

**Module 2. Music and Yoga****Module 3. Research**

- Journals and e-journals
- Books
- Periodicals

Module 4. Value of Music

- spiritual, intellectual, emotional & Cultural

Module 5. Musical honours and titles**Module 6. Music Education**

- Gurukula System
- Curriculum System

Module 7. Music appreciation and criticism**Module 8. Music Therapy**

- Śuddhadvaita of Vallabha and Dvaitadvaita of Nimbarka - textual sources.

Module 4.

- Systems - Lokayata - Materialism, denial of Atman and God, Concept of mind - epiphenomenalism.
- Jainism-Tirthankaras, Anēkāntavāda, Syādvāda.
- Buddhism - Ārya Satyas, Aṣṭāṅgamārga, Pratityasamutpāda, Kṣāṇikavāda, Nairātmyavāda, Nirvāṇa and Mōksa - comparison.

Module 5.

- Nyaya Vaisesika - Primary textual sources, concept of pramāṇas, doctrine of causation, Vaisesika doctrine of padārthas.
- Samkhya Yoga - Nature and scope of dualism, concept of evolution, comparison between prakṛtipariṇāma-vāda and vivartavāda.
- Aṣṭāṅgayoga - Structure of Patanjali's Yogasūtras, Samādhi pāda, Sādhana pāda, Vibhūti pāda, Kaivalya pāda.
- Purva Mimamsa - Textual sources, dharma, epistemological realism, pramāṇas accepted by Prabhakara and Kumarila Bhatta.

Module 6.

- Aesthetics - Two segments of Samaveda Samhita - Adhāra and Gāna. Nāṭyaśāstra - Rasa theory - Navarāsa, Sthāyibhāvas, Vibhāvas, Anubhāvas, Sāncāribhāvas.
- Anandavardhana - Threefold classification of dhvani - vastu, ālamkāra and rasa (definition)

23. Philosophy

Unit I Classical Indian Philosophy

Module 1. The Vedas

- Evolution from polytheism to monism, Vedic deities- concepts and names, journey to monism-intermediary concepts like Rta and Tad Ēkam.

Module 2. Prasthāna traya

- The Upanishads- Ekātma vāda, Brahman-Atman identity, The four Mahāvākyas and their sources - Aham Brahmasmi, Tattvamasi, Prajñānam Brahma, Ayamātma Brahma.
- Brahmasūtras - Structure of the text - pāda, adhyāya, adhikāraṇa.
- Bhagavad Gita - Karma Yoga, Sthitaprajña as the concept of self-management, Lōkasamgraha as an ethical concept.

Module 3.

- Vedānta darśana - Advaita - Recognition of Śabda Pramāṇa, Satta traya (only definition), Sāprapañcavāda, Nisprapañcavāda, Māya, Adhyāsa, Jīvanmukti.
- Viśiṣṭadvaita - Cit and Acit - relationship and distinction, Apratiksiddhi (definition).
- Dvaita - Nature and scope of dualism, Concept of Pañcabhēdas, Vidēhamukti.

Unit II Contemporary Indian Philosophy

Module 1.

- Indian Renaissance Movement - background, concerns and goals, prominent leaders and organizations.

Module 2.

- Swami Vivekananda -Neo-Vedānta, Four Yogas, The ideal of universal religion. Sri Aurobindo- Evolution and involution, Gnostic being, Integral Yoga.
- Rāmāṇa Maharshi - Concept of Jñānavichara.



Module 3.

- Rabindranath Tagore- Poet's religion, the ideal of creative unity, the concept of *Jeevandevara*.
- Dr.S. Radhakrishnan- Nature of reality, intellect and intuition.

Module 4.

- MK Gandhi - Truth and non-violence - end and means relationship, the economic and ethical bases of Sarvodaya, Satyagraha as the victory of soul-force over physical force.
- J Krishnamurti - Freedom from the known, truth is a pathless land.
- MN Roy- New Humanism, The biological basis of human rationality and freedom.

Module 5.

- BR Ambedkar - Caste as an unnatural institution - Sree Narayana Guru and Chattampi Swamikal - Critique of caste on the basis of Vedanta Darsana.

Unit III Western Philosophy

Module 1.

- Greek Philosophy - Pre-Socratic Age - the problem of being and becoming/substance and change with reference to Parmenides and Heraclitus.
- Socrates - Characteristics and aim of Socratic Method.
- Plato- Idealism, object-idea distinction, concept of reality, Cardinal Virtues, Concept of social organization - comparison with Indian Varna System.
- Aristotle- form and matter, doctrine of fourfold causation.

Module 2.

- Medieval Philosophy - St. Anselm - Faith and reason, St. Thomas Aquinas - Proofs for the existence of God, Occam's razor - definition and application.

Module 3.

- Modern Thinkers - Francis Bacon - The four idols.
- Descartes - Cartesian method - characteristics, substance dualism, interactionism and occasionalism.

- Spinoza - Monism, psychophysical parallelism, substance and modes.
- Leibniz - pluralism, Monadology, Pre-established harmony.
- John Locke - Arguments for the rejection of innate ideas.
- Berkeley - subjective idealism, *ess est percipii*.
- David Hume - skepticism, denial of substance and causality, epistemological doubt of Hume in comparison with methodological doubt of Descartes.

Module 4.

- Immanuel Kant - Original works, Transcendental Aesthetics - metaphysical exposition of space and time, twelve principal categories and judgments, phenomena-noumena distinction, Kant's agnosticism compared with *Anirvachaniya* concept.
- Hegel - Dialectical explanation of reality, Absolute Idea, comparison between the dialectics of Hegel and Plato.
- Marxism - dialectics of history, concept of class struggle and the dictatorship of proletariat.

Unit IV Contemporary Western Philosophy

Module 1.

- Edmund Husserl - Intentionality of consciousness, Phenomenological reduction

Module 2.

- Existentialism of Kierkegaard - three stages of existence, subjectivity of truth, freedom and choice.
- Gabriel Marcel - Freedom - positive and negative sense, concept of creative fidelity, distinction between problem and mystery.
- Sartre - Important works, existence precedes essence, the three levels of Being, freedom and responsibility.
- Nietzsche - major works, will to power, master - slave morality, concept of Superman.

Module 3.

- Martin Heidegger - Major works, Dasein.

Module 4.

- Gottlieb Frege - Concept-script distinction, sense and reference.



- Bertrand Russell - Theory of Description, Logical atomism.
- Ludwig Wittgenstein - Major works, Picture theory and use theory of meaning, Concept of language games.
- Logical positivism - Important figures and basic texts, critique of metaphysics, Verification theory of meaning - weak and strong sense, Unification of sciences.

Module 5.

- Karl Popper - Major works, Falsificationism - definition, the demarcation between science and non-science.
- Feyerabend - Epistemological anarchy, incommensurability thesis.

Module 6.

- Ordinary language philosophers - Gilbert Ryle - major works, category mistake. J. L. Austin - performatives, speech act theory.

Module 7.

- Structuralism - Saussure - signifier/signified, synchronic/diachronic langue/parole distinction.
- Post-structuralism and Postmodernism - Derrida - decentering, fluidity of meaning, Deconstructive style of reading, critique of logocentrism, difference.

Module 8.

- New Left Critical Theory - Antonio Gramsci - important works, concept of hegemony, critique of 'economism'.
- Althusser- Repressive state apparatus (RSA) and Ideological state apparatus (ISA).

Unit V Logic

Module 1.

- Logic as normative science of reasoning, induction and deduction-relationship and differences.
- Inference - immediate and mediate.
- Relations of opposition of propositions based on the Square.
- Eduction- Conversion, Obversion, Contraposition -definition and exercises.

Module 2.

- Syllogism - Types - categorical, hypothetical, disjunctive and dilemma - rules and fallacies, exercises to identify violation of rules and resulting fallacies.

Module 3.

- Induction - induction - deduction correlation in scientific method.
- Hypothesis - formation, verification and testing, qualities of a good hypothesis, canons of the experimental methods of J. S Mill.
- Analogy - Weak and strong, primary and secondary analogues.

Module 4.

- Symbolic Logic - Variables and Constants - definition and symbols, Truth and validity, Statements forms - tautology, contradictory and contingent forms.
- Basic truth - tables - Nine rules of inference, De Morgan's theorems.

Unit VI Ethics

Module 1.

- Axiology - Definition, concept of value, value/virtue distinction, intrinsic and instrumental values.

Module 2.

- Ethical theories - Virtue ethics - Arete and Eudemonia - definition.
- Deontological and Teleological approaches - Kant's concept of categorical imperative, necessity of God as a postulate of morality.
- Hedonism - Psychological and ethical hedonism - Utilitarianism of J. S. Mill, F. H. Bradley - My Station and its duties.
- Pragmatism - Prominent representatives, workability as the criterion of truth/good, instrumentalism.

Module 3.

- Metaethical Theories - Intuitionism, Emotivism, Prescriptivism and Descriptivism (definition and prominent representatives).
- Naturalism- non- naturalism distinction, G. E. Moore's concept of good, naturalistic fallacy.



- Three features of moral discourse (C. L. Stevenson), Three characteristics of moral judgment (R. M. Hare) - Concept of prescriptivity, supervenience and universalisability.
- Ethical skepticism - Logical positivist conception of moral judgments - Russell, Ayer and Carnap.

Module 4.

- Biomedical ethics - core issues - Doctor-patient relationship, concept of informed consent, debate on ethical issues of abortion, euthanasia, surrogacy and artificial reproductive techniques.

Module 5.

- Environmental ethics - Why environmental ethics is significant today? Critique of Anthropocentrism and technocentrism.
- Deep ecology of Arne Naess - differences between deep and shallow ecology, Ecosophy - T, biospherical egalitarianism.
- Ecological resistance movements in India - Chipko and Narmada Bachao Andolan - inspirations and goals.

Module 6.

- Cyberethics -The Ten Commandments of Computer Ethics proposed by the Computer Ethics Institute, the problem of personal privacy in cyber world.

residues and evaluation of integrals. Special functions (Hermite, Bessel, Laguerre and Legendre). Elementary probability theory, random variables, binomial, Poisson and normal distributions. Central limit theorem.

Module 2. Classical Mechanics

- Newton's laws, Dynamical systems, Phase space dynamics, stability analysis. Central force motions. Two body Collisions-scattering in laboratory and Centre of mass frames. Rigid body dynamics - moment of inertia tensor. Non-inertial frames and pseudoforces. Variational principle. Generalized coordinates. Lagrangian and Hamiltonian formalism and equations of motion. Conservation laws and cyclic coordinates. Periodic motion: small oscillations, normal modes. Special theory of relativity- Lorentz transformations, relativistic kinematics and mass-energy equivalence, Poisson brackets and canonical transformations. Hamiltonian-Jacobi theory.

Unit II

Module 1. Quantum Mechanics

- Wave-particle duality. Schrodinger equation (time dependent and time- independent). Eigenvalue problems (particle in a box, harmonic oscillator). Tunneling through a barrier. Wave-function in coordinate and momentum representations. Commutators and Heisenberg uncertainty principle. Dirac notation for state vectors. Motion in certain potential: orbital angular momentum, angular momentum algebra, spin, addition

24. Physics

Unit I

Module 1. Mathematical physics

- Dimensional analysis, Vector algebra and vector calculus, Linear algebra, matrices, Cayley- Hamilton Theorem, Eigen values and eigen vectors. Linear differential equations of first and second order. Fourier-series, Fourier and Laplace transforms. Elementary complex analysis, analytic functions; Taylor & Laurent series; poles,