TEACHING PLAN (ODD SEMESTER)

PHYSIOLOGY MAJOR (UNDER CCF NEW SYLLABUS)

SEMESTER-I

DISCIPLINE SPECIFIC CORE COURSE (4 CREDITS/100 MARKS)

PAPER	FULL MARKS	TOPIC	TEACHER	CLASS HOUR	TEACHING METHOD
DSCC 1 THEO	75	1. History of Physiology & Overview 2. Cellular Basis of Physiology 3. Chemistry of Biomolecules-Carbohydrates 4. Chemistry of Biomolecules- Lipids 5. Chemistry of biomolecules -Protein & Nucleic Acid	MD DS MD PG SD	09 09 09 09 09	Lecture, Interactive, Learner-centric methods with ITC tools
DSCC1 P PRACTICAL	25	1. Study of models & charts 2. Fresh tissue staining 3. Biochemistry-Unknown	MD MD MD	02 10 03	Practical Learning
				Total =60	
SKILL ENHANCEMENT COURSE (SEC)-I (4 CREDITS/100 MARKS)					
SEC-I THEO	50	1. Clinical importance of Biomolecule 2. Protein disorder 3. Age related health issues 4. Work & Exercise Physiology -I 5. Work & Exercise Physiology -II	MD PG MD SD SD	06 06 06 06 06	Lecture, Interactive, Learner-centric methods with ICT tools.
SEC-I PRACT	50	1. Preparation of solution & standardization 2. Human experiment	MD SD	15 15	Practical learning
				Total= 60	

SEMESTER- III (OLD CBCS SYSTEM)

PAPER	FULL MARKS	TOPIC	TEACHER	CLASS HOUR	TEACHING METHOD
CC5 TH	50	1. Blood physiology 2. Blood volume 3. Hemostasis 4. Body fluid and lymph	MD MD MD MD	20 04 06 06	Interactive, Learner-centric methods
CC5P PRACTICAL	30	1. Peripheral blood smear by Leishman stain 2. TC, DC of blood 3. Hemoglobin estimation 4. Bone marrow and megakaryocyte staining 5. Haemin crystal preparation 6. Reticulocyte staining	MD MD MD MD MD MD	06 08 02 04 02 02	Practical learning
				TOTAL = 60	
CC6TH	50	1. Cardiovascular physiology 2. ECG 3. Hemodynamics & pulse 4. Blood pressure	SD SD PG PG	12 06 12 06	Lecture, Interactive, methods with ICT tools
CC6P PRACTICAL	30	1. Determination of Blood pressure 2. Perfusion experiment- effect of adrenaline, K+ 3. ECG.	PG PG PG	04 10 10	Practical learning
				TOTAL = 60	
CC7TH	50	1. Respiratory physiology 2. Gas transport 3. Pulmonary disorders	DS DS DS	18 10 08	Lecture, Interactive, methods with ICT tools
CC7P PRACTICAL	30	1. Pneumographic recording 2. Spirometry(manual) and analysis of the results. 3. Peak flowmetry	PG PG PG	12 08 04	Practical learning
				TOTAL= 60	
SEC-A1	80	1. Blood group & transfusion 2. Abnormal hemoglobins (Up to Leptin) 3. Haematological indexes and counts 4. Disorders-anemia to purpura 5. Bone-marrow suppression and transplantation	MD MD MD MD MD	10 10 10 10 08	Lecture method, interactive method with ICT tools
				Total=48	

SEMESTER-V (OLD CBCS SYSTEM)

PAPER	FULL MARKS	TOPIC	TEACHER	CLASS HOUR	TEACHING METHOD
CC11TH	50	1. Special sense-Vision 2. Audition 3. Olfaction 4. Gustation	DS DS DS DS	12 12 06 06	Lecture, Interactive, with ICT tools
CC11P PRACTICAL	30	1. Determination of Visual Acuity by Snellen's Chart 2. Determination of Colour Blindness by Ishihara Chart. 3. Determination of Deafness by Tuning Fork Tests. 4. identification of stained sections of different mammalian tissues and organs: 5. Silver nitrate preparation of corneal cell space.	MD MD MD MD MD	04 04 04 08 04	Practical learning
				TOTAL= 60	
CC12TH	50	1. Endocrinology (Hypothalamus, pineal & thyroid) 2. Endocrinology (Adrenal, pancreas, heart & GIH)	PG PG	18 18	Lecture, Interactive, with ICT tools
CC12P PRACTICAL	30	1. PAS staining of liver section 2. Identification of stained sections of different mammalian tissues	PG PG	08 16	Practical learning
				TOTAL=60	
DSEA1TH	50	1. Biostatistics-basic concepts 2. Statistics of location 3. Testing of hypothesis 4. Correlation & regression 5. ANOVA	MD MD MD MD MD	04 10 08 08 06	Lecture, Interactive, with ICT tools
DSEA1P PRACTICAL	30	1. Computation of mean, median, mode, SD & SE. 2. Graphical representation of data in frequency polygon and histogram. 3. Student's t test 4. Determination of correlation coefficient (r) and computation of linear regression equation. 5. Statistical analysis with computer using One way ANOVA	MD MD MD MD MD	08 04 04 04 04	Practical learning
				TOTAL=60	
DSEB1TH	50	1. Fundamental concepts of work 2. Physiological basis of work 3. Work-load assessment 4. Work organization 5. Exercise and physical fitness 6. Physical working capacity 7. Bioenergetics 8. Training principles 9. Body composition	PG PG PG PG SD SD SD SD	04 06 04 04 04 04 04 04 02	Lecture, Interactive, with ICT tools
DSEB1P PRACTICAL	30	1. Determination of anthropometric parameters 2. Determination of VO2max by Queen's College Test 3. PFI by modified Harvard step test 4. Determination of agility, flexibility and anaerobic power 5. Recording of HR & BP during static and dynamic work 6. Determination of workload from heart rate and cardiac indices	SD SD SD SD SD SD	04 04 04 04 04 04	Practical learning
				TOTAL=60	

PHYSIOLOGY MINOR

SEMESTER-I

DISCIPLINE SPECIFIC CORE COURSE (4 CREDITS/100 MARKS)

PAPER	FULL MARKS	TOPIC	TEACHER	CLASS HOUR	TEACHING METHOD
DSCC 1 THEO	75	1. History of Physiology & Overview 2. Cellular Basis of Physiology 3. Chemistry of Biomolecules-Carbohydrates 4. Chemistry of Biomolecules- Lipids 5. Chemistry of biomolecules -Protein & Nucleic Acid	DS DS PG PG SD	09 09 09 09 09	Lecture, Interactive, with ICT tools
DSCC1 P PRACTICAL	25	1. Study of models & charts 2. Fresh tissue staining 3. Biochemistry-Unknown	DS DS DS	02 10 03	Practical learning
				Total =60	
SKILL ENHANCEMENT COURSE (SEC)-I (4 CREDITS/100 MARKS)					
SEC-I THEO	50	1. Clinical Biochemistry-I 2. Clinical biochemistry-II 3. Age related health issues 4. Clinical Hematology 5. Applied Work & Exercise Physiology	PG PG MD MD SD	06 06 06 06 06	Lecture, Interactive, with ICT tools
SEC-I PRACT	50	1. Hematology 2. Human experiment 3. Demonstration	SD DS SD	15 15	Practical learning
				Total= 60	

SEMESTER-III (CBCS METHOD)

PAPER	FULL MARKS	TOPIC	TEACHER	CLASS HOUR	TEACHING METHOD
CC3TH/ GEN3TH	50	1. Nerve-muscle physiology 2. Nervous system 3. Special sense	DS SD DS	12 12 12	Lecture, Interactive, with ICT tools
CC3P/ GEN3P PRACTICAL	30	1. Silver Nitrate preparation of nodes of Ranvier. 2. Silver nitrate preparation of corneal cell space. 3. Skeletal and cardiac muscles by Methylene Blue 4. Determination of visual acuity by Snellen's chart 5. Determination of colour blindness (Ishihara chart) 6. Exploration of conductive and perceptive deafness by tuning fork method. 7. Simple muscle curve –(Demonstration)	DS DS DS DS DS DS DS	02 04 04 02 04 04 04	Practical learning
				TOTAL=60	
SECA1	80	1. Microbiology-Virus 2. Microbiology-Bacteria 3. Immunology	DS DS DS	04 08 06	Lecture, Interactive, with ICT tools
				TOTAL=18	

SEMESTER-V (CBCS METHJOD)

PAPER	FULL MARKS	TOPIC	TEACHER	CLASS HOUR	TEACHING METHOD
DSEA2 TH	50	1. Blood group 2. Abnormal hemoglobins 3. Haematological count and indexes 4. Disorders	MD MD MD MD	04 04 04 04	Lecture, Interactive, with ICT tools
DSEA2 P PRACTICAL	30	1. DC of WBC 2. Estimation of hemoglobin 3. Blood group determination, 4. Bleeding time and Clotting time.	PG PG PG PG	04 04 02 04	Practical learning
				TOTAL=30	

SECA1	80	1. Microbiology-Virus 2. Microbiology-Bacteria 3. Immunology	DS DS DS	04 08 06	Lecture, Interactive, with ICT tools
				TOTAL= 18	

INTERDISCIPLINARY COURSE (IDC)

PHYSIOLOGY

SEMESTER-I

(TOTAL CREDIT 3/75 MARKS)

PAPER	FULL MARKS	TOPIC	TEACHER	CLASS HOUR	TEACHING METHOD
IDC THEORY	50	1. Cellular basis of Physiology 2. Biophysical principle 3. Enzyme 4. Biomolecule 5. Digestion & metabolism	DS DS DS DS DS	06 06 06 06 06	Lecture, Interactive, with ICT tools
IDC PRACTICAL	25	1. Fresh tissue 2. Biochemistry Unknown 3. Titration (Amino nitrogen)	MD MD MD	05 05 05	Practical learning
				TOTAL=45	