IAS Mains Zoology 2007

Paper-II

Section-A

- 1. Different between any three of the following: $20 \times 3 = 60$
 - a. Coincidence and interference
 - b. Mitotic and Meiotic Prophase
 - c. Substantive and polymorphic variation
 - d. Genera and Species
- 2. Describe transcription in pro-and eukaryotes. 60
- 3. Write explanatory notes on the following: $30 \times 2 = 60$
 - a. Mobile Genetic Segment
 - b. Tryptophan Opera
- 4. Discuss Hardy-Weinberg Law and mention its utility. 60

Section-B

- 5. Explain the importance of any three of the following: $20 \times 3 = 60$
 - a. Structure and function of cyclic AMP
 - b. Mechanism of Hormone action
 - c. Regeneration
 - d. Teratogenesis
- 6. Discuss active and passive immunity. Mention autoimmune disorders.

60

- 7. Describe programmed cell death. 60
- 8. Discuss the role of liver and pancreas in digestion? 60