# PSG COLLEGE OF ARTS & SCIENCE (AUTONOMOUS)

#### **BSc DEGREE EXAMINATION MAY 2018**

(Second Semester)

### **Branch-ZOOLOGY**

### **EMBRYOLOGY**

Time: Three Hours Maximum: 75 Marks

## **SECTION-A (20 Marks)**

**Answer ALL questions** 

ALL questions earn EQUAL marks (10 x 2 " 20)

- 1 Primordial germcells.
- 2 Polar body.
- 3 Fate map.
- 4 Gastrula.
- 5 Morula.
- 6 96 hours of chick embryo.
- 7 Cleavage.
- 8 Blastocyst.
- 9 Embryonic stemcells.
- 10 IVF.

#### **SECTION - B (25 Marks!**

**Answer ALL Questions** 

ALL Questions Carry EQUAL Marks  $(5 \times 5 = 25)$ 

11 a What is parthenogenesis? Explain its types and significances.

OR

- b Describe the process of Oogenesis.
- 12 a Describe the mechanism of gastrulation in frog.

OR

- b Explain the development of ear in frog.
- 13 a Enumerate the salient features of 48 hours of chick embryo.

OR

- b Give a brief account on embryonic induction in vertebrates.
- 14 a Explain the role of hormones in sexual cycle.

OR

- b Discuss the types of placenta in Mammals.
- 15 a Comment on quadriparental hybrids,

OR

b Give a brief note on production of chimeric mouse. .

# **SECTION - C (30 Marks!** Answer any THREE Questions

ALL Questions Carry EQUAL Marks  $(3 \times 10 = 30)$ 

- Explain the structure of a mammalian sperm and add a note on its types.
- 17 With suitable diagram, discuss the development of eye in frog.
- Write a detailed account on embryogenesis of chick.
- 19 Discuss elaborately the embryogenesis of rabbit.
- 20 Explain the following: (i) Artificial insemination (ii) Embryo transfer.