

BIRLA INSTITUTE OF TECHNOLOGY & SCIENCE-PILANI, HYDERABAD CAMPUS
SECOND SEMESTER 2021-2022
Course Handout (Part II)

Date: 11/03/2022

In addition to part I (General Handout for all courses appended to the time table) this portion gives further specific details regarding the course.

Course No. : PHA F214
Course Title : Anatomy, Physiology and Hygiene
Instructor-in-charge : ARTI DHAR
Instructors : Arti Dhar

1. Course Description:

Anatomical study of the important organs of human body; physiology of various functional systems of human body; general principles of personal and community hygiene and prevention of communicable diseases.

2. Scope and Objectives:

This course imparts knowledge of anatomy (the study of internal structures of the human body and their inter-relationships) and physiology (study of functions of various structures and organ systems of the human body) in healthy and diseased states. It also deals with general principles of personal and community hygiene for the prevention of various communicable diseases.

Learning Outcome:

The purpose of this course is to provide the student with an in-depth study of the anatomy and physiology (structure and function) of the human body. This course imparts knowledge of human body organs, structure and function (cell membrane, action potential) and homeostasis in healthy and diseased states. It also deals with new techniques in assisted reproductive technology.

3. Text book: Marieb, Elaine N, Essentials of Human Anatomy & Physiology, Pearson Education, 8th Edition, 2005.

4. Reference Books:

1. Park K, Textbook of Preventive and Social Medicine, 16th Edition, M/s Banarasidas Bhanot Publications, India, 2000.
2. Guyton & Hall, Textbook of Medical Physiology, 9th edition, WB Saunders Company, (Indian edition), 1998.

5. Course Plan: Theory Component

Lect. No.	Learning Objectives	Topics to be covered	Chap/Sec No. (Book)
1 -2	Overview of the cellular basis of life	Definition, Scope and common terms used in Anatomy and Physiology, Cell: Parts and their functions, Tissue: Types, differences, characteristics and properties of tissues	TI: Ch. 1, 3

3-6	Blood	Composition and functions of blood, Plasma proteins, RBC, Hb, WBC, Platelets	T1:Ch.17
7-10	Cardiovascular system	Anatomy of heart, Physiology of heart, Blood vessels, Blood pressure, ECG	T1: Ch. 15, 3, 21
11-13	Nervous system	General aspect of Neurology, Central Nervous System, Peripheral Nervous System, Autonomic Nervous System	T1: Ch. 11, 12, 13, 14
14-16	Endocrine system	General properties of endocrine glands and hormones, Pituitary gland, Thyroid gland and Adrenal gland	T1: Ch. 16
17-21	Respiratory system	Organs of Respiratory system, Process of respiration.	T1: Ch. 22
22-24	Urinary system	Anatomy of urinary system, Urine formation and diseases of kidney	T1: Ch. 25
25-28	Liver system	Anatomy of liver, gall bladder, liver diseases	T1: Ch. 18
29-33	Digestive system	Organs of digestive system, Other allied organs, Process of digestion of food	T1: Ch. 23
34-37	Reproductive system	Anatomy and Physiology of reproductive system, New techniques in reproductive medicine	T1: Ch. 27
38-40	Hygiene	Air borne diseases and Insect borne diseases, Water borne diseases	Reference Book No 1: Chapter 5.

6. Evaluation Scheme:

EC No.	Evaluation Component	Duration	Weightage (%)	Date & Time	Remarks
1.	Midterm test	90 min	25	05/05 9.00 to 10.30am	CB
2.	Quiz	60 min	10		OB
3.	Lab Components				
	(A) Day to day work & Viva		10		OB
	(B) Lab. Compre & Quiz	3 hr	15		CB
4.	Compre. Exam.	3 hr	40	29/06 FN	CB

7. Attendance: Although attendance is not compulsory, regularity in theory and practical classes will be decisive factor during grading, especially in borderline cases.

8. Surprise quizzes will be conducted in regular classes without prior notification.

9. Chamber Consultation Hour: To be announced in the class.

10. Make-up policy: Generally make-up will be considered for regular students only.

11. Notices: Concerning this course will be displayed on Pharmacy N. B.

Academic Honesty and Integrity Policy: Academic honesty and integrity are to be maintained by all the students throughout the semester and no type of academic dishonesty is acceptable.

**Instructor-in-charge
PHA F214**