

Q.P. CODE:M102A020**Dr YSR UNIVERSITY OF HEALTH SCIENCES: VIJAYAWADA- 520008****MBBS DEGREE EXAMINATION - MARCH, 2024****FIRST M.B.B.S. EXAMINATION****PHYSIOLOGY - PAPER-I****(Theory Questions)****Time: 2 Hour 40 Minutes****Max Marks: 80****Note: Answer all questions.****Draw diagrammatic representation wherever necessary**

SECTION-II (THEORY QUESTIONS - 80 MARKS)**STRUCTURED ESSAY QUESTIONS:****2 X15 = 30**

1. a) What are different leads in the ECG? Discuss PR interval in detail.
b) Describe the normal spread of electrical activity in the heart.
c) List the chemical and neural factors that regulate coronary circulation.
d) Describe the circulatory changes that occur during exercise.
2. a) Discuss in detail about the Pulmonary function tests.
b) Describe the pulmonary function tests in obstructive and restrictive lung disease.
c) What factors affect the compliance of the lungs?
d) What factors affect the Airway resistance?

SHORT ANSWER QUESTIONS:**10x5=50**

3. Describe and give examples of secondary active transport.
4. Describe the structure and function of platelets.
5. Explain the functions of Memory B Cells and T Cells.
6. Describe the functions of neutrophils.
7. Describe the composition and functions of Gastric Juice.
8. A 40-year-old male came with complaints of upper abdominal pain since one week. Ultrasound examination reveals gallstones in the gallbladder. What is the cause for gallstones formation? Discuss.
9. List the factors affecting cardiac output.
10. Explain the factors affecting the glomerular filtration rate.
11. Discuss tubular reabsorption and secretion of glucose.
12. Describe the countercurrent mechanism in the kidney.
