

**SRI VENKATESWARA UNIVERSITY**  
**B.Sc. DEGREE COURSE IN PARAMEDICAL TECHNOLOGY**  
**(Syllabus under CBCS w.e.f. 2020-21)**

**PARAMEDICAL**



*(With Learning Outcomes, Unit-wise Syllabus, References, Co-curricular Activities  
& Model Q.P.)*  
**(To be Implemented from 2020-21 Academic Year)**

## **Domain Subject: MARKET ORIENTED COURSE PARAMEDICAL SCIENCE**

### ***Activities, References & Model Q.P For Five Courses of 1, 2, 3, 4 & 5 Semesters)***

“The domain subject “PARAMEDICAL SCIENCE”, embracing the fields of human anatomy, human physiology, bio chemistry and hematology and microbiology. This course is meant for providing employment opportunities for the graduates in the paramedical sector.

#### **GENERAL CURRICULAR ACTIVITIES**

##### **Lecturer-based:**

- 1) **Class-room activities:** Organization of Group discussions, question-answer sessions, scientific observations, use of audio-visual aids, guidance programmes, examination and evaluation work (scheduled and surprise tests), quizzes, preparation of question banks, student study material, material for PG entrance examinations etc.
- 2) **Library activities:** Reading books and magazines taking notes from prescribed and reference books and preparation of notes on lessons as per the syllabus; Reading journals and periodicals pertaining to different subjects of study; Making files of news-paper cuttings etc.
- 3) **Lab activities:** Organization of practicals use of virtual laboratory , maintenance of lab attendance registers/log registers, maintenance of glassware and chemicals
- 4) **Activities in the Seminars, workshops and conferences:** Organization of at least one seminar/workshop/conference per academic year either on academic/research aspects and inculcate research spirit among students
- 5) **Research activities:** Student study projects (General / RBPT model), Minor or Major research projects, Research guidance to research scholars, Publication of research articles/papers (at least one in 2 years) in UGC-recognized journals, Registration in Vidwan/Orcid/Scopus/Web of Science
- 6) **Smart Classroom Activities:** Organization of Departmental WhatsApp groups, Ed Modo groups/Google Class Rooms/Adobe Spark groups for quick delivery of the subject; Preparation of Moocs content & presentation tube lessons by trained lecturers; Using smart/digital/e- class rooms (mandatory) wherever present; Utilization of YouTube videos (subject to copy rights) etc.

##### **Student-based:**

- 1) **Class-room activities:** Power point presentations, seminars, assignments
- 2) **Library activities:** Visit to library during library hour and preparation of notes
- 3) **Lab activities:** Maintenance of observation note book and record, keeping lab clean and tidy
- 4) **Activities in the Seminars, workshops and conferences:** Participation/presentation in seminar/workshop/conference

## CO-CURRICULAR ACTIVITIES

### OBJECTIVES:

The co-curricular activities are aimed at strengthening the theoretical knowledge with an activity related to the content taught in the class room. The aesthetic development, character building, spiritual growth, physical growth, moral values, creativity of the student.

The different types of co-curricular activities relevant to Sericulture domain are listed below:

### Academic – based

- Preparation of Charts/Clay or Thermocol Models
- Debates, Essay Writing Competitions
- Group Discussions
- Departmental magazine
- Formation of Book clubs
- Paramedical importance album-making
- Viva-Voce

### Lab/Research –based

- Documentaries
- Field Visit/Excursions/to Paramedical centres
- Training at paramedical centres
- Exposure to scientific instruments and hands-on experience

### Value - based

- Organization of works shop with the doctors from the primary health centres for awareness on the role of paramedics in the Medical & health sector

### ➤ Observation of Days of National/International Importance

World Cancer Day (February 4th )	International Biological Diversity Day (May 22 <sup>nd</sup> )
Darwin Day (February 12 <sup>th</sup> )	World Turtle Day (May 23 <sup>rd</sup> )
National Science Day (Feb 28 <sup>th</sup> )	World blood Donor Day (June 14 <sup>th</sup> )
World Wildlife day (March 3 <sup>rd</sup> )	World Zoonoses Day (July 6 <sup>th</sup> )
National Vaccination Day (March 16 <sup>th</sup> )	World Mosquito Day (August 20 <sup>th</sup> )
World Health Day (April 7 <sup>th</sup> )	World Turtle Day (May 23 <sup>rd</sup> )
Earth Day (April 22 <sup>nd</sup> )	World Mosquito Day (August 20 <sup>th</sup> )
Malaria Day (April 25 <sup>th</sup> )	World Animal day (October 4 <sup>th</sup> )
World Hepatitis Day (May 19 <sup>th</sup> )	World Fisheries Day (November 21)
National Doctors Day (July 1)	Blood Donor's Day- (June 14)

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**B.Sc. DEGREE COURSE IN PARAMEDICAL TECHNOLOGY**

**FIRST YEAR - FIRST SEMESTER**  
**(Syllabus under CBCS w.e.f. 2020-21)**

**Core Course Paper-I: HUMAN ANATOMY**  
(Total hours of teaching – 60 @ 04 Hrs./Week)

**Course Outcomes:** By the completion of the course the graduate should able to –

- CO1:** Explain the different types of cells and Tissues
- CO2:** Explain the mechanism of digestion, absorption & breathing
- CO3:** Describe the cardiovascular and excretory systems
- CO4:** Explain the hepatobiliary and endocrine regulations
- CO5:** Describe the neurotransmitters ,male and female genitals

**Learning objectives**

1. To understand the concept different types of cells and Tissues .
2. To understand the mechanism of digestion, absorption & breathing.
3. To understand the cardiovascular and excretory systems .
4. To understand the hepatobiliary and endocrine regulations.
5. To understand the neurotransmitters ,male and female genitals

**SYLLABUS**

**UNIT- 1**

- 1.1 Cell and its structure,
- 1.2 Cell organelles and its functions,
- 1.3 Types of cells- Eukaryotic, Prokaryotic and its difference,
- 1.4 Tissues- types, properties, differences.

**UNIT- 2**

- 2.1 Digestion & Absorption.
- 2.2 Breathing - Exchange of Gases.

**UNIT- 3**

- 3.1 Excretory System – Excretory Products and their Elimination.
- 3.2 Cardio Vascular System- Structure of Heart, Cardiac Cycle.

**UNIT-4**

- 4.1 Hepatobiliary system- Liver and its Functions.
- 4.2 Endocrine System- Hormonal regulation.

**UNIT-5**

- 5.1 Nervous System- Neurotransmitters.
- 5.2 Reproductive System – Male and Female Genitals.

**Reference Books:**

1. Ross & Wilson Anatomy & Physiology in Health & Illness by Waugh(A).
2. Textbook of Medical Physiology by G.K.Pal.
3. Review of Medical Physiology by Ganong.
4. Text book of Medical Physiology by Guyton(AC)

**SRI VENKATESWARA UNIVERSITY**  
**B.Sc. DEGREE EXAMINATION IN PARAMEDICAL TECHNOLOGY**

**FIRST YEAR - FIRST SEMESTER**  
**(Revised Syllabus under CBCS w.e.f. 2020-21)**

**Core Course Paper– I: HUMAN ANATOMY**  
**MODEL QUESTION PAPER**

**Time : 3 hrs**

**Max. Marks : 75**

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**SECTION –I**

**Answer any FIVE of the following**

**5x5 = 25 Marks**

**(Draw labelled diagrams wherever necessary)**

1. Lysosomes
2. Epithelial tissue
3. Absorption
4. Cardiac Cycle
5. Ammonia
6. Liver
7. Male Productive System
8. Nerve Cell

**SECTION –II**

**Answer ALL the questions each question carries 10 marks**

**5x10=50 Marks**

**(Draw diagrams wherever necessary)**

9. (a) Describe about Eukaryotic cell structure. (or)  
(b) Explain about Structure and functions of Mitochondria.
10. (a) Write about Digestion process in Humans. (or)  
(b) Give an account on O<sub>2</sub> oxygen transport
11. (a) Explain about structure and function of Excretory System (or)  
(b) Describe about structure and function of human heart.
12. (a) Describe about hormonal regulation (or)  
(b) Explain about the hepatobiliary system
13. (a) Write about neurotransmission in brief. (or)  
(b) Describe about female reproductive system.

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**FIRST YEAR - FIRST SEMESTER**  
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**Practical Paper-I: HUMAN ANATOMY**

1. Structure and Parts of Human Digestive System.
2. Structure and Parts of Circulatory System.
3. Structure and Parts of Reproductive System.
4. Structure and Parts of Central Nervous System.
5. Structure and Parts of Respiratory System.
6. Structure and Parts of Excretory System.
7. Different Types of Tissues.
8. Structure and Parts of Eye.
9. Structure and Parts of Ear
10. Structure and Parts of Nose
11. Cell structure
12. Cell Organelles and its structures
13. Endocrine Glands and Its Functions