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G – 1418

Reg. No. : .....

Name : .....

**Sixth Semester B.Sc. Degree Examination, April 2019**  
**First Degree Programme Under CBCSS**  
**Branch : Zoology**  
**Core Course – IX**  
**ZO 1641 : PHYSIOLOGY AND BIOCHEMISTRY**  
**(2013 Admission)**

Time : 3 Hours

Max. Marks : 80

I. Answer **all** questions (1 mark **each**) :

- 1) Balanced diet.
- 2) Roughage.
- 3) Anticoagulants.
- 4) Apnoea.
- 5) Haematuria.
- 6) Cardiac muscle.
- 7) Acromegaly.
- 8) Organ of corti.
- 9) Oligosaccharides.
- 10) Neutral fats.

(10 ×1=10 Marks)

II. Answer **any eight** questions (2 marks **each**) :

- 11) Agranular leucocytes.
- 12) Pacemaker.
- 13) Oxygen debt.
- 14) Glomerular ultrafiltration.
- 15) Visual pigments.
- 16) Parkinson's disease.



- 17) Lymph.
- 18) Progesterone.
- 19) Muscle proteins.
- 20) Islets of Langerhans.
- 21) Transamination
- 22) Chemi-osmotic hypothesis.

(8×2=16 Marks)

III. Answer **any six** questions (4 marks **each**) :

- 23) Comment on physiological effects of smoking.
- 24) Describe any two cardio vascular diseases.
- 25) Briefly describe the hormonal regulation of renal function.
- 26) Write an account on vitamin B complex.
- 27) With suitable diagrams, explain the structure of nephron.
- 28) What is synapse ? Explain the different types of synapses.
- 29) What are mono saccharides ? Mention its classification with examples.
- 30) Briefly describe the functions of thyroid hormone.
- 31) Give an account on factors affecting enzyme action.

(6×4=24 Marks)

IV. Answer **any two** of the following (15 marks **each**) :

- 32) Describe the structure of haemoglobin and explain the mechanism of transport of O<sub>2</sub> and CO<sub>2</sub>.
- 33) Explain the physical and biochemical events in muscle contraction.
- 34) What is glycolysis ? Describe the process and biological significance of it.
- 35) Write an essay on pituitary hormones and their functions. (2×15=30 Marks)