I Year B.N.Y.S Degree Examination

**Time: Three Hours** Max. Marks: 80 Marks

# **PHYSIOLOGY - Paper I QP Code: 2527** (QP contains two pages)

Your answers should be specific to the questions asked. Draw neat, labeled diagrams wherever necessary.

Section - A

### **Multiple Choice Questions**

10 X 1 = 10 Marks

- Conjugation of bilirubin occurs in
  - a. Erythrocytes
  - b. Granulocytes
  - c. Hepatocytes
  - d. Lymphocytes
- Function of rough endoplasmic reticulum 2.
  - a. ATP synthesis
  - b. DNA synthesis
  - c. Protein synthesis
  - d. Cell division
- Hormone secreted by kidney 3.
  - a. Angiotensin
  - b. Aldosterone
  - c. Renin
  - d. Cortisol
- Most common blood group in India 4.

  - В b.
  - c. AB
- Achalasia cardia is characterized by
  - a. Relaxation of lower oesophageal sphincter
  - b. Cardiac failure
  - c. Accumulation of food in oesophagus
  - d. Spasm of lower oesophageal sphincter
- Haemophilia is inherited as 6.
  - a. X-linked dominant
  - b. X-linked recessive
  - c. Y-linked dominant
  - d. Autosomal disease
- 7. Which component of BP undergoes much less fluctuations?
  - a. Systolic BP
  - b. Diastolic BP
  - c. Mean arterial pressure
  - d. Pulse pressure
- P wave of ECG produced due to 8.
  - a. Atrial repolarization
  - b. Atrial depolarization
  - c. Ventricular repolarization
  - d. Ventricular depolarization
- Marey's law denotes relationship between heart rate and 9.
  - a. Conductivity
  - b. Force of contraction
  - c. Blood volume
  - d. Blood pressure

- 10. Juxta glomerular cells are located in
  - a. Afferent arteriole
  - b. Efferent arteriole
  - c. Distal convoluted tubule
  - d. Collecting duct

#### Section B

### LONG ESSAYS (Answer any two)

2 X 10 = 20 Marks

- Describe mechanism of oxygen transport. Add a note on oxygen dissociation curve.
- 12. Describe Rh blood group system. Add a note on transfusion reaction.
- Explain the functions of pancreatic enzymes. Discuss regulation of pancreatic juice secretion. 13.

## **SHORT ESSAYS (Answer any ten)**

- Describe active transport mechanism.
- 15. Describe pressure changes during respiration.
- 16. Explain chemical regulation of respiration.
- 17. Compare first and second heart sound.
- 18. Define and classify jaundice.
- Describe acclimatization. 19.
- 20. Explain origin and conduction of cardiac impulses.
- 21. Explain laboratory tests for coagulation and bleeding disorders.
- 22. Describe coronary circulation.
- 23. Describe Micturition reflex.
- www.FilestRankers. Explain composition and function of surfactant. 24.
- 25. Describe functions of liver.

10 X 5 = 50 Marks