

ANDHRA PRADESH
RECRUITMENT OF ASSISTANT PROFESSORS IN THE UNIVERSITY
SYLLABUS FOR THE SCREENING TEST

YOGA

SUBJECT CODE - 66

- 1. Foundations of Yoga : History, Evolution of Yoga and Schools of Yoga**
 - 2. Basic Yoga Texts : Principal Upanishads Bhagavad Gita, Yoga Vasishtha**
 - 3. Patanjala Yoga Sutra**
 - 4. Hatha Yoga Texts**
 - 5. Allied Sciences : Anatomy and Physiology, Diet and Nutrition, General Psychology and Counseling**
 - 6. Yoga and Health**
 - 7. Therapeutic Yoga – Disease Wise and Evidence based**
 - 8. Applications of Yoga**
 - 9. Practical Yoga: Asana, Pranayama, Dharana Dhyana, Bandha, Mudra, Shat Kriya**
 - 10. Methods of Teaching Yoga**
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- 1. Foundations of Yoga : History, Evolution of Yoga and Schools of Yoga**
 - Origin of Yoga, History and Development of Yoga; Etymology and Definitions, Misconceptions, Aim and Objectives of Yoga, True Nature and Principles of Yoga
 - Introduction to Vedas, Upanishads, Prasthanatrayee and Purushartha Chatushtaya
 - General introduction to Shad-darshanas with special emphasis on Samkhya and Yoga Darshana, Yoga in Vedanta
 - Introduction to Epics - (Ramayana, Mahabharata), Yoga in Ramayana, Yoga in Mahabharata
 - Introduction to Smritis and Yoga in Smritis; General introduction to Agamas and Tantra, Yoga in Tantra; Concepts of Nadi and Prana in Tantra, Kundalini, Effects of Kundalini Shakti and Shatchakra Sadhana
 - Yoga in Medieval Literature, Bhakti Yoga of Medieval Saints, Yoga in Narada Bhakti Sutras.
 - Yoga in Modern Times: Yogic Traditions of Ramakrishna and Swami Vivekananda, Shri Aurobindo; Yoga traditions of Maharshi Ramana and Swami Dayanand Saraswati
 - Yoga in Contemporary Times: Brief Introduction to important Yoga Paramparas (lineages) Yoga Parampara of Sri T. Krishnamacharya, Yoga Parampara of Swami Shivanada Saraswati, Swami Rama of Himalayas, Maharshi Mahesh Yogi and their contributions for the development and promotion of Yoga.
 - Introduction to Schools (Streams)of Yoga: Yoga Schools with Vedanta Tradition (Jnana, Bhakti,Karma and Dhyana), Yoga Schools with Samkhya-Yoga Tradition (Yoga of Patanjali) and Yoga Schools with Tantric Tradition (Hatha Yoga, Swara Yoga and Mantra Yoga)
 - Elements of Yoga and Yogic practices in Jainism, Buddhism and Sufism

2 Basic Yoga Texts :: Principal Upanishads Bhagavad Gita, Yoga Vasishtha

Principal Upanishads

Brief Introduction of Ten principal Upanishads as the basis of Yogic context;
Ishavasyopanishad: Concept of Karmanishta; Concept of Vidya and Avidya; Knowledge of Brahman; Atma Bhava;

Kena Upanishat: Indwelling Power; Indriya and Antahkarana; Self and the Mind; Intuitive realization of the truth; Truth transcendental; Moral of Yaksha Upakhyaana;

Katha Upanishad : Definition of Yoga; Nature of Soul; Importance of Self Realization;
Prashna Upanishad: Concept of Prana and rayi (creation); Pancha pranas; The five main questions;

Mundaka Upanishad: Two approaches to Brahma Vidya-the Para and Apara; The greatness of Brahavidya, The worthlessness of Selfish-karma; Tapas and Gurubhakti, The origin of creation, Brahman the target of Meditation

Mandukya: Four States of Consciousness and its relation to syllables in Omkara.

Aitareya: Concept of Atma, Universe and Brahman.

Taittiriya Upanishad Concept of Pancha Kosha; Summary of Shiksha Valli; Ananda Valli; Bhruvuvalli.

Chandogya Upanishad: Om (udgitha) Meditation; Sandilyavidya,

Brihadaryanaka Upanishad : Concept of Atman and Jnana Yoga. Union of Atman and Paramatman

Bhagavad Gita

General Introduction to Bhagavad Gita (B.G.). Definitions of Yoga in B.G. and their relevance & Scope; Essentials of B.G - the meanings of the terms Atmaswrupa, Stithaprajna, Sankhya Yoga (Chpt.II), Karma Yoga (Chpt.III), Sanyasa Yoga and Karma Swarupa (Sakama and Nishkama) etc; Samnyasa, Dhyana Yogas (Chpt. VI); Nature of Bhakti (Chpt.XII), Means and Goal of Bhakti-Yoga; The Trigunas and modes of Prakriti; Three Kinds of Faith. Food for Yoga Sadhaka, Classification of food (Chpt.XIV & XVII) Daivasura-Sampad-Vibhaga Yoga (Chpt.XVI); Moksa-Upadesa Yoga (Chpt. XVIII)

Yoga Vasishtha

Highlights of Yoga Vashitha, Concept of Adhis and Vyadhis; Psychosomatic Ailments; The four Gatekeepers (Pillars) to Freedom; How Sukha is attained the Highest State of Bliss; Practices to overcome the Impediments of Yoga; Development of Satvaguna; Eight limbs of Meditation; Jnana Saptabhumika.

.3 Patanjala Yoga Sutra

Introduction: Yoga, it's meaning & purpose & Nature of Yoga; Concept of Chitta, Chitta-Bhumis, Chitta-Vrittis, Chitta-Vritti nirodhopaya Abhyasa and Vairagya as the tools Chitta-Vikshepas (Antarayas), Chitta-prasadanam, Prakriti and its evolutes.

SAMADHI PADA : Types and nature of Samadhi: Ritambharaprajna and Adhyatmaprasada; Samprajnata, Asamprajnata, Sabeeja & Nirbeeja Samadhi, Difference between Samapattis and Samadhi; Concept of Ishvara and qualities of Ishvara.

SADHANA PADA : Concept of Kriya Yoga of Patanjali, theory of Kleshes; Concept of Dukhavada; Drishyanirupanam, Drasthanirupanama, PrakritiPurushaSamYoga; Brief Introduction to Ashtanga Yoga; Concept of Yama, Niyama, Asana, Pranayama, Pratyahara and their usefulness in ChittavrittinirodhopayaH.

VIBHUTI & KAIVALYA PADA: Introduction of Dharana, Dhyana and Samadhi, Samyama and Siddhis; Four types of Karmas; Concept of Vasana; Vivek Khyati Nirupanam, Kaivalya.- Nirvachana.

4. Hatha Yoga texts

- Introduction to Hatha Yoga and Hatha Yoga Texts. Siddhasiddhanta paddhati, Hatha Pradeepika, Gheranda Samhita, Hatha Ratnavali and Shiva Samhita. Aim & objectives, misconceptions about Hatha Yoga, prerequisites of Hatha Yoga (dasha yama and dasa niyama), Sadhaka and Badhaka tattvas in Hatha Yoga; Concept of Ghata, Ghatashuddhi, Concept and importance of Shodhana kriyas in Hatha Yoga; Importance of Shodhana kriyas in health and disease; Concept of Mattha, Mitaahara, Rules & Regulations to be followed by Hatha Yoga Sadhakas;
- **Asanas in Hatha Texts:** Definition, pre requisites and special features of Yoga-asana; Asanas in Hatha Pradeepika, Hatha Ratnavali, Gheranda Samhita; Benefits, precautions, and contraindications of different Asanas;
- **Pranayama in Hatha Texts:** - Concept of Prana & Ayama, Pranyama; Pranayama its phases and stages; Prerequisites of Pranayama in Hatha Yoga Sadhana; Pranayama in Hatha Pradeepika, Hatha Ratnavali & Gheranda Samhita; Benefits, precautions and contraindications of Pranayama.
- **Bandha, Mudra and other practices:** Concept, definition of Bandha and Mudras, in Hatha Pradeepika, Hatha Ratnavali and Gheranda Samhita; Benefits, precautions and contraindications. Concept, definition, benefits and Techniques of Pratyahara, Dharana and Dhyana in Gheranda Samhita; Concept and benefits of Nada and Nadanusandhana in Hatha Pradeepika, Four Avasthas (stages) of Nadanusandhana; Relationship between Hatha Yoga and Raja Yoga; Goal of Hatha Yoga. Relevance of Hatha Yoga in contemporary times.

5 Allied Sciences – General Psychology, Essential Anatomy and Physiology; Dietetics and Nutrition

General Psychology

- **INTRODUCTION:**

- Brief History of modern Psychology
 - Major Perspectives in Modern Psychology
 - Key data collection methods in Psychology

- **Introduction to Altered States of Consciousness**

- Sleep: Stages of Sleep, Circadian Rhythm, Sleep Disorders; Dreams: The Content of Dreams; Hypnosis, Biofeedback

- **Behavioral Psychology:** Psychology as a Science of Behavior; Definition of Behavior; Psychic forces and human behavior, behavior and Consciousness, Psychological basis of behavior;

- **Personality:** Nature and Types of Personality; Determinants of Personality: Heredity and Environment; Facets and Stages of Personality Development; Personality Theories of Sigmund Freud, Alfred Adler and C.G. Jung, Carl Rogers; Assessment of Personality:

- **Cognitive Psychology:** Sensation, Perception, Attention, Memory, Learning, Feeling etc.; Their definitions and types, Intelligence and its' measurements; Emotional Intelligence and Social Intelligence.

- **Mental Health;** Means of mental health; Positive Mental Health; Causes and Consequences of Conflicts and Frustrations; Introduction to Common mental disorders; Depressive disorders; Anxiety disorders; Serious mental disorders; Sleep disorders; Mental retardation; Alcohol and drug abuse; Suicide, attempted suicide and suicide prevention.

Introduction to Human Anatomy and Physiology

- Introduction to cell, tissue, organs and systems; Basic cell physiology-Cell-Introduction, Cell Organelles, Cell membrane, Movement of the substances and water through the cell membrane, Bioelectric potentials.

- Musculoskeletal systems: Skeleton - names of all bones, joints and muscles, cartilage, tendon and ligaments, types of bone, joints and their functions; spine, muscles and their functions; Skeletal muscles - Properties of skeletal muscles, Muscular contraction and relaxation, Neuromuscular junction, Sarcotubular system, Smooth muscle- mechanism of contraction

- Digestive and excretory system: Anatomy of digestive system, excretory system (component organs) and their functions; Gastro intestinal system- General

structure of alimentary canal, Gastric secretion, Pancreatic secretion, Gastric motility-digestive peristalsis Gastrointestinal hormones.

- Renal physiology- Structure of kidney, Nephrones, Juxtra glomerular filtrate, Reabsorption, Secretion-mechanism of secretion, Concentrating and diluting mechanism of urine, Dialysis
- Nervous system and glands: Structure and properties of neurons, subdivisions of nervous system and their functions, types of glands (endocrine and exocrine glands), important endocrine and exocrine glands and types of hormones their functions.
- Sensory nervous system, Motor nervous system, Higher functions of the nervous system, Synapse, Reflexes Cerebrospinal fluid, Blood brain and blood CSF barrier
- Cardiovascular and respiratory system: Components of cardiovascular and respiratory system; functions of cardiovascular and respiratory system; Circulatory system- Functional anatomy of the heart, Properties of cardiac muscles, Conducting system of the heart, Pressure changes during cardiac cycles, Capillary circulation, Arterial and venous blood pressure; Respiratory system-Mechanism of breathing, Ventilation, Regulation of respiration, Transport of gases, Hypoxia, Artificial ventilation, Non respiratory functions of the lungs
- Immune system: Component organs of immune system, Functions of immune system; Endocrinology-Endocrine glands, hormones, their functions;
- Reproductive system: Anatomy of male and female reproductive systems
- Stress physiology- how acute and chronic stress disturbs the normal physiology

Dietetics and Nutrition

- Basic concepts and components of food and nutrition Understanding Nutrition, Basic Terminology in Relation to Nutrition Requirement, Human Nutritional Requirements; Concept of food, Acceptance of Food, Functions of Food; Components of Food & their Classification; Macro Nutrients –Sources, Functions and Effects on the Body; Micro Nutrients - Sources, Functions and Effects on the Body; Fat Soluble Nutrients - Sources, Functions and Effects on the Body; Water soluble Nutrients - Sources, Functions and Effects on the Body; Significance of Carbohydrate, Proteins, Lipids, Vitamins, Minerals and water in the body; Antioxidants and their Role;
- Yogic concept of diet and its relevance in the management of lifestyle
- Nutrients, proximate principles of diet, balanced diet concept; Carbohydrates, proteins, fats – sources, nutritive values, importance; Minerals-calcium, iron, phosphorus etc. Vitamins – sources, roles, requirements
- Food groups.
Cereals & Millets –Selection, Preparation and Nutritive Value; Pulses, Nuts and Oil Seeds- Selection, Preparation and Nutritive Value; Milk and Milk Products- Selection,

Preparation and Nutritive Value; Vegetables and Fruits- Selection, Preparation and Nutritive Value, Fats, Oils and Sugar, Jaggery- Selection, Preparation and Nutritive Value

- Food and metabolism. Energy- Basic Concepts, Definition and Components of Energy Requirement, Energy Imbalance Concept of Metabolism, Anabolism, Catabolism, Calorie Requirement-BMR, SDA, Physical Activity; Metabolism of Carbohydrates, Lipids and Protein; Factors Affecting Energy; Requirement and Expenditure, Factors affecting BMR.

6. Yoga and Health

- Definition & Importance of Health According to WHO; Dimensions of Health: Physical, Mental, Social and Spiritual;
- Concept of Health and Disease in Indian Systems of Medicine i.e. Ayurveda, Naturopathy
- Yogic Concept of Health and Disease: Concept of Adhi and Vyadhi; Meaning and definitions,
- Concepts of Trigunas, Pancha-mahabhutas, Pancha-prana and their role in Health and Healing; Concept of Pancha-koshas & Shat-chakra and their role in Health and Healing;
- Role of Yoga in preventive health care – Yoga as a way of life, Heyam dukham anagamam; Potential causes of Ill-health: Tapatrayas and Kleshas, Physical and Physiological manifestation of Disease: Vyadhi, Alasya, Angamejayatva and Svasa-prashvasa.
- Mental and Emotional ill Health: Styana, Samshaya, Pramada, Avirati, Bhranti-darsana, Alabdha-bhumikatva, Anavasthitatva, Duhkha and Daurmanasya
- Yogic Diet - General Introduction of Ahara; Concept of Mitahara; Classification in Yogic diet according to traditional Yoga texts;; Diet according to the body constitution (Prakriti) – Vata, Pitta and Kapha as also Gunas.
- Concepts of Diet Pathya and Apathya according to Gheranda Samhita, Hatha Pradeepika and Bhagavad Gita; Importance of Yogic Diet in Yog Sadhana and its role in healthy living; Diet according to the body constitution (Prakriti) – Vata, Pitta and Kapha as also Gunas.
- Yogic Principles of Healthy Living: Ahara, Vihara, Achara and Vichara; Role of Yogic Positive Attitudes (Maitri, Karuna, Mudita and Upeksha) for Healthy Living, Concept of Bhavas and Bhavanas with its relevance in Health and well-being

7. Therapeutic Yoga – Disease Wise and Evidence based

- **Yogic Practice***- Management of the disease through suitable yogic practices - Yogic diet, Asanas, Shatkarmas; Pranayama; Meditation; Notional corrections through yogic scriptures and counseling; Yama and Niyama; Stress(emotions management) Life style prescriptions - Moderation in Ahara, Vihara, Achara and Vichara.
- **Integrated approach of Yoga Therapy in the treatment of diseases **** Systemic anatomy, physiology of the related System; Pathophysiology, Stress and disease; Medical Management; Mechanism of imbalances at psychological, pranic, physical, endocrinal, autonomic levels;psyhocneuroimmunological aspect of the disease model; Disease specific parameter; what, why and how of each **Yogic practice***; Prevention. Evidence research done on the particular disease;
- General Parameters and questionnaires to evaluate Health status - GHQ, Prakriti, Guna, PSS, STAI.

**** Integrated Approach of Yoga therapy for the following Common Ailments:**

- **Respiratory disorders** - Allergic Rhinitis & Sinusitis: COPD: Chronic Bronchitis, Tuberculosis: Evidence research done on the particular disease
- **Cardiovascular disorders:** Hypertension:, Atherosclerosis / Coronary artery disease: Ischemic Heart disease – Angina pectoris / Myocardial Infarction/ Post CABG rehabilitation: Congestive Cardiac failure, Cardiac asthma:
- **Endocrinal and Metabolic Disorder** - Diabetes Mellitus (I&II); Hypo and Hyper-Thyroidism; Obesity: Metabolic Syndrome
- **Obstetrics and Gynecological Disorders, Menstrual disorders:** Dysmenorrhea, Oligomenorrhea, Menorrhagia: Premenstrual Syndrome: Menopause and perimenopausal syndrome: Yoga for Pregnancy and Childbirth: Complicated pregnancies: PIH, Gestational DM, Ante-natal care, Post-natal care; PCOS:
- **Gastrointestinal disorders** APD: Gastritis – Acute & Chronic, Dyspepsia, Peptic Ulcers, Constipation, Diarrhoea, Irritable Bowel Syndrome: Definition, Etiopathogenesis, Inflammatory Bowel Disease, Ulcerative colitis
- **Cancer:** types, clinical features, Side effects of Chemotherapy, radiotherapy
- **Musculo-Skeletal Disorders:** Back Pain: Lumbar Spondylosis, Intervertebral disc prolapse (IVDP), Spondylolisthesis, Spondylitis, Psychogenic- Lumbago, Neck pain: Cervical Spondylosis, radiculopathy, Functional neck pain, All forms of Arthritis: Rheumatoid Arthritis, Osteoarthritis
- **Neurological Disorders: Headaches:** Migraine, Tension headache; Cerebro vascular accidents: Epilepsy; pain; Autonomic dysfunctions; Parkinson’s disease
- **Psychiatric disorders:** Psychiatric disorders: Neurosis, Psychosis: Neurosis: Anxiety disorders: Generalized anxiety disorder, Panic Anxiety, Obsessive Compulsive

Disorder, Phobias: Depression: Dysthymia, Major depression, Psychosis: Schizophrenia, Bipolar affective disorder.

8. Applications of Yoga

- **Yoga in Education:** Salient features of Yoga Education, Factors of Yoga Education; Teacher, Student and Teaching, Guru-shishya parampara and its importance in Yoga Education; Value Education, its meaning and definitions, types of values, value-oriented education and modes of living, role of value oriented education; contribution of Yoga towards development of values; Salient features of ideal Yoga teacher, role of Yoga teacher in value-oriented education, role of Yoga in development of human society; Yogic Concepts for the Development of Four Fold Consciousness - Civic Sense, Patriotic Urge, Service Zeal and Spiritual Growth;
- **Yoga for Stress Management:** Introduction to Stress, Concept of Stress; Solutions through Mandukya karika - Relaxation and stimulation combined as the core for stress management; Practice of Stimulation and relaxation; Yoga and Stress Management; Concepts and Techniques of Stress Management in Ashtanga Yoga of Patanjali and Bhagavad Gita, specific practices for stress management, breath awareness, shavasana, Yoganidra, pranayama and meditation, impact of yogic lifestyle on stress management.
- **Yoga for Personality Development** - Yogic attitudes for personality development, Ashtanga Yoga and personality development, personality development with special emphasis on Panchakosa. Memory and Concentration; Short-term, long-term memory, stages of memory foundation and maintenance; Yoga modules to improve memory; Barriers to concentration; creativity eastern concept, silence and creativity; yogic approach to creativity; yogic practices for creativity development; Facets of intelligence; concept of intelligence according to Yoga; Yoga practices for IQ development; Practices for Anger Management;

9. Practical Yoga

Yogic Practices – Asana, Kriya, Mudra, Bandha, Dhyana, Surya Namaskara (Techniques, Salient Features, Benefits)

- **Shatkarmas** Dhauti (Kunjali), Vastra dhauti, Danda dhauti, Laghoo and Poorna sankhaprakshalana, Neti (Sutra and Jala), Kapalbhathi, Agnisara, Nauli
- **Suryanamaskar-** Suryanamaskar must be practiced traditionally and the variation in Suryanamaskar may be taken into consideration based on the convenience of patients for therapy.
- **Asnas (yogic postures)** Standing Postures Ardhakati chakrasana, Hastapadasana, Ardha chakrasana, Trikonasana, Parivritta trikonasana, Parsvakonasana, Veersana, Sitting postures Paschimottanasana, Suptavajrasana, Ardhamatsyendrasana, Vakrasana, Marichasana, Malasana, Badhakanasana, Merudandasana, Akarna dhanurasana, Gumukhasana, Prone postures Bhujangasana, Salabhasana,

Dhanurasana, Urdhvamukhosvanasana, Makarasana, Supine postures Halasana, Chakrasana, Sarvangasana, Matsyasana, Shavasana, Setubandhasana, Balancing postures Vrikshasana, Garudasana, Namaskarasana, Tittibhasana, Natrajasana

- **Pranayama** Breath awareness, Sectional breathing, Nadishuddhi, Bhastrika, Ujjai, Cooling pranayama (Sitali, Sitkari and Sadanta), Bhramari, Pranayama (with Antar & Bahya Kumbhaka)
- **Practices leading to Meditation:** Pranav and Soham Japa, Yoga Nidra (1,2,3), Antarmauna, Ajapa Dharana (Stage 1,2,3), Practices leading to Breath Meditation, Practices leading to Om Meditation, Practices leading to Vipassana Meditation, Practices leading to Preksha Meditation
- **Bandhas and Mudras:** Jivha Bandha, Jalandhara Bandha, Uddiyana Bandha, Mula Bandha, Maha Bandha, Yoga Mudra, Maha Mudra, Shanmukhi Mudra, Tadagi Mudra, Vipareet Karni Mudra
- **Contemporary Yogic Practices** - Yogic Sukshma Vyayama, Cyclic Meditation (S-VYASA); Mindfulness based Stress Reduction Technique (Kabatzin); Mind Sound Resonance Technique (S-VYASA); Raja Yoga Meditation (Brahmakumaris); Transcendental Meditation (Mahesh Yogi); ZEN Buddhist Meditation; Yoga Nidra (BSY); Savita Ki Dhyana Dharana (DSVV)

10. Methods of Teaching Yoga

- Teaching and Learning: Concepts and Relationship between the two; Principles of Teaching: Levels and Phases of Teaching, Quality of perfect Yoga Guru; Yogic levels of learning, Vidyarthi, Shishya, Mumukshu; Meaning and scope of Teaching methods, and factors influencing them; Sources of Teaching methods; Role of Yoga Teachers and Teacher training Techniques of Individualized; Teaching Techniques of group teaching; Techniques of mass instructions; Organization of teaching (Time Management, Discipline etc)
- Essentials of Good Lesson Plan: concepts, needs, planning of teaching Yoga (Shodhanakriya, Asana, Mudra, Pranayama & Meditation);
- Models of Lesson Plan; Illustration of the need for a lesson plan; Illustration of the need for a content plan; Eight Step method of Introduction as developed in Kaivalyadhama.
- Evaluation methods of an ideal Yoga class; Methods of customizing Yoga class to meet individual needs. The student will have demonstrations and training in the above mentioned aspects of teaching methods.
- Yoga classroom: Essential features, Area, Sitting arrangement in Yoga class
- Student's Approach to the teacher: Pranipaata; Pariprashna; Seva; (BG 4.34)