Bharat, Shresht Bharat 	3 classes
 Unit II: Developing Life Skills Empathy Adaptability Conserving our natural resources Sharing knowledge resources 	4 classes
Unit III: Effective Communication in Everyday Life	8 classes

(15 sessions of 2 hours each= 30 hours)

As hands-on experience is an essential component of the course, this section will focus on the practical aspects to correlate with the fundamental principles and learnings of the theory portion. Students will be encouraged to use the communication tools learnt through Unit 3 and corroborate the continuities of core principles studied in Unit 1 and 2.

- Students will be asked to conduct surveys/interviews in their neighbourhood or commuting routes to assess the nature and quality of negotiating our cultural diversity and pluralist traditions.
- Students would be assigned visits to old-age homes, hospitals, cancer wards, etc. to
 interact and write about their experiences with old people, caregivers, patients, nursing
 staff, helpers, etc.
- They will also be assigned visits to historically important places and monuments within
 the city and also converse with the tourists in order to trace a comprehensive view of
 the rich cultural history of India. They may create video documentaries, take and record

tourists' interviews and/or write a journal entry of the visit using the communication

skills learnt

Students shall make group presentations or individual reports on the activities

undertaken. Discussions with classmates and the teacher shall be undertaken to evolve

clarity of vision on the ethical values and effective communication skills learned

through this course.

ESSENTIAL READINGS:

Ramanujan, A.K. 'A Flowering Tree', Cultural Diversity, Linguistic Plurality &

Literary Traditions in India. Department of English, OUP, 2015. pp 125-138

Haksar, A. N. D. 'Chanakya Niti Shastra', Chanakya Niti. India, Penguin

Random House India Private Limited, 2020.

Dhanavel. S.P. English and Soft Skills. Orient Black Swan, 2010.

• Murthy, Sudha. 'The Nobel Prize', Wise & Otherwise. India, Penguin Random

House India Private Limited, 2006.

• Murthy, Sudha. 'How to Beat the Boys', Three Thousand Stitches: Ordinary

People, Extraordinary Lives'. Penguin Books, 2017.

• Soyinka, Wole. 'Telephone Conversations', The Individual and Society, Department

of English, Pearson Education, 2006. pp 122-23

• Bansode, Hira. 'Bosom Friend', The Individual and Society, Department of

English, Pearson Education, 2006. pp 49-50

Assessment Methods*

Internal Assessment: 25%

End Semester Theory Exam: 25%

Practical: 50%

*Subject to directions from the Examination Branch/University of Delhi from time to time

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Ecology and Literature

Course Title	Credits	Credit Distribution of the Course			Eligibility Criteria	Prerequisite of the Course	
and Code		Lecture	Tutorial	Practical/Practice	Criteria	the Course	
Ecology and Literature	02	1	0	1	Pass in Class 12th	NIL	

Course Objectives:

- To raise awareness among students towards the urgent predicament of Environmental and Ecological crisis and the need for reducing our carbon footprint upon fast depleting, ravaged ecological reserves.
- To develop a heightened ecological consciousness among students, leading to more responsible ecological behavior.
- To view environmental concerns as raised through plays, stories and poems.

Learning Outcomes:

- The course will highlight the urgency of environmental crisis, making studentsconscious and aware of the role each one of us plays.
- Students will be trained into environmental sensitivity and responsible ecologicalbehavior.
- Students will be encouraged to respond to incidents of habitat destruction, deforestation, etc. and realize the need for our urgent intervention.

Syllabus of Ecology and Literature

Unit I: Negotiating environmental issues creatively	5 classes
William Wordsworth: 'In April beneath the scented thorn'	
2. Rabindranath Tagore: 'The Waterfall'	
3. Gieve Patel: 'On Killing a Tree'	
UNIT II. Ecocritical literary representations	5 classes
1. Mary Oliver: 'Sleeping in the Forest'	
2.AK Ramanujan: 'A Flowering Tree'	

3.Mamang Dai: 'Small Towns and the River'	
UNIT III: Empathetic exploration and imaginative re-enactments	5 Classes
1. Amitav Ghosh's 'Part I: Stories' from The Great Derangement: Climate	
Change and the Unthinkable.	
2. ThangjamIbopishak: 'Volcano, You cannot erupt' from Dancing Earth:	
An Anthology of Poetry from North-East India	
3. ThangjamIbopishak: 'Dali, Hussain, or Odour of Dream, Colour of Wind'	
from Dancing Earth: An Anthology of Poetry from North-East India	

(15 sessions of 2 hours each= 30 hours)

- Students would undertake field visits to a school or a slum in the neighborhood or the
 play area of residential complexes to share, narrate stories, poems and articulate the ideas
 engaged with in the classroom lectures.
- They shall apply imaginative and creative ways of presenting socially responsible ecological behavior through re-tellings of the texts they have studied in the class.
- Creative re-enactment of key ideas studied by students in the form of a play, to be done
 individually and/or in a group to create awareness regarding environmental
 consciousness.
- They can also collectively organize a tree plantation drive in and around the college campus and adopt a sapling each in the college premises and in their neighborhood to take care of.
- Any other Practical/Practice as decided from time to time

SUGGESTED READINGS:

- Akhter, Tawhida, and Ahmad Bhat, Tariq. Literature and Nature. United Kingdom, Cambridge Scholars Publishing, 2022.
- Shiva, Vandana. 'Development, Ecology and Women', Staying Alive: Women Ecology and Development. India: Zed Books, 1988. pp 1-14
- 3. Carl, Safina. Prologue & Chapter 1, Beyond Words: What animals think and feel. Souvenir Press, 2015.

- 4. Garrard, Greg. Ecocriticism. United Kingdom: Taylor & Francis, 2011.
- 5. Wohlleben, Peter. The Hidden Life of Trees: What They Feel, How They Communicate—Discoveries from a Secret World. India: Penguin Books Limited, 2016.

Reading Indian Fiction in English

Course Title and	Credits	Credit Distribution of the Course			Eligibility	Prerequisite
Code		Lecture	Tutorial	Practical/Practice	Criteria	of the Course
Reading Indian Fiction in English	02	1	0	1	Pass in Class 12th	NIL

Course Objectives

- · Acquaint students with Indian Fiction in English.
- Familiarise students with Indian ethos and values through Indian fiction.
- Analyze novels critically and in the context of their own lived situations.

Learning Outcomes

- Understanding of Indian ethos and values through Indian fiction.
- Develop creative thinking through reading of fiction.
- Realise the potential of fiction in bringing out social and cultural change.

UNIT:I	2
 How to Read a Novel 	
 Novel as Reflection of Society 	
UNIT II:	7
 Bankim Chandra Chatterjee: Anandamath (English translation by 	
Sri Aurobindo and Barindra K Ghosh)	
Points of Discussion:	
Patriotism and Nationalism	
The song Bande Mataram	
 Elements of History and Romance 	
Issues of Gender	

Natural calamity	
Genre of Text and Feature Film	
UNIT III:	6
 Chaman Nahal: Azadi. Houghton Mifflin publication, 1975. 	
Points of Discussion:	
The Story of Partition	
Violence and Trauma	
 Autobiographical voices in the novel 	
 Elements of history, politics and art 	
Personal and Political	

(15 sessions of 2 hours each= 30 hours)

- Students may be asked to do a dramatic recitation of selected parts of a novel.
- Students may be asked to organize the major events of the plot of a novel through different methods: graphically, making a plot outline or sketching a storyboard.
- Students may be asked to classify each instance of figurative language (simile, metaphor, etc.) and explain its effect on that section of the text.
- Students may share their understanding of any particular aspect of the novels through a brief write up.
- Discuss the portrayal of any major characters of the novel with reference to the central theme of the text.
- Think about and discuss Indian fiction in relation to cultural and critical contexts.
- Any other Practical/Practice as decided from time to time

ESSENTIAL READINGS:

- Bankim Chandra Chatterjee: Anandamath (English translation by Sri Aurobindo and Barindra K Ghosh)
- Chaman Nahal: Azadi. Houghton Mifflin publication, 1975
- E. M. Forster: Aspects of the Novel

SUGGESTED READINGS:

- 1. Srinivasa Iyengar, K. R. Indian Writing in English. India, Sterling Publishers, 1987.
- 2. Naik, M. K. A History of Indian English Literature. India, SahityaAkademi, 1982.
- Nayar, Pramod K. The Indian Graphic Novel: Nation, History and Critique. India, Taylor & Francis, 2016.
- Gopal, Priyamvada. The Indian English Novel: Nation, History, and Narration. United Kingdom, Oxford University Press, 2009.

Assessment Methods*

Internal Assessment: 25%

End Semester Theory Exam: 25%

Practical: 50%

*Subject to directions from the Examination Branch/University of Delhi from time to time

CONSTITUTIONAL VALUES AND FUNDAMENTAL DUTIES

Course Title and	Credits	Credit	Distribution	of the Course	Eligibility Criteria	Prerequisite of the	
Code		Lecture	Tutorial	Practical/Practice	Criteria	Course	
Constitutional Values and Fundamental Duties	02	1	0	1	Pass in Class 12th	NIL	

COURSE OBJECTIVES:

- Enrich students with knowledge and relevance of the Constitution.
- Develop awareness about Duties and Values.
- Inculcate a sense of Constitutionalism in thought and action.

LEARNING OUTCOMES:

- Understand the Constitution and its relevance
- Appreciate the values and goals embedded in the Constitution.
- Recognise the importance of Fundamental Duties enshrined in the Constitution.
- Apply the spirit of fundamental values and duties in everyday national life.

Syllabus of Constitutional Values and Fundamental Duties

Unit I: The Const	5 lectures				
• Sov	 Federal Republic, Rule of Law, Separation of Powers Sovereignty, Socialism, Democracy Secularism and Sarva Dharma Sama Bhava 				
Unit II: Constitut	5 lectures				
Justice: So	ocial, Political, Economic				
• Liberty: T					
• Equality :					

Unit III: Fundamental Duties	5 lectures
Reflecting on the ancient Indian notions of righteousness and duty consciousness	
 Fundamental Duties- Article 51A [(a) – (k)] 	
Legal status of Fundamental Duties - Judicial approach	

(15 sessions of 2 hours each= 30 hours)

- Reflections on some of the constitutional values/ fundamental duties and its contemporary relevance in day-to-day national life through group discussions and projects.
- Conduct workshops to spread awareness on the Fundamental Duties and Values.
- Students are required to conduct a survey (minimum 25 respondents) on assessing the awareness of the constitutional duties amongst the citizens.
- Students may share their experiences on Fundamental Duties and Values in the form of a Project Report.
- Any other Practical/Practice as decided from time to time

ESSENTIAL READINGS

- Preamble to the Constitution of India, 1950.
- The Constitution of India, Articles 14, 19, 21.
- The Constitution of India, Fundamental Duties [Ar. 51 A (a) (k)].

SUGGESTED READINGS

- Durga Das Basu, et al., Introduction to the Constitution of India (LexisNexis, 26th edn, 2022).
- Leila Seth, We, the Children of India: The Preamble to Our Constitution (New Delhi, Puffin Books, Penguin Books India, 2010).
- Mahendra Pal Singh, V.N. Shukla's Constitution of India, (Eastern Book Company, Lucknow, 13th revised edn. 2017)
- B.R. Ambedkar Selected Speeches, (Prasar Bharati, New Delhi, 2019) available at: https://prasarbharati.gov.in/whatsnew/whatsnew 653363.pdf.

Assessment Methods*

Internal Assessment: 25%

End Semester Theory Exam: 25%

Practical: 50%

*Subject to directions from the Examination Branch/University of Delhi from time to time
