

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

**SEMESTER END EXAMINATION AUGUST 2020**

**Semester: VI      Course name & Code: ZOC-108 Developmental Biology**  
**Total marks: 30      Date:      Duration: 02 hrs.      Total No of pages: 01**

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- Instructions: 1. *All questions are compulsory*  
2. *Figures to the right indicate marks allotted to the question.*  
3. *Illustrate your answers wherever necessary.*

**Q1. Answer any five of the following: (10)**

- a. Define Embryology. Name any two branches of embryology.
- b. Write any two characteristic features of the Primary Organizer.
- c. Differentiate between Epimorphic and Heteromorphic regeneration.
- d. What are the distinguishing characters of children born with Fetal Alcohol Syndrome?
- e. What is a cell lineage study? State its significance.
- f. Comment on the two distinct types of positional changes which alter the entire configuration of the chick embryo.
- g. Mention the nutritive role of placenta.
- h. Draw a labeled diagram of Hen's egg in longitudinal section.

**Q2. Answer any four of the following: (20)**

- i) With reference to Primary organizer explain the 'Spemann and Mangold experiment'.
- ii) Explain the mechanism of regeneration with reference to vertebrate limb.
- iii) Discuss the causes of female infertility.
- iv) What is morphogenesis? Describe embolic morphogenetic movements.
- v) Elucidate the salient features of a 48-hour old chick embryo.
- vi) Trace the development of allantois in chick embryo. Add a note on its functions.

