

**B. Tech. Sem – III (Biomedical Engg.) (2014 COURSE) (CBCS) :
SUMMER - 2019**

SUBJECT: HUMAN BIOLOGY

Day: Wednesday
Date: 15/05/2019

S-2019-2587

Time: 02.30 PM TO 05.30 PM
Max. Marks: 60

N.B:

- 1) All questions are **COMPULSORY**.
 - 2) Figures to the right indicate **FULL** marks.
 - 3) Draw neat labeled diagrams **WHEREVER** necessary.
-

Q.1 What is tissue? What are the types of tissues? Draw the diagram of each and explain. (10)

OR

Define following w.r.t. cell and its function: (10)

- | | |
|------------------|----------------------------------|
| i) Nucleus | iii) Rough endoplasmic reticulum |
| ii) Mitochondria | |

Q.2 Explain with diagram: (10)

- i) Male Reproductive System.
- ii) Female Reproductive System.

OR

Explain the anatomy of respiratory system. (10)

Q.3 Give detailed anatomy of: (10)

- i) Nose
- ii) Eye

OR

Describe anatomy of spinal cord with neat diagram. (10)

Q.4

- i) Discuss the factors responsible for blood clotting.
- ii) Write a note on blood transfusion.

 (10)

OR

What is ECG? Draw the diagram of ECG waveform and explain amplitudes and time durations of each. Also explain each wave in the ECG signal. (10)

Q.5 How does kidney help in maintaining electrolyte balance? (10)

OR

Explain the functions and composition of pancreatic juice. Name the various gastric juices and its importance. (10)

Q.6 Explain the physiology of eye and importance of sight. (10)

OR

- i) Describe various types of papillae of tongue. (10)
- ii) Justify: Skin is called largest organ of body.