Downloaded From: http://www.iasexamportal.com

This question paper contains 3 printed pages ]

Code No.: 24(II) Roll No.

O(CCEM)9

ZOOLOGY

Paper: II

Time Allowed: 3 hours]

[Maximum Marks: 300

Note: (i) Answers must be written in English.

- (ii) Number of marks carried by each question are indicated at the end of the question.
- (iii) Part/Parts of the same question must be answered together and should not be interposed between answers to other questions.
- (iv) The answer to each question or part thereof should begin on a fresh page,
- (v) Your answers should be precise and coherent.
- (vi) Candidates should attempt Q. No. 1 and 5 which are compulsory and three of the remaining questions selecting at least one question from each Section.

P. T. O.

Downloaded From: http://www.iasexamportal.com

24(II)

## SECTION - A

1. Give an account of any three of the following:

20 + 20 + 20 =

- (a) Cyanobacteria
- (b) Patau syndrome
- (c) Cistron effect
- (d) Genetic basis of recapitulation
- 2. Describe the *nuclear envelope* and the structure of pores. What similarities occur between the *nucle envelope* and *endoplasmic reticulum*? 30 + 30 = 6
- Describe different types of radiations and chemic mutagens used for inductions of mutations. 30 + 30 =
- 4. What do you mean by adaptive radiations? Explain the phenomenon by citing example of some mesozo animals.
  20 + 40 = 6

## SECTION - B

5. Give an account of any three of the following:

$$20 + 20 + 20 = 60$$

- (a) Pinocytosis
- (b) Nucleoproteins
- (c) Respiratory pigments
- (d) Retrogressive metamorphosis

(2)

Downloaded From: http://www.iasexamportal.com 24(II) **6.** What is Krebs Cycle? Discuss it in detail. 30 + 30 = 607. What are neurotransmitters? Give an account of the mechanism of conduction along axon and across synapses. 20 + 40 = 608. Describe various types of eggs and cleavage found in chordates. 30 + 30 = 60

(3)

3,200