

Final Examination in **BIOLOGY – Std. 11** 4-3-2016 M. Marks : 70 Time : 3 hrs.

Total printed pages :

Total printed questions :

09

25

Roll

General Instructions:

- i) The question paper comprises of five Sections A, B, C, D and E.
- ii) All questions are compulsory.
- iii) There is no overall choice however; internal choice has been provided in one question of 2 marks, one question of 3 marks and all the two questions of five marks category. Only one option in such question is to be attempted.
- iv) Questions1 to 5 in section A are very short questions of one mark each. These are to be answered in one word or one sentence each.
- v) Questions 6 to 9 in section B are short questions of two marks each. These are to be answered in approximately 20 - 30 words each.
- vi) Questions 10 to 20 in section C are questions of three marks each. These are to be answered in approximately 30-50 words each. Question 21 is of 4 marks.
- vii) Questions 22 to 23 in section D are questions of five marks each. These are to be answered in approximately 80-120 words each.
- viii) Questions 24 to 25 in section E is based on OTBA of 10 marks. Answer them in 100 - 200 words each.

Section – A

 $(1 \times 5 = 5 \text{ marks})$

- 1. Why do cartilaginous fishes have to swim constantly?
- 2. Give two examples of plants whose adventitious roots are modified for the purpose of storage of food.
- 3. Give the scientific terms for the following :-
 - a) Stacks of closely packed thylakoids _
 - b) Extensive infoldings of the inner membrane of Mitochondria _____.
- 4. Name the following :
 - a) Structural and functional unit of kidney _____.
 - b) The unit of nervous system _____
- 5. Draw the path of a reflex action.

Section – B

 $(2 \times 4 = 8 \text{ marks})$

- 6. Define alternation of generation giving one suitable example of a life cycle of any lower plant.
- 7. Who gave the cell theory and what is the meaning of "Omnis cellula-e-cellula"?
- 8. a) Define crossing over.
 - b) Explain Metacentric chromosome.



