## Scientific Aptitude

# Reproduction in Animals

### **Application Based Questions**

#### Multiple choice questions:

Dire	ections: Read the fol	lowing questions and c	hoose the answer that i	best answers the questions		
1.	What common feature do the eggs of different organisms share?					
	(a) They have hard	shells.				
	(b) They have an en	nbryo inside each of th	em.			
	(c) They can develo	(c) They can develop into young organisms when fertilized.				
	(d) They all are ferti	lized internally.				
2.	Which of the followi	Which of the following traits is not passed on from parents to their young one?				
	(a) Length of hair	(b) Color of eyes	(c) Dimples	(d) Height		
3.	The stage of develop	oment between fertilize	d egg and newly forme	ed baby is		
	(a) Zygote	(b) Embryo	(c) Fetus	(d) bud		
4.	Which of the following food items should not be included in the diet of adolescents?					
	(a) Dal and roti		(b) Rice and pulses	5		
	(c) Fruits and vegeta	ables	(d) Chips and coke			
<b>5</b> .	How long does it take for a fertilized human egg to develop into a baby?					
	(a) Three months	(b) Six moths	(c) Nine months	(d) Twelve months		
6.	Which of these are o	changes which occur du	uring puberty in a boy?	r		
	I, Voice breaks		II. Hips become wi	der		
	III. Shoulders becom	ne wider	IV. Menstruations s	starts		
	(a) I and II only	(b) I and III only	(c) II and III only	(d) III and IV only		

<b>7</b> .	Which of the follo	wing glands have both en	docrine and exocrir	ne function?		
	(a) Pancreas	(b) Adrenal	(c) Salivary	(d) Pituitary		
8.	Which of the following statements about sexual reproduction in Hydra is correct?					
	(a) The new individual is formed by splitting of parent body into two halves.					
	(b) The fragments formed by the parent's body give rise to new individual.					
	(c) The spores for	(c) The spores formed on parent's body give rise to the new individual.				
	(d) The new indiv	(d) The new individual develops as a bud on the body of parent.				
9.	Mohan wants to s	tudy the life cycle of vivip	parous animal. Whic	ch of the following animals can he choose		
	for his study?					
	(a) Frog	(b) Rabbit	(c) Lizard	(d) Sparrow		
10.	Which of the following events occur during menstruation?					
	(a) Formation of zygote.		(b) Sperms enter zygote.			
	(c) Disintegration	of uterus wall.	(d) Zygote impla	nts itself in uterus.		
11.	Which of the follo	Which of the following changes is not observed in girls at the time of puberty?				
	(a) Increase in hei	ght	(b) Enlargement	of larynx		
	(c) Development of	of ovaries	(d) Change in the	e shape of body		
<b>12</b> .	Menopause refers to phase in the life of female when					
	(a) Menstruation b	pegins.	(b) Menstruation	stops.		
	(c) The developm	ent of breast takes place.	(d) The develop	ment of ovaries takes place.		
13.	Adrenaline is a hormone secreted by adrenal gland. Which of the following statements is correct for adrenaline?					
	(a) It maintains blo	ood sugar level.	(b) It helps the b	ody to adjust stress.		
	(c) It ensures norm	nal growth of body.	(d) It prepares ut	erus for receiving the embryo.		
14.	AIDS is not transn	nitted by				
	(a) A mother to an infant through her milk					
	(b) Shaking hands with an infected person					
	(c) Sharing syringes used for injecting drugs					
	(d) An infected person to a healthy person during sexual intact					
		~ .	=			

<b>15.</b> Which of the following organisms has the characteristics listed in the b	box?
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It is a mammal.

It lays eggs.

The eggs are fertilized internally

(a) Bat	(b) Ostrich	(c) Kangaroo	(d) Platypus

**16.** The type of fertilization in which fusion of male and female gamete takes place inside the female body is called ...i.... The example includes ....ii....

The information in which row completes the given statements?

- (a) i-Internal fertilization; ii-chicken
- (b) i-External fertilization; ii-chicken
- (c) i-Internal fertilization; ii-starfish
- (d) i-External fertilization; ii-starfish
- 17. The information about the traits that parents will pass on to their young is found in
  - (a) Cell membrane
- (b) Chloroplast
- (c) Cytoplasm
- (d) Nucleus
- **18.** The animals such as .....i..... which give birth to young ones is called .....ii.....

The information in which row completes the given statement?

(a) i-Lizard; ii-Oviparous

(b) i-Dog; ii-Oviparous

(c) i-Lizard; ii-Viviparous

(d) i-Dog; ii-Viviparous

**19.** The given illustration represents a human sperm.

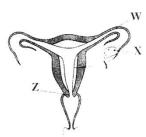


**Human sperm** 

In the given illustration labels I, II and III respectively represents

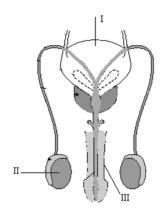
- (a) Head, middle piece, and tail
- (b) Head/tail, and middle piece
- (c) Middle piece, head, and tail
- (d) Middle piece, tail, and head

**20.** The diagram shows the female reproductive system.



The process of fertilization occurs in ......i....... While implantation occurs in ......ii.......

- (a) i-W; ii-Y
- (b) i-X, ii-Z
- (c) i-Y; ii-X
- (d) i-Z; ii-W
- **21.** The diagram shows the human male reproductive system.



The structures labelled I, II and III respectively refer to

(a) Testes, Bladder/Penis

- (b) Bladder, Testes, Penis
- (c) Sex glands. Bladder, Penis
- (d) Penis, Sex glands. Bladder

#### Q.2. Assertion and Reason:

The question given below consists of a Statement-1 (assertion) and a Statement-2 (reason). Use the following key to choose the appropriate answer.

- (a) If both Statement-1 and Statement-2 are correct and Statement-2 is the correct explanation of Statement-1.
- (b) If both Statement-1 and Statement-2 are correct but Statement-2 is not the correct explanation of Statement-1.
- (c) If Statement-1 is correct, but Statement-2 is incorrect
- (d) If Statement-1 is incorrect, but Statement-2 is correct
- (e) If both Statement-1 and Statement-2 are incorrect.

1.	Statement I: During fertilization only head of spermatozoa enters egg.
	Statement II: If several spermatozoa hit the egg at same time, all can enter the egg.
Ans.	
•	
<b>2</b> .	Statement I: Amoeba shows binary fission during unfavorable conditions.
<b>A</b> m o	Statement II: Chances of survival are less during unfavorable conditions.
Ans.	
3.	<b>Statement I:</b> Urethra in human male acts as urinogenital canal.
	Statement II: Urethra carries only urine while sperms are carried by vasa deferentia only.
Ans.	
<b>.</b> .	
Q.3.	Subjective questions:
1.	Can you explain, why sperms are described as many, minute and mobile.
Ans.	
2.	Usually only one embryo is formed at a time although there are two ovaries in women. Explain.
Ans.	
3.	The human egg cell is about 50 times wider than a sperm cell? Can you guess the reason behind it?
Ans.	

4.	Why aquatic animals produce large number of eggs?
Ans.	
5. Ans.	Why sperms are motile whereas ovum non-motile in human reproductive system?
6.	How do living beings ensure that their own kind continues to exist?
Ans.	
7. Ans.	Briefly explain the journey of sperm through female reproductive system and journey of egg cell.
8.	The diagram show the stages of growth of a baby in its mother's womb.
	(a) Arrange them in the correct order.
Ans.	(b) The period of time from fertilization to the birth of a human baby is known as Explain.

**9.** (a) Complete the given chart.

Glands	Hormone	Functions
	secreted	
Pituitary	(i)	Controls development of bone and muscles in body.
(ii)	Insulin	(iii)
Adrenal gland	(iv)	Regulates carbohydrate metabolism.
Ovaries	(v)	(vi)
(vii)	(viii)	Controls the development of male secondary sexual
		character.
(ix)	Thyroxine	Controls the development of carbohydrate, fat and
		protein in body.

(b) The given illustration represents the position of various endocrine glands in human body.

Label each gland with their respective name, in the figure itself.



Ans.	