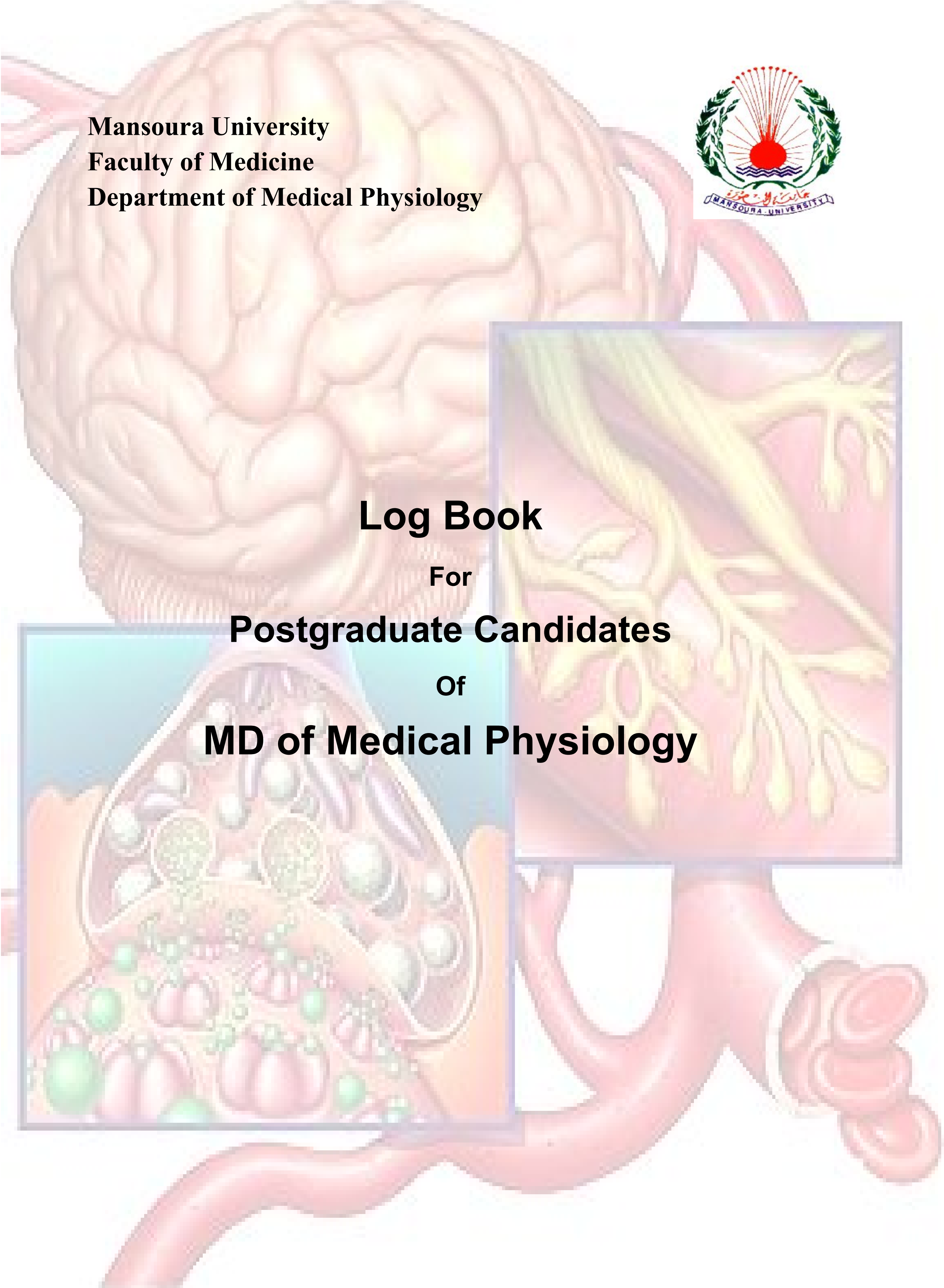
Mansoura University
Faculty of Medicine
Department of Medical Physiology



Log Book

For

Postgraduate Candidates

Of

MD of Medical Physiology

ii. These hours are distributed as follow:

A) Compulsory theoretical course (lectures) (10 credit hours).
B) Elective theoretical course (lectures) (5 credit hours)
C) Practical course (10 credit hours).
D) Logbook activities (10 credit hours).

iii. The credit hours are calculated as follow:

A) 1 hour theoretical lecture per week = 1 credit hour.
B) 3 hours practical class per week = 1 credit hour.
C) Attendance of seminars & journal clubs of others = 1/4 credit hour for each.
D) Attendance of thesis discussion = 1/2 credit hour for each.
E) Attendance of conferences = 1/2 credit hour for each.
F) Speaking in conference = 1 credit hour for each.
G) Attendance of the extradepartmental workshops or courses = 2 credit hours for each
H) Presentation of seminars or journal clubs = 1/2 credit hours for each.
I) Preparation of review articles = 1/2 credit hours for each.

iv. The minimum requirement of each individual Logbook activity is shown as follow:

A) Attendance of seminars & journal clubs of others (at least 2 credit hours)
B) Attendance of thesis discussion (at least 1 credit hour).
C) Attendance of conferences (at least 1 credit hour).
D) Attendance of the annual scientific conference of Mansoura Faculty of Medicine is a must.
E) Presentation of seminars (at least 2 credit hours).
F) Presentation of journal clubs (at least 2 credit hours).
G) Preparation of review articles (at least 3 credit hours).

☐ Personal Data:

Recent Photo

- **Name:**
- **Nationality:**
- **Date of Birth:**
- **Date of Graduation:**
- **Date of Employment:**
- **Marital Status:**
- **Address:**
- **Telephone:**

Home:

Mobile:

- **E-mail:**
- **Date of registration for MD degree:**

PART I

Postgraduate Lectures (Theoretical Course)

No.	Date	Subject	Signature

PART I

Postgraduate Lectures (Theoretical Course)

No.	Date	Subject	Signature

Practical Classes

No.	Date	Subject	Signature

Practical Classes

No.	Date	Subject	Signature

PART II

Postgraduate Lectures (Theoretical Course)

No.	Date	Subject	Signature

PART II

Postgraduate Lectures (Theoretical Course)

No.	Date	Subject	Signature

Practical Classes

No.	Date	Subject	Signature

Practical Classes

No.	Date	Subject	Signature

Conferences, Seminars, Journal Clubs, Thesis Discussion & Workshops Attendance (elective)

No.	Date	Subject	Signature

Undergraduate Teaching Activities

(as predetermined by the department)

No.	Date	Subject	Signature

Scientific Lectures

First Part

Compulsory (Sport Physiology)

No.	Scientific Lecture	Date	Signature
	Muscles in Exercise		
	Muscle Metabolic Systems in Exercise		
	Phosphocreatine-Creatine System		
	Oxygen Debt		
	Nutrients Used During Muscle Activity		
	Effect of Athletic Training on Muscles and Muscle Performance		
	Muscle Hypertrophy		
	Hereditary Differences Among Athletes for Fast-Twitch Versus Slow-Twitch Muscle Fibers.		
	Respiration in Exercise		
	Cardiovascular System in Exercise		
	Body Heat in Exercise		
	Body Fluids and Salt in Exercise		
	Drugs and Athletes		
	Body fitness		

Second Part

Elective (Genetic Physiology)

No.	Scientific Lecture	Date	Signature
	Introduction to genetics Mitosis and meiosis		
	Mendelian laws of genetics		
	Chromosome mapping in eukaryotes		
	Sex determination and sex chromosome		
	Chromosome mutation: variation in chromosome number and arrangement		
	DNA structure and analysis		
	DNA replication and recombination		
	DNA organization in chromosomes		
	DNA recombinant technology and gene cloning		
	The genetic code and transcription		
	Translation and protein		
	Regulation of gene expression in eukaryocytes		
	Cancer and regulation of cell cycle		

Second Part

Compulsory (General Physiology)

No.	Scientific Lecture	Date	Signature
	Digestive system 1) Digestive & absorptive function of GIT. 2) Reflexes controlling function of GIT. 3) Hormones controlling function of GIT. 4) Functional abnormalities in GIT		
	Endocrine system 1) Chemical nature, release and transport of hormones and mechanism of hormone action. 2) Pituitary gland (adeno and neurohypophysis) and Physiology of growth. 3) Thyroid gland. 4) Parathyroid gland and Endocrine regulation of calcium & phosphate metabolism. 5) Endocrine regulation of blood glucose and endocrine function of pancreas 6) Suprarenal gland: cortex and medulla. 7) Physiology of male and female reproductive system.		
	Renal Physiology		

	1) Nephron and Juxtaglomerular apparatus. 2) Renal blood flow RBF. 3) Glomerular filtration and Glomerular filtration rate. 4) Methods of studying renal physiology and concept of clearance methods. 5) Tubular function 6) Renal handing of water. 7) Control of body fluid osmolarity (water balance). 8) Regulation of sodium excretion & extracellular fluid volume. 9) Diuresis and diuretics. 10) Renal handling of K^{+}, Ca^{+2}, mg^{+2}, and phosphate. 11) Role of the kidney in acid - base balance. 12) Physiology of Micturition		
	Central nervous system 1) Physiology of autonomic N. system 2) Physiology of somatic sensations 3) Neurotransmitters and neuromodulatrors 4) Reflex Actions. 5) Control of posture and Movement. 6) Motor neuron lesions and spinal cord		

	lesions 7) Learning, Memory, languages speech. 8) Electrical activity of the brain, sleep-wake stoles & circadian rhythms 9) Hypothalamic role in endocrine & control, stress and emotions 10) Cerebrospinal fluid formation – composition and function		
	Physiology of special senses 1) Physiology of vision (image formation and phototransduction) 2) Functions of intraocular fluids and accessory extroocular structures 3) Physiology of hearing 4) Taste sensation 5) Olfactory sensation		
	Physiology of metabolism 1) Energy metabolism 2) Metabolic Rate thermogenesis 3) Control of Food Intake and Regulation of Energy Stores 4) Regulation of Body Temperature Physiology of Exercise		
	Cardiovascular system 1) Cardiac properties 2) Cardiac cycle, JVP, AP, ECG, HS 3) Heart rate		

	4) C .O .P and cardiac reserve 5) Arterial blood pressure 6) Capillary, Venous, Lymphatic, Coronary, Pulmonary, Cerebral, Splanchanic and Cutaneous circulations 7) Hemorrhage and Shock		
	Respiratory physiology 1) Pulmonary ventilation. 2) Gas transport. 3) Regulation of respiration. 4) Respiratory adjustments in health & disease.		
	Blood 1) Plasma proteins 2) Blood volume , total body water 3) Haemostasis 4) Disorders of haemostasis 5) RBCS 6) Blood groups and Blood transfusion 7) WBC and Immunity		

Second Part

Practical Sections

No.	Scientific Lecture	Date	Signature
	1. Calibration of bioback system		
	2. E M G		
	3. recording of smooth muscle contraction (Aortic strip, stomach) trachea, uterus, UB, ureters, esophagus)		
	4. ECG ,EEG & EOG & EDG		
	5. recording of isolated atrial contraction		
	6. reaction time & spinal cord reflexes		
	7. Exercise physiology		
	8. GSR		
	9.Short Tandem Repeat (STR) Genotyping, Restriction Fragment Length Polymorphism (RFLP), Amplification Mutation Detection System (ARMS), Single Stranded Conformation Polymorphism (SSCP), Nucleic Acid Blotting Techniques, Microarray Technique, DNA Sequencing, Multiplex PCR and Automated DNA Fragment, Analysis by Gene Scanning , DNA Recombinant Technology		

Final Report

Signature

Head of Department