PSYCHOLOGY
ALLIED PAPERS

SEMESTER: I ALLIED: I PART: III	22UPSYA15: MEDICAL SOCIOLOGY	CREDITS: 4 HOURS: 60

COURSE OBJECTIVES

To enable the student to understand

1. The nature and scope of medical sociology
2. The relationship between health and social environment
3. To know the medical social services in hospital
4. The role of health professionals in health care providing systems

Unit–I: Medical Sociology **Hours: 13**

Medical Sociology – Nature and Scope, Relationship between medicine and sociology; Social epidemiology, Development of epidemiological measures, age, sex, race and social class.

Unit–II: The interaction of mind **Hours: 12**

The interaction of mind, body and society – Stress – Psycho physiological medicine, Social factors and stress, Socio demographic variables in the process of seeking medical care.

Unit–III: Approach to Deviance **Hours: 12**

The sick role – Illness as deviance, functional approach to deviance, the sick role, labelling theory.

Unit–IV: Social institution **Hours: 11**

The physician in a changing society – nursing – Past, present and future trends, other health practitioners, the hospital as a social institution, health care: a right or a privilege.

Unit–V: Medical social services in hospital **Hours: 12**

Medical social services in hospital – Medical social work in paediatrics, skin and STD (sexually transmitted Disease). Psychiatry and Tuberculosis divisions: Health policy of government of India.

COURSE OUTCOMES

After completion of the course, the will be able to

1. Understand the nature and scope of medical sociology
2. Acknowledge the interaction between mind, body and society
3. Practically contribute towards the medical- social services in hospitals
4. Become aware of the Indian health policy.

Text Books

1. Coceraham, William. *Medical Sociology*. New Jersey: Prentics Hal, 1982.

2. Giriraj Gupta.*The social and Cultural context medicine in India,* New Delhi: Vikas publishing House Ltd., 1981.

Reference Books

1. Coe,Redney. *Sociology of Medicine*. New York: McGraw Hill, 1970.
2. Freeman, H.*Handbook of Medical Sociology*. Englewood Cliffs: Prentice Hal, 1963.
3. Goel, S.L.*Health care Administration policy making and planning*.New Delhi: Sterling Publishers Private Limted, 1981.
4. Johan Bond, Senga Bond. *Sociology and Health Care*. New Delhi: Churchil living Store, 1994.
5. Ommen, T.K *Doctors and Nurses*. New Delhi: Macmillam, co.,1978

OUTCOME MAPPING

Course	PO1	PO2	PO3	PO4	PO5
CO1	3		3		2
CO2		3		2	
CO3	3		3		
CO4		3		3	3
CO5	3		3		

SEMESTER: II ALLIED: II PART: III	22UPSYA26: BIOPSYCHOLOGY I	CREDITS: 4 HOURS: 60

COURSE OBJECTIVES

To enable the student to understand

1. The meaning and approaches of Bio Psychology
2. The Neurophysiology
3. The chemical basis of behaviour
4. The concept of emotions

Unit–I: Biological Foundations of Behaviour **Hours: 10**

Introduction: Meaning of Biological Psychology – Viewpoints to explore Biology of Behaviour – Approaches the brain and behaviour – Levels of Analysis - Functional Neuro-anatomy: Composition of the Nervous System – Divisions of the Nervous System – Functional descriptions of Brain Structures – Blood supply to the Brain – Newer Imaging Technology – Cell Specialization.

Unit–II: Neurophysiology **Hours: 13**

Conduction, Transmission, and the Integration of Neural Signals - Electrical signals are the vocabulary of the Nervous System -The sequence of transmission process at chemical synapses – Neurons and synapses combine to make circuits gross Electrical Activity of the Human Brain.

Unit–III: Chemical Base of Behaviour **Hours: 13**

The Chemical Base of Behaviour: Neurotransmitters and Neuropharmacology. Many chemical neurotransmitters have been identified - Neurotransmitter system from a complex array in the brain - Research on Drugs range from molecular processes to effects on transmission -Drugs that affect the brain can be divided into functional classes -Drug abuse is pervasive.

Unit–IV: Hormones and the Brain **Hours: 12**

Hormones and the Brain: Hormones act in a great variety of ways throughout the body - Hormones act on a wide variety of cellular mechanisms -Each endocrine gland secretes specific hormones – Hormones affect behaviour in many different ways – Hormonal and Neural system interact to produce integrated responses.

Unit–V: Emotions **Hours: 12**

Emotions: Meaning of Emotions – Theories of Emotions – Types of Emotions Viewpoint – Individual Differences in Emotional Responsiveness – Autonomic Responses – Brain Circuits in Emotions.

Text Books

1. Rosenzweing, M. S., Marc Breedlove, S & Watson, N. V. (2005). *Biological Psychology*. MA:Sinauer Associates, Inc.
2. Garret, B. (2008). *Brain and Behaviour*, New Delhi: Sage.

3. Leukel, F. (1985). *Introduction to Physiological Psychology*, Delhi: CBS Publishers and Distributors.
4. Kalat , J.W. (2004). *Biological Psychology*. CA: Wadswort/Thomson Learning,

COURSE OUTCOME

After completion of the course, the will be able to

1. Learn the meaning and approaches of Bio Psychology.
2. Become aware of neurophysiology.
3. Practically imbibe the chemical basis of behavior.
4. Understand the concept of emotions.

OUTCOME MAPPING

Course	PO1	PO2	PO3	PO4	PO5
CO1	3		3		2
CO2		2		3	
CO3	3		2		3
CO4		3		3	

SEMESTER: III ALLIED: II PART: III	22UPSYA35: BIOPSYCHOLOGY II	CREDITS: 4 HOURS: 60

COURSE Objectives

To enable the student to understand

LO1: The general principles of sensory processing

LO2: The motor control and plasticity

LO3: The sexual behaviour

LO4: The concept of homeostasis and other biological functions

LO5: The several kinds of biological perspectives of learning and memory

Unit–I: Sensory process **Hours: 10**

General principles of Sensory processing, Touch and Pain - Sensory Receptors – Nature of Stimulus – Sensor processing – Beginning – Selective and Analytical. Touch: Structure of Skin – Dorsal column – Cortical columns – Somatosensory Perception: Pain: Nature –Measuring Pain - Hearing, Vestibular Perception, Testing and Smell - Hearing: Structure and Functions of ear – Auditory system pathways – Theories of pitch Discrimination – Localization of sound – Perception of sound – deafness. Vestibular Perception: Receptor Mechanisms – Evolution of Auditory and Vestibular Organs – Nerves Fibres – Motion Sickness. The Chemical Senses: Taste sensations – Odour Sensations.

Unit–II: Vision **Hours: 10**

Vision - Nature of Visual information – Eye as an optical device and neural organ – Neural signals – Area VI – Colour Vision – Perception of Visual Motion – Major Systems of Cortical Visual Areas – Visual Neuroscience. Motor Control and Plasticity - The Behavioural View – The Control system View – The Neuroscience View – Movement Control – Extra pyramidal Systems - Sensory Receptor organs Detect energy substances -what type of stimulus was that? – Sensory processing begins in receptor cells -Sensory information processing is selective and analytical.

Unit–III: Sexual Behaviour **Hours: 8**

Sexual Behaviour - Reproductive behaviour can be divided into four stage -The neural circuitry of the brain regulates reproductive behaviour – Pheromones guide reproductive behaviour in many species – The hallmark of human sexual behaviour is diversity. Sexual differentiation - The sex of an individual is determined early in life – Hoe should we define gender – by genes, gonads, genitals or the brain – Gonadal hormones direct sexual differentiation of the brain and behaviour – Social influence affect sexual differentiation of the nervous system – Do early gonadal hormones masculinise human behaviour in adulthood.

Unit–IV: Homeostasis **Hours: 12**

Homeostasis: Active Regulation of internal states -Homeostasis maintains internal states within a critical range. Temperature, Food and Energy regulation.

Importance of body temperature is a critical condition for all Biological process – Some animals generate heat; others must obtain heat from the environment – which behaviours can adjust body temperature – The brain monitors and regulates body temperature. Nutrient regulation requires the anticipation of future need – Insulin is crucial for the regulation of body metabolism - The Hypothalamus coordinates multiple systems that control hunger – obesity is difficult to treat – Experience protects from toxins in food – Eating disorder are life – threatening.

Biological Rhythms, Sleep, and Dreaming - Many animals shoe daily rhythms in activity and physiological measures – An endogenous circadian clock is located in the hypothalamus – Many biological events display rhythms shorter than a day – Animals use circannual rhythms to anticipate seasonal change. Human sleep exhibits different stages – The sleep of different species provides clues about the evolution sleep – Our sleep patterns change across the life span – Manipulating sleep reveals an underlying structure – What are the biological functions of sleep? – At least four interacting neural system underlie sleep – Sleep disorder can be serious, even life- threatening.

Unit–V: Learning and memory **Hours: 10**

Learning and memory: Biological perspectives - Many kinds of brain damage can impair memory – There are several kinds of memory and learning – Memory has temporal stage: short, intermediate, and long – Different region of the brain process different aspects of memory – Brain image provides insights about region involved in different kinds of memories – Comparative approaches yield insights about the evaluation of learning and memory – Learning and memory change throughout life.

COURSE OUTCOMES

After completion of the course, the will be able to

1. Learn about the general principles of sensory processing
2. Become aware of the motor control and plasticity
3. Personalize their sexual behaviour
4. Learn the concept of homeostasis and other biological functions
5. Explore the biological perspectives of learning and memory

Text Books

1. Rosenzweing, M.S., Marc Breedlove, S. & Watson, N.V. (2005*). Biological Psychology*. MA: Sinauer Associates, Inc.
2. Garret, B. (2008). *Brain and Behaviour*, New Delhi: Sage.