

92275

B.Sc. 4th Semester (New Scheme)

Examination, April-2018

BIOTECHNOLOGY

Paper- BT-404

Mammalian Physiology

Time allowed : 3 hours]

[Maximum marks : 40

Note: Attempt five questions in all, selecting at least one question from each unit. Question number 1 is compulsory. All questions carry equal marks.

1. Write the short notes on the following. 8×1

- (a) Gall bladder
- (b) Emulsification
- (c) Cardiac cycle
- (d) Plasma
- (e) Muscle twitch
- (f) Osmoregulation
- (g) Exocrine gland
- (h) Thymus

Unit-I

2. Describe the mechanism of digestion, absorption and functions of carbohydrate as well as lipid in detail. 8

3. Write the notes on any two: 4×2

- (a) Respiration

- (b) Composition & function of bile juice
- (c) Chloride shift

Unit-II

- 4. What is blood? Describe mechanism of coagulation of blood & why its importance? 8
- 5. Write the notes on any *two*: 4×2
 - (a) Types of blood cells & their individual functions
 - (b) Haematopoiesis
 - (c) Mechanism of working of heart (Human)

Unit-III

- 6. What are similarity and differences between cardiac, smooth and skeletal muscle? 8
- 7. Write the notes on any *two*: 4×2
 - (a) Osmoregulation
 - (b) Excretion
 - (c) Ornithine cycle

Unit-IV

- 8. What is hormone? Describe mechanism of action of steroids hormone on our body. 8
- 9. Write the notes on any *two*: 4×2
 - (a) Neuro-transmitter
 - (b) Pituitary glands
 - (c) Insulin hormone