VI Semester B.Sc. Examination, May 2016
(New Scheme) (Freshers + Repeaters)
(70 Marks – 2013-14 and Onwards/60 Marks – Prior to 13-14)
ZOOLOGY
Animal Physiology and Techniques in Biology (Paper – VIII)

Time : 3 Hours                                                          Max. Marks : 60/70

Instructions : 1) Draw diagram **wherever** necessary.
2) Answer should be **completely** either in **Kannada** or in **English**.
3) NS **70** marks, **2013-14** and Onwards.
4) NS **60** marks, Prior to **2013-14**.

## PART – A

I. Answer **any five** of the following :                                              (5×3=15)

1) Briefly explain the mechanism of blood clotting according to Howell.

2) Differentiate between Bohr effect and Haldane effect.

3) What is uricotelism ? Cite an example with its significance.

4) Name the ear ossicles and give their function.

5) What is metabolic rate ? Mention any four factors affecting it.

6) Comment on Cretinism.

7) Give any three applications of autoradiography.

## PART – B

II. Answer **any five** of the following :                                              (5×5=25)

1) Explain Neuro-endocrine control of gastric juice secretion.

2) Give an account of $CO_2$ transportation by blood. Add a note on Chloride shift.

3) Explain axonal conduction of nerve impulse.

4) With respect to Adrenal secretion explain the negative feedback mechanism.

5) What is Peptic ulcer ? Give causes, effects and prevention.

6) Write notes on :
   a) Uses of alcohol in micro-techniques.
   b) Differential staining.

P.T.O.

7) Consider the following statistical data on the incubation period (X) of Small Pox, measured in days among the children of a family – 15, 13, 11 and 17. Calculate the standard deviation.

## PART – C

III. Answer **any two** of the following :
(2×10=20)

1) Explain the sliding filament theory on muscle contraction.

2) List the hormones of Pituitary and give their functions.

3) With reference to thermoregulation, explain the role of hypothalamus.

4) Write an explanatory notes on the physiology of

    a) Olfaction

    b) Body equilibrium.

## PART – D

(**Compulsory** for Students of 2013-2014 and onwards)

IV. Answer **any one** of the following :
(1×10=10)

1) Write an explanatory note on :

    a) Fractionation

    b) Endoscopy.

2) a) Immunoassay

    b) Haemodialysis.

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