

[Time: 3 Hours]

[Marks:70]

Please check whether you have got the right question paper.

- N.B:**
1. All questions are compulsory
 2. Figures to the right indicates full marks
 3. Draw neat and labeled diagram wherever diagram wherever necessary

- Q.1 A)** Answer the following 12
- vii. Define 'Iso-volumetric Ventricular Contraction'.
 - viii. Define Stroke Volume and enlist the factors affecting it.
 - ix. Define Net filtration pressure.
 - x. What are the causes of Peptic Ulceration.
 - xi. Give the general structure and composition of tooth.
 - xii. State the functions of Renal System.
- B)** Fill in the Blanks 3
- iv. The chamber of heart with the thickest myocardium is -----.
 - v. ----- cells secretes pepsinogen and gastric lipase.
 - vi. The Aortic and Pulmonary Valves are known as the -----.
- Q.2 A)** Answer ANY TWO of the following 8
- iv. Draw a neat and labeled diagram of section of ovary.
 - v. Describe the role of various accessory sex glands in male reproductive system.
 - vi. Write a note on sexually transmitted diseases.
- B)** Answer ANY ONE of the following 3
- iii. Write a note on male infertility.
 - iv. Describe role of FSH in menstrual cycle.
- Q.3 A)** Answer ANY TWO of the following 8
- iv. Draw a neat and labeled diagram showing internal structure of heart.
 - v. Discuss the pathophysiology of congestive heart failure.
 - vi. Draw a normal ECG. Explain the significance of segments and peaks and its diagnostic use.
- B)** Answer ANY ONE of the following 3
- i. Explain the effect of the following on Heart.
 - a. Calcium
 - b. Adrenaline
 - c. Acetylcholine
 - ii. Describe the structure features of capillaries and state its functions

Q.4 A) Answer ANY TWO of the following

8

- iv) Draw neat and labeled diagram of nephrons.
- v) Explain the process of urine formation.
- vi) Explain the structure and function of liver.

3

B) Answer ANY ONE of the following

- iii. Define: Hypervolemia, Hypernatremia and Hypokalemia.
- iv. Explain rennin-angiotensin-aldosterone system.

Q.5 A) Answer ANY TWO of the following

8

- iv) Draw neat and labeled diagram of section of small intestine.
- v) Describe the process of digestion and absorption of carbohydrates across the GIT.
- vi) Discuss the function of gall bladder and pancreas.

B) Answer ANY ONE of the following

3

- iii) Write a note on Reflux Esophagitis.
- iv) Discuss the pathophysiology of Crohn's disease.

Q.6 A) Answer ANY TWO of the following

8

- iv) Describe the pathophysiology of Atherosclerosis.
- v) Write a note on Baro-receptor reflex.
- vi) Differentiate between pulmonary and systemic circulation.

3

B) Answer ANY ONE of the following

- iii) What does the heart sounds 'lubb and 'dupp' indicate?
- iv) Write a note on Angina pectoris.