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3 (Sem-4/CBCS) ZOO HC 2

2021

ZOOLOGY

(Honours)

Paper : ZOO-HC-4026

***(Animal Physiology : Life Sustaining
Systems)***

Full Marks : 60

Time : Three hours

***The figures in the margin indicate
full marks for the questions.***

GROUP-A

1. Answer the following as directed : $1 \times 5 = 5$

(a) What is Rh factor ?

(b) Kupffer cells occur in _____.
(Fill in the blank)

Contd.

- (c) State the function of the hormone 'vasopressin'.
- (d) The human heart is *neurogenic/pulsating/myogenic*.
(Choose the correct answer)
- (e) AB blood group contains *antigen A/antigen B/both antigen A and antigen B/both antibody A and antibody B*.
(Choose the correct answer)

2. Answer the following questions briefly :

2×5=10

- (a) Mention the role of secretin in digestion process.
- (b) Differentiate between internal respiration and external respiration.
- (c) Differentiate between S-A node and A-V node.
- (d) What are blood clotting factors ?
- (e) Define cardiac output.

3. Answer **any three** questions from the following : 5×3=15
- (i) What is micturition ? How is it regulated ? 1+4=5
- (ii) Write a short note on O_2 -dissociation curve. 5
- (iii) Give an account of mechanism and regulation of urine formation. 5
- (iv) Describe briefly the role of bile in intestinal digestion process. 5
- (v) Draw a standard Electrocardiogram (ECG) and explain the different segments in it. 1+4=5

GROUP-B

4. Answer **any three** of the following : (within **1200** words) 10×3=30
- (a) What do you mean by respiratory pigment ? Mention the functions of respiratory pigment. Describe briefly the CO_2 transport mechanism in human body. 1+2+7=10

- (b) Describe in details about digestion and absorption of fats in the intestine.
5+5=10
- (c) Give a detailed account of the cellular contents of blood. Describe briefly the functions of platelet.
8+2=10
- (d) What is cardiac cycle ? Discuss the different physiological events in the heart during a complete cardiac cycle.
2+8=10
- (e) Give an account of extrinsic and intrinsic pathway of blood clotting mechanism.
4+6=10
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