(Pages : 2) **D – 3131**

Reg. No. : .....

Name : .....

**Third Semester B.Sc. Degree Examination, December 2017**
**First Degree Programme Under CBCSS**
**Complementary Course for Botany, Home Science and Bio-Chemistry**
**ZO 1331.1 : FUNCTIONAL ZOOLOGY**
**(2015 Admission Onwards)**

Time : 3 Hours Max. Marks : 80

***Instruction*** : *Draw diagrams* ***wherever*** *necessary.*

I. Answer **all** questions in **one** or **two** sentences. **Each** question carries **one** mark.

1) What is pernicious anaemia ?
2) What is apnoea ?
3) Mention the function of heparin.
4) What is arteriosclerosis ?
5) Differentiate between a sensory neuron and a motor neuron.
6) What do you mean by acidosis ?
7) What is rigor mortis ?
8) Explain chloride shift.
9) Name two steroid hormones produced by placenta.
10) What are secondary lymphoid organs. **(10×1=10 Marks)**

II. Answer **any eight** of the following. **Each** question carries **two** marks.
(Answer **not** to exceed **one** paragraph)

11) Comment on hypercapnia.
12) What is a pace maker ?
13) Mention the diseases caused by the deficiency of Vitamin A.
14) What is coprophagy ?
15) What are neurotransmitters ? Give one example.
16) Mention any two nutritional disorders.

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17) Explain all or none law.

18) How does a myogenic heart differ from a neurogenic heart ?

19) Define oxygen debt.

20) What are haptens ?

21) How can you control the spread of HIV ?

22) What are antigen presenting cells ? Give examples. **(8×2=16 Marks)**

III. Answer **any six** of the following. **Each** question carries **four** marks. (**Each** answer should **not** exceed **120** words)

23) Explain the different types of nutrition found in animals.

24) Describe the mechanism of muscle contraction.

25) Give an account on the structure of haemoglobin.

26) Explain the different types of immunity.

27) Discuss the ultra structure of a striated muscle fibre.

28) Differentiate between diabetes mellitus and diabetes insipidus.

29) Describe the structure and functions of immunoglobulins.

30) What are the physiological effects of smoking ?

31) Write an account on the neural control of respiration. **(6×4=24 Marks)**

IV. Answer **any two** of the following :

32) With the aid of a diagram explain the structure of a typical neuron and discuss the mechanism of impulse transmission.

33) Write an essay on the composition and functions of blood.

34) Give an account on the endocrine glands in human body and mention the functions of hormones produced by each.

35) Classify animals based on their excretory wastes. Add a detailed account on the formation of urine.

**(2×15=30 Marks)**

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