

B.Sc. 6th Semester (Honours) Examination, 2021 (CBCS)

Subject: Zoology

Paper: CC-13 (Developmental Biology)

Full Marks: 40

Time: 2 Hrs

Candidates are required to give the answers in their own words as far as practicable.

Answer any *eight* questions of the following: **5×8=40**

1. Describe the process of spermiogenesis with suitable diagram.
 2. Write in brief about the cellular movements during gastrulation.
 3. Give an account of different applications of embryonic stem cells.
 4. Give a brief account of formation of Gray crescent in amphibian eggs.
 5. Elucidate briefly different types of cleavage depending upon the amount and distribution of yolk.
 6. Briefly describe the development of amnion and chorion in chick embryo.
 7. Describe the process by which polyspermy is prevented during fertilization.
 8. Write brief notes on (a) Nieuwkoop centre, (b) Permissive induction and (c) Instructive induction.
 9. Write down the purpose and procedure of Amniocentesis.
 10. Give an account of haemochorial and haemoendothelial placenta with sketch diagram.
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