

**PSG COLLEGE OF ARTS & SCIENCE  
(AUTONOMOUS)**

**BSc DEGREE EXAMINATION DECEMBER 2018  
(Second Semester)**

Branch - **ZOOLOGY**

**EMBRYOLOGY**

Time : Three Hours

Maximum : 75 Marks

**SECTION-A (20 Marks)**

Answer **ALL** questions

**ALL** questions carry **EQUAL** marks (10 x 2 = 20)

**Answer in one or two sentences:**

- 1 Spermioteliiosis..
- 2 Polar body.
- 3 Blastula.
- 4 Morula.
- 5 Gastrula.
- 6 48hrs chick embryo.
- 7 Blastocyst.
- 8 Cleavage.
- 9 Quadriparental hybrids.
- 10 Stem cells.

**SECTION - B (25 Marks)**

Answer **ALL** Questions

**ALL** Questions Carry **EQUAL** Marks (5 x 5 = 25)

- 11 a Elucidate the structure of a Mammalian sperm.  
OR  
b Explain the types of egg membranes.
- 12 a With suitable diagram, explain the development of brain in frog.  
OR  
b With suitable diagram, discuss the development of heart in frog.
- 13 a Enlist the salient features of 24hrs chick embryo.  
OR  
b Discuss the fate map of chick.
- 14 a Briefly explain sexual cycle and role of hormones.  
OR  
b With suitable diagram, discuss the structure of egg.
- 15 a Comment on artificial insemination.  
OR  
b Give a brief note on embryo transfer.

**SECTION - C (30 Marks)**

Answer any **THREE** Questions

**ALL** Questions Carry **EQUAL** Marks (3 x 10 = 30)

- 16 Discuss the structure and types of eggs.
- 17 Explain in detail fate-map and gastrulation in Amphioxus.
- 18 Write an essay on extra-embryonic membranes in chick.
- 19 Describe the types of placenta in mammals.