

Answer five questions, selecting two from each Group, in which Q.No. 1 is compulsory.

1. Select the correct option of the following :
 - (a) Human sperm was first observed by :

(i) Wilhelm Roux	(ii) Spemann
(iii) Hertwrig	(iv) Hamma nd Leeuwenhoek
 - (b) Human eggs are :

(i) Microlecithal	(ii) Medialecithal
(iii) Macrolecithal	(iv) Mesolecithal
 - (c) Egg of eutherian mammals is :

(i) Controlecithal	(ii) Telolecithal
(iii) Macrolecithal	(iv) Microlecithal
 - (d) In which type of egg, total cleavage is possible ?

(i) Oligolecithal	(ii) Macrolecithal	(iii) Centrolecithal	(iv) Telolecithal
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 - (e) Cytoplasm is concentrated in frog's egg in :

(i) Peripheral region	(ii) Middle region	(iii) Vegetal pole	(iv) Animal pole
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 - (f) Solid ball of cells formed during cleavage is :

(i) Morula	(ii) Blastula	(iii) Blastodisc	(iv) Blastocyst
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 - (g) Bastopore is found in :

(i) Gastrula	(ii) Blastula	(iii) Morula	(iv) Planula
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 - (h) A secondary sexual character is :

(i) Ovary	(ii) Thyroid	(iii) Pituitary	(iv) Breast
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 - (i) Animals which give birth to young ones are called :

(i) Amphibious	(ii) Oviparous	(iii) Triploblastic	(iv) Viviparous
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 - (j) Leydig cells are present in the mammalian :

(i) Liver	(ii) Testis	(iii) Kidney	(iv) Duodenum
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 - (k) In mammals failure of testis to descend into the scrotum is known as :

(i) Cryptorchidism	(ii) Castration	(iii) Impotency	(iv) Paedogenesis
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 - (l) The persistence of corpus luteum during pregnancy is due to a hormone known as :

(i) LH	(ii) Estrogen	(iii) Progesteron	(iv) Chorionic gonadotropin
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 - (m) The mammalian corpus luteum produces :

(i) Progesteron	(ii) Estrogen	LNMUonline.com
(iii) Luteotrophic hormone	(iv) Luteinizing hormone	
 - (n) In human menstrual cycle, ovulation occurs on :

(i) 1st day	(ii) 5th day	(iii) 14th day	(iv) 28th day
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 - (o) The process by which ova are formed is known as :

(i) Oviparity	(ii) Ovulation	(iii) Oviposition	(iv) Oogenesis
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Group-A

2. Describe reproductive cycles in vertebrate.
3. Discuss, with suitable, diagramme, about corpus luteum and its control.
4. Describe structure and function of adult mammalian testis.
5. Explain any two of the following : (a) Gamete (b) Biochemistry of Semen (c) Capacitation of Spermatozoa (d) Progesteron and Estrogen

Group-B

6. Give historical perspective, aim and scope of developmental biology.
7. Discuss, in detail, types and pattern of cleavage with diagrammes.
8. Describe gastrulation in frog and chick upto the formation of their germinal layers.
9. Write short notes on any two of the following : (a) Concept of competence (b) Process of blastulation (c) Meiosis (d) Mòrula