

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER- III EXAMINATION – SUMMER 2020****Subject Code: 2130304****Date: 28/10/2020****Subject Name: HUMAN ANATOMY & PHYSIOLOGY****Time: 02:30 PM TO 05:00 PM****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

MARKS

- Q.1** (a) Explain Structure & Function of Mitochondria. **03**
(b) Define: Superior, Inferior, Anterior, Posterior **04**
(c) Draw and Explain Neat Structure & Functions of cell. **07**
- Q.2** (a) What is Homeostasis? **03**
(b) Enlist Functions of Blood. **04**
(c) Give Basic Classification of tissue and Explain Epithelial Tissues in detail with neat Diagram. **07**
- OR**
- (c) Explain Structure of Human heart with necessary Diagram. **07**
- Q.3** (a) Define: TV, IRV, RC **03**
(b) Explain Blood Flow through the Heart. **04**
(c) Define: Inspiration & Expiration & Explain Muscles of Respiration detail. **07**
- OR**
- Q.3** (a) Draw ECG waveform and Define cardiac Output. **03**
(b) Write a Short Note on heart Sound. **04**
(c) Draw neat labeled Structure of Respiratory System and Explain mechanism of Respiration in detail. **07**
- Q.4** (a) Define: Mastication, deglutination **03**
(b) Draw neat Labeled Diagram of Human Eye. **04**
(c) Draw neat labeled Diagram of Human Brain & Explain Mid brain with their Functions. **07**
- OR**
- Q.4** (a) Draw neat Labeled Diagram of neuron. **03**
(b) Write a Brief Note on Synovial Joints. **04**
(c) Draw and Explain Structure of Ear and Physiology of Hearing. **07**
- Q.5** (a) State Functions of Liver. **03**
(b) Explain structure & Functions of Large & small Intestine. **04**
(c) Explain Physiology of Urine Formation detail. **07**
- OR**
- Q.5** (a) Explain Physiology of micturition **03**
(b) Draw neat labeled Structure of Digestive System. **04**
(c) Give Classification of Muscle & Explain Physiology of Muscle Contraction. **07**
