- (x) Candidates shall put a cross (×) on blank pages of Answer Script.
- (xi) No blank page be left in between answer to various questions.
- (xii) No programmable Calculator is allowed.
- (xiii) No stencil (with different markings) is allowed.

SECTION-A

- 1. Give an account of any **three** of the following : 20+20+20=60
 - (a) Morphology of Dictyosomes.
 - (b) Cytoplasmic inheritance.
 - (c) ICZN
 - (d) The fluid mosaic model.
- 2. Explain Watson and Crick model of DNA and add a note on its replication. 60
- 3. Write an essay on linkage and linkage maps. 60
- 4. Describe the theories of biological classification. 60

SECTION-B

- 5. Give an account of any **three** of the following : 20+20+20=60
 - (a) Sulphur containing amino acids.
 - (b) Cell-mediated immunity.
 - (c) Cyclic AMP.
 - (d) Prevention of polyspermy.
- 6. (a) Explain mechanisms of temperature regulation in man. 30
 - (b) Describe the structure of synapse. Write a note on chemical transmission. 30
- Write a detailed account of glycolysis and Krebs cycle. Add a note on the energetics of glucose oxidation.
 60
- What is aging ? Explain symptoms of aging, theories of aging and measures to delay the processes of aging.
 60

Total No. of Printed Pages : 2

Roll No.

Time : Three Hours]

[Maximum Marks: 300

INSTRUCTIONS

- (i) Answers must be written in English.
- (ii) The number of marks carried by each question is indicated at the end of the question.
- (iii) The answer to each question or part thereof should begin on a fresh page.
- (iv) Your answer should be precise and coherent.
- (v) The part/parts of the same question must be answered together and should not be interposed between answers to other questions.
- (vi) Candidates should attempt question nos. 1 and 5 which are compulsory and any three out of the remaining questions selecting at least one question from each section.
- (vii) If you encounter any typographical error, please read it as it appears in the text-book.
- (viii) Candidates are in their own interest advised to go through the General Instructions on the back side of the title page of the Answer Script for strict adherence.
- (ix) No continuation sheets shall be provided to any candidate under any circumstances.

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