

ATTEMPT ANY FIVE QUESTIONS

1. (a) Discuss four important functions of plasma proteins.
(b) Describe the physiological basis of ABO blood group system.
6 + 4 = 10
2. (a) Explain the physiological basis of Sickle-cell anemia and
Thalassemia.
(b) State the origin of ECG waves. **4 + 6 = 10**
3. (a) Write a brief note on the significance of different heart sounds.
(b) What is slow diastolic depolarization?
(c) Define cardiac cycle. **6 + 2 + 2 = 10**
4. (a) State the neural and physiological basis of Bainbridge Reflex.
(b) Describe the structure of different types of capillaries. **4 + 6 = 10**
5. (a) Discuss the cardiovascular adjustments that take place after severe
hemorrhage.
(b) Mention the important factors that regulate blood pressure in
human. **6 + 4 = 10**
6. (a) Describe with a diagram the histological structure and functions of
spleen.
(b) What is circle of Willis? **(2 + 3 + 3) + 2 = 10**
7. (a) Name the different respiratory muscles of human.
(b) Write a note on ventilation-perfusion ratio.
(c) What is physiological dead space? **4 + 4 + 2 = 10**
8. (a) What is hypoxia? Mention the types of hypoxia.
(b) What is Hering-Breuer reflex?
(c) What is lung surfactant? **(2 + 4) + 2 + 2 = 10**

Examinees are requested to send the answer-scripts in pdf format to the following e-mail id — arnab_c39@hotmail.com on the day of the examination by 2.15pm sharp.