

**CARMEL COLLEGE OF ARTS, SCIENCE & COMMERCE FOR WOMEN,
NUVEM-GOA**

B.Sc. CBCS Semester VI End Examination, July 2021

Subject: Zoology **Paper Code:** ZOC 108 **Paper Name:** Developmental Biology
Total marks: 30 **Duration:** 2 hrs **Total No of Pages:** 01 **Date:** 09/07/2021

Instructions: 1. All questions are compulsory
2. Figures to the right indicate marks
3. Draw neat labeled diagrams wherever necessary.

Q1. Answer any FIVE of the following. (2x5)

- a) Write four advantages of Parthenogenesis.
- b) Define transplantation. Write a point of difference between Autoplastic and Heteroplastic transplantation.
- c) Draw a labeled diagram of a hen's egg
- d) State the fate of any two germ layers in embryonic development.
- e) Comment on the endocrine function of placenta.
- f) How does Temperature and Oxygen affect regenerative ability of animals?
- g) Comment on the regenerative ability of Coelenterates.
- h) Differentiate between GIFT and ZIFT.

Q2. Answer any FOUR of the following. (5x4)

- i. What are morphogenetic movements? Explain the two basic types.
- ii. What is a Fate map? Describe any two methods of fate map construction.
- iii. Briefly explain the experiment which served as the basis for the concept of the "Primary organizer".
- iv. Highlight the developmental features of a 24-hour old chick embryo.
- v. Discuss Flexion and torsion in a chick embryo.
- vi. What are teratogens? Add a note on teratogenicity of Bisphenol A and Alcohol.

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