

2017

(November)

ZOOLOGY

(Major)

Course : 503

(Animal Physiology)

Full Marks : 48

Pass Marks : 19 /14

Time : 2 hours

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

1. (a) Fill in the blanks : 1×5=5

(i) Salivary amylase converts starch
into ____.

(ii) One complete heartbeat lasts for
about ____ seconds.

(iii) In human body, major fraction of
CO₂ is transported as ____.

(2)

- (iv) Ammonia is converted into urea through ____ cycle.
- (v) Axon releases ____ at the synapse which sets up a new impulse in the dendrites.

(b) Write short notes on the following (any two) : $5 \times 2 = 10$

- (i) Cardiac cycle
- (ii) Nephric filtrate
- (iii) Antigen-antibody reaction
- (iv) Balanced diet
- (v) Neurotransmitters

2. What is meant by digestion? Describe the physiology of digestion and absorption of proteins in human being. $1+2+8=11$

Or

Define drug addiction. Name the four categories of drugs. What are the reasons for drug addiction in adolescents? Explain the physiological effects of drug addiction in human body. $1+3+3+4=11$

3. What is muscle contraction? Write about the mechanism of muscle contraction with suitable diagrams. $2+9=11$

(3)

Or

What is synapse? Explain with proper diagrams about the synaptic transmission in human being. $3+8=11$

4. What is excretion? Write about the mechanism and regulation of urine formation in men. $3+8=11$

Or

Distinguish between the following pairs : $3+4+4=11$

- (a) Central nervous system and Sympathetic nervous system
- (b) Isometric contraction and Isotonic contraction
- (c) Facultative water reabsorption and Obligatory water reabsorption in kidney
