

# COMBINED COMPETITIVE EXAMINATION (MAIN)

## ZOOLOGY

### Paper—II

Time : 3 hours

Full Marks : 200

**Note :** (1) The figures in the right-hand margin indicate full marks for the questions.

(2) Attempt **five** questions in all.

(3) Question No. **1** is compulsory.

(4) Suitable diagrams may be drawn, wherever required.

1. Answer any ten of the following :

4×10=40

- (a) Differentiate between euchromatin and heterochromatin.
- (b) Define mitotic cell division and meiotic cell division.
- (c) Give one example each of (i) carbohydrate, (ii) protein, (iii) lipid and (iv) vitamin.
- (d) Compare between the processes of blastulation and gastrulation.
- (e) Write in brief the structure and function of haemoglobin.
- (f) Distinguish between resting potential and action potential.
- (g) Differentiate between a hormone and a pheromone.
- (h) Distinguish between an antigen and an antibody.
- (i) Mention the sources of (i) gonadotropin releasing hormone, (ii) calcitonin, (iii) glucagon and (iv) aldosterone.
- (j) Write briefly about the functions of placenta.
- (k) Distinguish between species and sub-species.
- (l) Give an example each of (i) glucocorticoid hormone, (ii) progesterone, (iii) androgen and (iv) estrogen.

