



## BIOLOGY

### BOOKS - SARAS PUBLICATION

### REPRODUCTION IN ORGANISMS

#### Example

1. What is parthenogenesis? Give two examples from animals.

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2. Write notes on binary fission in animals.

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3. Define encystment.



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4. What is meant by strobilation?



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5. Define plasmotomy.



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6. Define endogenous budding?



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7. What is syngamy?



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8. How is juvenile phase different from reproductive phase?



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9. What is the difference between syngamy and fertilization?



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10. Differentiate between the following: Binary fission in Amoeba and multiple fission in Plasmodium.



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11. Differentiate between the following:

a. Binary fission in amoeba and multiple fission in plasmodium.

b. Budding in yeast and budding in Hydra.

c. Regeneration in lizard and Planaria

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**12.** Differentiate between the following:

a. Binary fission in amoeba and multiple fission in plasmodium.

b. Budding in yeast and budding in Hydra.

c. Regeneration in lizard and Planaria

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**13.** Distinguish between asexual and sexual reproduction. Why is vegetative reproduction also considered as a type of asexual reproduction?

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14. Name the phenomenon where the female gamete directly develops into a new organism with an avian example

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15. What is parthenogenesis? Give two examples from animals.

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16. Why is the offspring formed by asexual reproduction referred to as clone?

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17. How is juvenile phase different from reproductive phase?

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18. What is the difference between syngamy and fertilization?

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19. In each of the following questions there are two statements. One is assertion (A) and other is reasoning ( $R$ ). Mark the correct answer as

Assertion : Predation is a form interaction.

Reason : It is similar to parasitism.

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20. Which is a better mode of reproduction: sexual or asexual? Why?

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21. The unicellular organisms which reproduce by binary fission are considered immortal. Justify.



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**22.** Why are the offsprings of oviparous animals are at a greater risk as compared to offsprings of viviparous organisms?

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**23.** Give reasons for the following:

Some organisms like honey bees are called parthenogenetic animals.

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**24.** Give reasons for the following:

A male honey bees has 16 chromosomes where as its female has 32 chromosomes.

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25. Differentiate between the following: Binary fission in Amoeba and multiple fission in Plasmodium.

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26. Differentiate between the following : Budding in yeast and budding in Hydra

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27. Differentiate between the regeneration in lizard and Planaria.

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28. At what stage of development are the gametes formed in new born male and female?

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**29.** Expand the acronyms



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**30.** Draw a labeled sketch of a spermatozoan.



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**31.** Placenta is an endocrine tissue. Justify.



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**32.** What is inhibin ? State its functions.



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**33.** What is the composition of semen?

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**34.** Define gametogenesis.

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**35.** Mention the differences between spermiogenesis and spermatogenesis.

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**36.** How is polyspermy avoided in humans?

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**37.** What is colostrum? Write its significance.



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**38.** Mention the importance of the position of the testes in humans.



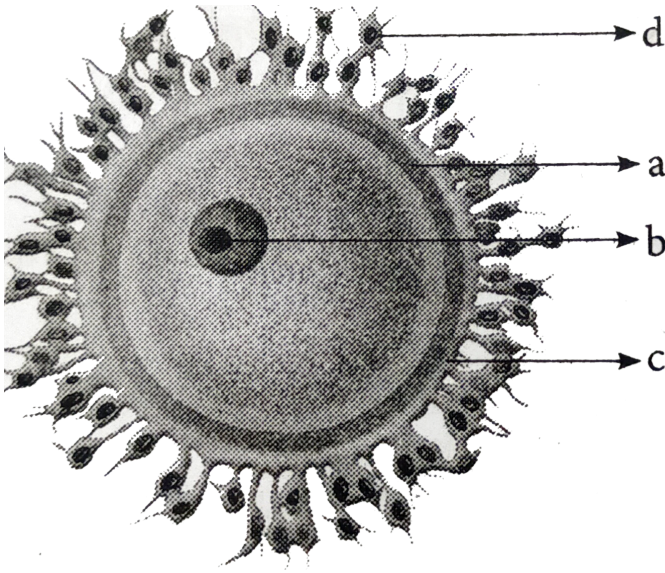
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**39.** Name the hormones produced from the placenta during pregnancy.



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40. Identify the given image and label its parts marked as a,b,c and d.



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41. Describe the structure of the human ovum with a neat labelled diagram.



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42. Explain the various phases of the menstrual cycle.

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43. Explain the role of oxytocin and relaxin in parturition and lactation.

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44. Give a schematic representation of spermatogenesis and oogenesis in humans.

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45. The following is the illustration of the sequence of ovarian events (a-i) in a human female.



(a) Identify the figure that illustrates ovulation and mention the stage of oogenesis it represents.

(b) Name the ovarian hormone and the pituitary hormone that have caused the above mentioned events.

(c) Explain the changes that occurs in the uterus simultaneously in anticipation.

(d) Write the difference between C and H.

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**46.** The following is the illustration of the sequence of ovarian events (a-i) in a human female.



(a) Identify the figure that illustrates ovulation and mention the stage of oogenesis it represents.

(b) Name the ovarian hormone and the pituitary hormone that have caused the above mentioned events.

(c) Explain the changes that occurs in the uterus simultaneously in

anticipation.



(d) Write the difference between C and H.

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47. Explain the changes that occurs in the uterus simultaneously in anticipation.

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48. Matching.

i.		a)	cell
ii.	 Open	b)	insulators
iii.	Source of electricity	c)	open key
iv.	Do not allow electric charges	d)	bulb (does not glow)

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49. Provide the reasons for the presence of scrotum outside the abdominal cavity.

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50. What happens to the female gamete immediately after fertilization?

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51. Write the main functions of the reproductive system.

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52. Write the sequence of major reproductive events that occur in humans.

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53. What is placenta?

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54. Give the components of male reproductive system.

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55. Write the functions of the cells that secrete inhibin.

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56. Write about the organ that temporarily stores the sperms.

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57. Write the characteristics and functions of seminal fluid.



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58. Why is female reproductive system considered more complex than male reproductive system?



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59. List the components of the female reproductive system.



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60. What are the components of female accessory reproductive organs?



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61. Name the layers of uterus.



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62. The \_\_\_\_\_ glands in human female are homologous to the bulbourethral glands

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63. Define spermiogenesis

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64. Differentiate Spermatogenesis and oogenesis.

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65. Write about hyaluronidase.

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66. Define menstrual cycle.



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67. What are the phase of the menstrual cycle?



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68. Explain the phase in which LH surge occurs.



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69. Why is luteal phase called secretory phase?



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70. What is corpus albicans?





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71. Some women develop many partially formed follicles in their ovary. What is it called? What symptoms do women develop?



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72. What is meant by acrosomal reaction?



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73. Which type of pregnancy is considered dangerous? Why?



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74. Give the types of twins formed during pregnancy with their alternative names.



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75. Membranes covering the brain

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76. Throughout pregnancy, the uterus undergoes periodic episodes of weak and strong contraction. What are they?

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77. Name the hormone that plays a major role in lactogenesis.

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78. Write the role of the hormone oxytocin.

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**79.** Write the composition of the first milk.

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**80.** What is cryptorchism? What is the solution for this?

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**81.** What is PCOS? Give the treatment options.

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**82.** Define gametogenesis.

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**83.** How does the dividing embryo get implanted?



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84. Write about the female reproductive organ that connects uterus to the vagina?



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85. Name primary reproductive organ of males.



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86. \_\_\_\_ are the primary female sex organs in human .



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87. Explain briefly the structure of the smallest human cell.



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**88.** Give diagrams to show : Events in the ovary

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**89.** Explain the various phases of the menstrual cycle.

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**90.** Why is menstrual hygiene important? How can this be achieved?

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**91.** Explain menarche and menopause.

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**92.** Which hormone initiates spermatogenesis?



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**93.** Explain the egg membranes of human ovum.



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**94.** Write the similarities between spermatogenesis and oogenesis.



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**95.** Name the process that occurs in uterus after fertiization that results in pregnancy. How does it occur? Write the changes that occur in the ovary if a woman fails to conceive.



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96. The thin ring of tissue that particularly closes the vaginal opening

-----



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97. What is the neurohumoral reflex caused during parturition?



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98. Name the hormones produced from the placenta during pregnancy.



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99. What is gestation period? How is this period divided and give the development that takes place during this period?



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**100.** Write the role of primary germ layers in foetal development.



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**101.** Expand WBW. Write short notes about it.



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**102.** Explain the process of fertilization in human beings.



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**103.** Explain the divisions that occur in the zygote.



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**104.** Write about the tube that extends from periphery of ovary to the uterus?

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**105.** Explain the significance of male reproductive accessory ducts.

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**106.** What are the major functions of male accessory ducts and glands?

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**107.** Explain the structure of the gland involved in lactation.

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**108.** Define twins. Explain the types of twins.



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**109.** Explain the process of spermatogenesis with diagram.



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**110.** Describe oogenesis with a diagram.



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**111.** Fertilization



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**112.** What denotes the completion of pregnancy.



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**113.** What is implantation?



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**114.** Which membrane provides the medium for movement of the foetus?

Explain it.



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**115.** Write a note on Yolk Sac.



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**116.** Explain the membrane present at the caudal end of the yolk sac.



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**117.** Which is the outermost membrane of the embryo?



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**118.** What is placenta?



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**119.** Write about the female reproductive organ where implantation takes place.



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**120.** Describe the structure that extends from cervix to the exterior.



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**121.** What are the components that make up external genitalia female?

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**122.** Explain the different stage of foetal development.

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123. Match the following with correct sequence

1. Parturition-a. Attachment of zygote to uterine wall
2. Gestation- b. Release of egg from Graafian follicle
3. Ovulation-c. Delivery of baby from uterus
4. Conception- d. Duration period of pregnancy
5. Implantation-e. Formation of zygote by fusion of the egg and sperm

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124. Arrange the following in the correct sequence: Isthmus, Infundibulum, Ampulla, Body of uterus, Fundus, Vagina, Cervix.

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125. Which of the following is a correct sequence?



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126. Arrange the following in the correct sequence: Rete testis, Ejaculatory duct, Seminiferous tubules, Urethra, Penis, Epididymis, Tubulus rectus, Vasa efferentia, Vas deferens.



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127. Arrange the following in the correct sequence: Primary oocyte, Blastocyst, Gastrula, Primary oocyte, ovum, Morula, Zygote, Oogonia.



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128. Arrange the following in the correct sequence: Primary oocyte, Blastocyst, Gastrula, Primary oocyte, ovum, Morula, Zygote, Oogonia.



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## Exercise

1. In which type of parthenogenesis are only males produced ?

- A. Arrhenotoky
- B. Thelytoky
- C. Amphitoky
- D. Both a and b

**Answer:**



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2. The animals which give birth to young ones are

- A. Oviparous

B. Ovoviviparous

C. Viviparous

D. Both a and b

**Answer:**



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**3. In which mode of reproduction variations are seen?**

A. Asexual

B. Parthenogenesis

C. Sexual

D. Both a and b

**Answer:**



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4. Which phases of life cycle begins at the end of the reproductive phase?

- A. Senescent phase
- B. Maturity phase
- C. Juvenile phase
- D. None of the above

**Answer:**



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5. Which one is not a biparental sexual reproduction?

- A. Complete parthenogenesis
- B. Incomplete parthenogenesis
- C. Paedogenetic parthenogenesis
- D. Artificial parthenogenesis

**Answer:**

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6. Name the phenomenon where the female gamete directly develops into a new organism with an avian example

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7. Why is the offspring formed by asexual reproduction referred to as clone?

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9. How does an Amoeba multiply during unfavourable conditions?

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10. Define the type of reproduction seen in Sea anemone.

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11. Why is apolysis important for reproduction of tapeworms?

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12. Which type of reproduction is effective -Asexual or sexual and why?

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13. The unicellular organisms which reproduce by binary fission are considered immortal. Justify.





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14. A male honey bee has 16 chromosomes whereas its female has 32 chromosome-Give reasons.



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15. On what basis are breeding animals classified?



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16. What are the types of breeding animals?



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17. How does strobilation occur?



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18. In which organism does strobilation occurs?



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19. Differentiate between the regeneration in lizard and Planaria.



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20. Why are the offsprings of oviparous animals are at a greater risk as compared to offsprings of viviparous organisms?



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21. What is multiple fission. Explain it with an example.



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22. In which type of parthenogenesis are only males produced ?

A. Arrhenotoky

B. Thelytoky

C. Amphitoky

D. Both a and b

**Answer:**



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23. The animals which give birth to young ones are

A. Oviparous

B. Ovoviviparous

C. Viviparous

D. Both a and b

**Answer:**



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**24.** The mode of reproduction in bacteria is by .....

- A. Formation of gametes
- B. Endospore formation
- C. Conjugation
- D. Zoospore formation

**Answer:**



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**25.** In which mode of reproduction variations are seen

- A. Asexual

B. Parthenogenesis

C. Sexual

D. Both a and b

**Answer:**



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26. Name an organism where cell division is itself a mode of reproduction.



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27. What is asexual reproduction?

A. Amoeba

B. Euglena

C. Paramecium

D. Bacteria

**Answer:**



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**28.** Which type of reproduction is known as blastogenic reproduction?

A. Asexual reproduction

B. Sexual reproduction

C. Both a and b

D. None of the above

**Answer:**



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**29.** Which of the following is a mode of asexual reproduction ?

A. Budding

B. Gemmule formation

C. Schizogony

D. merogamy

**Answer:**



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**30.** Transverse Binary fission is seen in \_\_\_\_

A. Vorticella

B. Ceratium

C. Amoeba

D. Planaria

**Answer:**



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**31.** What is the type of binary fission seen in dinoflagellates?

- A. Simple binary fission
- B. Longitudinal binary fission
- C. Transverse binary fission
- D. Oblique binary fission

**Answer:**



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**32.** Name the daughter individuals formed when multiple fission occurs in the oocyst

- A. Sporozoites
- B. Merozoites
- C. Gametocytes



D. Trophozoites

**Answer:**



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**33.** Define the type of reproduction seen in Sea anemone.

A. Simple binary fission

B. Multiple fission

C. Sporulation

D. All of the above

**Answer:**



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**34.** Define endogenous budding?

A. Hydra

B. Noctiluca

C. Aurelia

D. None of the above

**Answer:**



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**35.** Regeneration was first studied by\_\_\_\_\_

A. Planaria

B. Starfish

C. Hydra

D. Sponges

**Answer:**



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36. Replacement of lost body parts is called \_\_\_\_\_

- A. Morphallaxis
- B. Epimorphosis
- C. Plasmotomy
- D. Strobilation

**Answer:**



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37. Fusion of two haploid gametes to produce a diploid zygote is called

- A. Merogamy
- B. Paedogamy
- C. Exogamy

D. Syngamy

**Answer:**



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**38.** Name the types of natural parthenogenesis.

A. Arrhenotoky

B. Amphitoky

C. Thelytoky

D. None of the above

**Answer:**



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**39.** In honey bees, the unfertilized egg produces.

- A. Workers
- B. Drones
- C. Queen
- D. All of the above

**Answer:**

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**40.** Which phases of life cycle begins at the end of the reproductive phase?

- A. Senescent phase
- B. Maturity phase
- C. Juvenile phase
- D. None of the above

**Answer:**

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41. The temporary union of two individuals of same species is called \_\_\_\_\_.

- A. Autogamy
- B. Conjugation
- C. Regeneration
- D. Anisogamy

**Answer:**

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42. Organism that shows Thelytoky kind of parthenogenesis.

- A. Aphis
- B. Honey bees

C. Solenobia

D. Liver fluke

**Answer:**



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**43.** Which one is not a biparental sexual reproduction?

A. Complete parthenogenesis

B. Incomplete parthenogenesis

C. Paedogenetic parthenogenesis

D. Artificial parthenogenesis

**Answer:**



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44. Who first discovered parthenogenesis in animals?

- A. Jay Lush
- B. George Robertson
- C. Charles Bonnet
- D. Joshua Lederberg

**Answer:**



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45. Which organism is called giant Amoeba?

- A. Opalina
- B. Pelomyxa
- C. Paramecium
- D. Aurelia



**Answer:**



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**46.** Technique use for cultivation of sponges is based on \_\_\_\_\_

- A. Fragmentation
- B. Artificial parthenogenesis
- C. Regeneration
- D. Apolysis

**Answer:**



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**47.** In which type of fusion, the organisms do not form gametes but they themselves behave as gametes?

A. Merogamy

B. Hologamy

C. Paedogamy

D. Autogamy

**Answer:**



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**48.** Identify the animal that does not breed continuously.

A. Lizards

B. Hen

C. Rabbit

D. Honey bees

**Answer:**



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49. Paedogenetic parthenogenesis is seen in \_\_\_\_\_

A. Honey bee

B. Hen

C. Gall fly

D. Sea urchin

**Answer:**



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50. Which one shows ovoviviparous development?

A. fish

B. Reptiles

C. Shark

D. Amphibians

**Answer:**



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**51.** In transverse binary fission, the macronucleus divides by

A. Mitosis

B. Amitosis

C. Meiosis

D. None of the above

**Answer:**



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**52.** Which is dioecious?

- A. Earthworm
- B. Taenia solium
- C. Ascaris
- D. Liver fluke

**Answer:**

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**53.** In which type of natural parthenogenesis, only females are produced

- A. Arrhenotoky
- B. Amphitoky
- C. Thelytoky
- D. Complete parthenogenesis

**Answer:**

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54. How does the micronucleus divide in Paramecium

- A. Mitosis
- B. Meiosis
- C. Replaced fission
- D. Amitosis

**Answer:**



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55. Which organism divides by longitudinal binary fission?

- A. Planaria
- B. Plasmodium
- C. Euglena

D. Amoeba

**Answer:**



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**56.** Which period does juvenile phase represent

- A. Period between birth and end of reproductive phase
- B. Period between birth and reproductive maturity
- C. Period between end of reproductive phase and death
- D. Period between maturity and reproductive phase

**Answer:**



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**57.** In which organism is external fertilization seen?

A. Aves

B. Reptiles

C. Sponges

D. Mammals

**Answer:**



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58. \_\_\_\_\_ refers to the fusion of small sized, morphologically different gametes

A. Hologamy

B. Isogamy

C. Paedogamy

D. merogamy

**Answer:**



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59. Conjugation is seen in \_\_\_\_\_

- A. Paramecium
- B. Vorticella
- C. Bacteria
- D. All of the above

**Answer:**

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60. Which method of reproduction produces pseudopodiospores?

- A. Budding
- B. Sporulation
- C. Binary fission

D. Multiple fission

**Answer:**



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**61.** What divides first during binary fission ?

A. Nucleus

B. Cytoplasm

C. Cell organelles

D. Cytoplasmic membrane

**Answer:**



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**62.** ----- honey bee is developed by parthenogenesis

- A. Drone
- B. Queen
- C. Worker
- D. Worker and drone

**Answer:**

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**63.** What are the types of honey bees found in a colony?

- A. Seasonal breeding
- B. Selective breeding
- C. Continuous breeding
- D. Random breeding

**Answer:**

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64. Amoeba reproduces by fragmentation .

- A. Hydra
- B. Planaria
- C. Star fish
- D. Sea anemone

**Answer:**



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65. What are internal buds known as

- A. Osculum
- B. Micropyle
- C. Gemmules

D. Strobila

**Answer:**



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**66.** Apolysis is seen in -----

A. Star fish

B. Hydra

C. Taenia solium

D. Palnaria

**Answer:**



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**67.** What is autogamy?

A. humans

B. Trichonympha

C. Reptiles

D. Actinosphaerium

**Answer:**



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**68.** Type of sexual reproduction seen in Monocystis is

A. Merogamy

B. Isogamy

C. Paedogamy

D. Exogamy

**Answer:**



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69. Multiple fission of the oocyte in plasmodium is called \_\_\_\_\_

- A. Sporogony
- B. Schizogony
- C. Plasmotomy
- D. Paedogamy

**Answer:**



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70. Multiple fission

- A. Only in schizont stage
- B. Only in oocyst stage
- C. Both a and b

D. None of the above

**Answer:**



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**71.** Encystment occurs in ---- during unfavourable conditions

A. Vorticella

B. Euglena

C. Paramecium

D. Amoeba

**Answer:**



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**72.** What is the type of asexual reproduction seen in Aurelia?



- A. Encystment
- B. Strobilation
- C. Binary fission
- D. Sporulation

**Answer:**

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**73.** Division of multinucleated parent into many multinucleate daughter individuals without the division of nuclei is called ---

- A. Plasmotomy
- B. Budding
- C. Strobilation
- D. Fragmentation

**Answer:**

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74. During apolysis ---- are regularly cut off in *Taenia solium*

- A. Immature proglottids
- B. Mature proglottids
- C. Gravid proglottids
- D. Scolex

**Answer:**

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75. What is the other term for pseudo podiospore?

- A. Gemmule
- B. Ephyrae
- C. Manubrium

D. Amoebulae

**Answer:**



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76. Food laden internal mass of gemmules is called

- A. Micropyle
- B. Archaeocytes
- C. Pedal disc
- D. Lobes

**Answer:**



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77. Why asexual reproduction is called as somatogenic reproduction?





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**78.** What are the different modes of reproduction by a single parent without the involvement of gametes.



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**79.** Classify binary fission based on the plane of fission.



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**80.** Define the binary fission that is seen in Paramecium and Planaria.



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**81.** How does the macronucleus and micronucleus of Paramecium divide?



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**82.** What is the type of binary fission seen in dinoflagellates?

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**83.** Multiple fission

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**84.** What are merozoites?

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**85.** What happens when multiple fission occurs in the oocyst?

 [Watch Video Solution](#)

**86.** Define encystment.



**Watch Video Solution**

**87.** What is meant by strobilation?



**Watch Video Solution**

**88.** Define plasmotomy.



**Watch Video Solution**

**89.** How does an Amoeba multiply during unfavourable conditions?



**Watch Video Solution**

**90.** Explain the type of asexual reproduction seen in Sea anemone.



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91. Define endogenous budding?



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92. Define apolysis.



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93. What are the two types of regeneration method of reproduction?



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94. What is repeated fission?



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95. How Paramecium reproduces asexually? Define it.

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96. Define Anisogamy.

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97. Write a note on parthenogenesis.

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98. What is artificial parthenogenesis?

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99. What are ovoviviparous animals?





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**100.** Define amphitoky.



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**101.** Why is apolysis important for reproduction of tapeworms?



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**102.** Give 3 points of differentiation between Asexual and Sexual methods of reproduction .



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**103.** Define amphitoky.



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**104.** What is the type of binary fission in Amoeba.



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**105.** Give details of the type of asexual reproduction in Planaria. Name the other organism that follows the same type of reproduction.



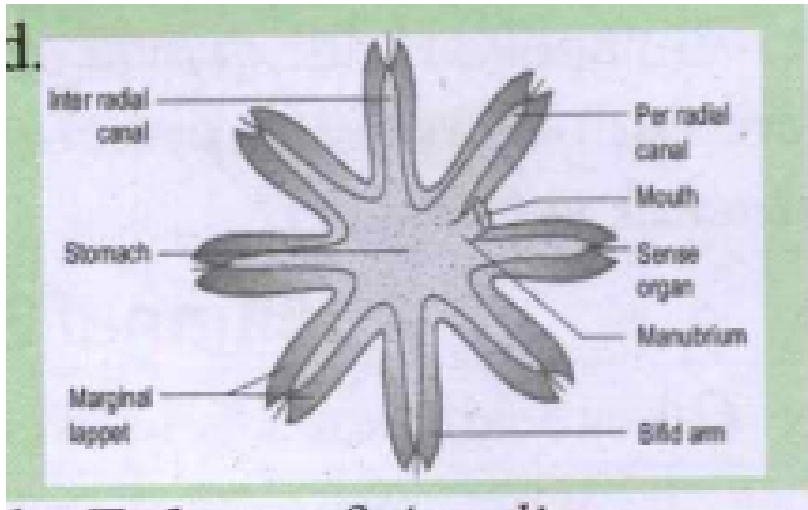
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**106.** Explain the type of reproduction seen in Vorticella and Euglena. Give the diagram showing reproduction in Euglena.



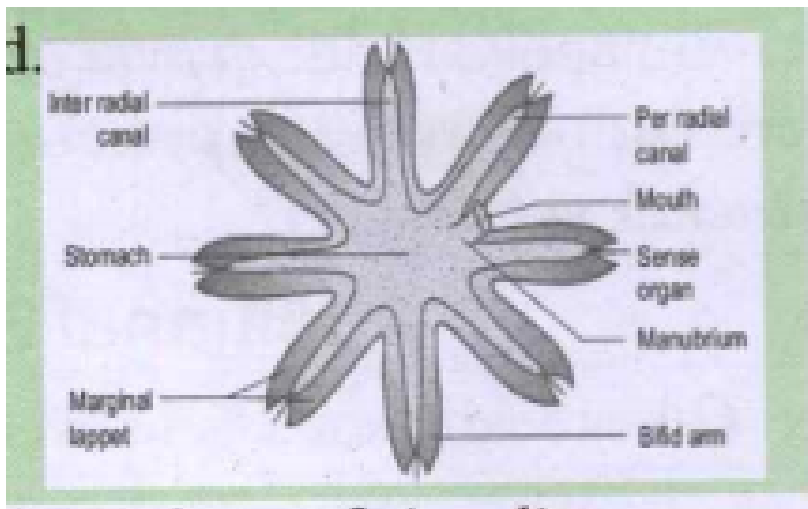
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107. Identify the given diagram



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108. Explain the process by which it is formed.





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**109.** What happens when encysted Ameoba encounter favourable conditions?



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**110.** When does Amoeba multiply by sporulation? Explain.



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**111.** How do Leucosolenia reproduce? Give a diagram to show it.



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**112.** Explain the type of reproduction in Hydra with a diagram.



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113. Explain the peculiar type of budding in freshwater sponges. How do these buds help the sponges?



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114. How are sponges cultivated?



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115. Define syngamy. How is it classified based on the place of fertilisation?



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116. The temporary union of two individuals of same species is called \_\_\_\_\_.



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**117.** On what basis are breeding animals classified? What are the types?

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**118.** Define natural parthanogenesis. Explain its types.

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**119.** Which type of reproduction brings about genetic variations? How is it beneficial to the organisms?

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**120.** What is multiple fission? Explain it with its types in Plasmodium?

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**121.** Who studied regeneration in Hydra?



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**122.** What is the type of regeneration found in Hydra.



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**123.** What is the reproduction where lost body parts are replaced?



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**124.** Explain with examples types of asexual reproduction in unicellular organisms.



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**125.** What are the different kinds of syngamy found in living organisms. Describe it with examples.

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**126.** Describe the phases of life cycle in animals.

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**127.** Name the types of natural parthenogenesis.

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**128.** How are animals classified based on the modes of reproduction to form young ones? Describe it.

 [Watch Video Solution](#)



**129.** The mature sperms are stored in the

- A. Seminiferous tubules
- B. Vas deferens
- C. Epididymis
- D. Seminal vesicle

**Answer:**



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**130.** The male sex hormone testosterone is secreted from .....

- A. Sertoli cells
- B. Leydig cell
- C. Epididymis
- D. Prostate gland

**Answer:**



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**131.** The glandular accessory organ which produces the largest proportion of semen is

- A. Seminal vesicle
- B. Bulbourethral gland
- C. Prostate gland
- D. Mucous gland

**Answer:**



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**132.** The male homologue of the female clitoris is

A. Scrotum

B. Penis

C. Urethra

D. Testis

**Answer:**



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**133.** The site of embryo implantation is the

A. Uterus

B. Peritoneal cavity

C. Vagina

D. Fallopian tube

**Answer:**



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**134.** The foetal membrane that forms the basis of the umbilical cord is

- A. Allantois
- B. Amnion
- C. Chorion
- D. Yolk sac

**Answer:**



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**135.** The most important hormone in initiating and maintaining lactation after birth is

- A. Oestrogen
- B. FSH
- C. Prolactin

D. Oxytocin

**Answer:**



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**136.** Mammalian egg is

- A. Mesolecithal and non cleidoic
- B. Microlecithal and non cleidoic
- C. Alecithal and non cleidoic
- D. Alecithal and cleidoic

**Answer:**



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137. The process which the sperm undergoes before penetrating the ovum is

- A. Spermiation
- B. Cortical reaction
- C. Spermiogenesis
- D. Capacitation

**Answer:**



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138. The milk secreted by the mammary glands soon after child birth is called

- A. Mucous
- B. Colostrum
- C. Lactose

D. Sucrose

**Answer:**



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**139.** Colostrum is rich in

A. IgE

B. IgA

C. IfD

D. IgM

**Answer:**



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**140.** The Androgen Binding Protein (ABP) is produced by

A. Leydig cells

B. Hypothalamus

C. Sertoli cells

D. Pituitary gland

**Answer:**



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**141.** Which one of the following menstrual irregularities is correctly matched?

A. Menorrhagia - excessive menstruation

B. Amenorrhoea - absence of menstruation

C. Dysmenorrhoea - irregularity of menstruation

D. Oligomenorrhoea - painful menstruation

**Answer:**



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**142.** Find the wrongly matched pair

- A. Bleeding phase - fall in oestrogen and progesterone
- B. Follicular phase - rise in oestrogen
- C. Luteal phase - rise in FSH level
- D. Ovulatory phase - LH surge

**Answer:**

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**143. A** -In human male, testes are extra abdominal and lie in scrotal sacs.

**R** -Scrotum acts as thermoregulator and keeps temperature lower by  $2^{\circ}C$  for normal sperm production.

A. A and R are true, R is the correct explanation of A

B. A and R are true, R is not the correct explanation of A

C. A is true, R is false

D. Both A and R are false

**Answer:**



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**144.** A -Ovulation is the release of ovum from the Graafian follicle.

R -It occurs during the follicular phase of the menstrual cycle.

A. A and R are true, R is the correct explanation of A

B. A and R are true, R is not the correct explanation of A

C. A is true, R is false

D. Both A and R are false

**Answer:**



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**145.** A -Head of the sperm consists of acrosome and mitochondria.

R -Acrosome contains spiral rows of mitochondria.

- A. A and R are true, R is the correct explanation of A
- B. A and R are true, R is not the correct explanation of A
- C. A is true, R is false
- D. Both A and R are false

**Answer:**



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**146.** Name the cells that provide nourishment to the sperms till maturation

- A. Rete testis
- B. Sertoli cells

C. Vas deferens

D. Leydig cells

**Answer:**



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**147.** What temperature does the scrotum provide?

A.  $2 - 3^{\circ}C$  lower than normal internal body temperature

B.  $5 - 6^{\circ}C$  higher than normal internal body temperature

C.  $5 - 6^{\circ}C$  lower than normal internal body temperature

D.  $2 - 3^{\circ}C$  higher than normal internal body temperature

**Answer:**



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**148.** The site for sperm production is

- A. Scrotum
- B. Seminiferous tubules
- C. Sertoli cells
- D. Prostate gland

**Answer:**



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**149.** What is cryptorchism?

- A. Failure of formation of fallopian tube
- B. Failure of formation of ovary
- C. Failure of formation of prostate gland
- D. Failure of testes to descend into the scrotum.

**Answer:**



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**150.** Name the hormone secreted by interstitial cells.

- A. Oestrogen
- B. Testosterone
- C. Progesterone
- D. Inhibin

**Answer:**



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**151.** Sperms enter the epididymis through

- A. Vasa efferentia

B. Ejaculatory duct

C. Vas deferens

D. Seminal vesicles

**Answer:**



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**152.** The other name of bulbourethral gland is.

A. Prostate gland

B. Vestibular gland

C. Skene's gland

D. Cowper's gland

**Answer:**



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153. The enzyme which enhances sperm motility is.....

- A. Glutathione transferase
- B. Cyclooxygenase
- C. Vesiculase
- D. Trypsin

**Answer:**



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154. Fimbriae are present in the edges of ...

- A. Infundibulum
- B. Ovary
- C. Isthmus
- D. Oviduct



**Answer:**



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**155.** Perimetrium is the ..... layer of the uterus.

- A. Outermost
- B. Inner
- C. Middle
- D. Thick

**Answer:**



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**156.** Which layer of uterus undergoes strong contractions during parturition?

A. Endometrium

B. Perimetrium

C. Vascular layer

D. Myometrium

**Answer:**



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**157.** The gland in females that is homologous to prostate gland of males is

A. Bartholin's gland

B. Skene's gland

C. Vestibular gland

D. Mammary gland

**Answer:**

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**158.** The gland that is rudimentary in males, but functional in females is....

- A. Mammary gland
- B. Prostate gland
- C. Bartholin's gland
- D. Bulbourethral gland

**Answer:**

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**159.** Spermatids are transformed into spermatozoa by

- A. Oogenesis
- B. Spermiation
- C. Meiosis

## D. Spermiogenesis

**Answer:**



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**160.** The whole process of spermatogenesis takes about \_\_\_\_\_ days

A. 64 days

B. 23 days

C. 15 days

D. 28 days

**Answer:**



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**161.** Number of sperms produced per day is around....

- A. 10 million
- B. 50 million
- C. 100 million
- D. 200 million

**Answer:**

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**162.** Which hormone initiates spermatogenesis?

- A. Gonadotropin Releasing Hormone
- B. Follicle Stimulating Hormone
- C. Luteinizing Hormone
- D. Testosterone

**Answer:**

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**163.** Which hormone stimulates the synthesis of testosterone?

- A. Gonadotropin Releasing Hormone
- B. Follicle Stimulating Hormone
- C. Luteinizing Hormone
- D. Testosterone

**Answer:**



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**164.** Name the enzyme that helps the sperm to penetrate the ovum during fertilisation

- A. Catalase
- B. Glutathione transferase
- C. Hyaluronidase

D. Hydroxylase

**Answer:**



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**165.** The smallest human cell is

A. Ovum

B. Sperm

C. Epithelial cell

D. Follicular cell

**Answer:**



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**166.** Of the million eggs produced, how many of them ovulate before menopause?

- A. 300 to 400
- B. 3000 to 4000
- C. 30 to 40
- D. 3000 to 4000

**Answer:**



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**167.** Menstruation is due to the breakdown of which layer of the uterus.

- A. Myometrium
- B. Endometrium
- C. Perimetrium
- D. None of the above



**Answer:**



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**168.** Which hormone induces the rupture of Graafian follicle?

- A. LH and FSH
- B. GnRH
- C. LH
- D. Oestrogen

**Answer:**



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**169.** Which phase of the menstrual cycle is called secretory phase?

- A. Luteal pahse

B. Menstrual phase

C. Proliferative phase

D. Ovulatory Phase

**Answer:**



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170. \_\_\_\_\_ is a biochemical event which enables a sperm to fertilize an egg.

A. polyspermy

B. Blastulation

C. Gastrulation

D. Capacitation

**Answer:**



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171. Days taken by the dividing embryo to implant in the nuterine wall is ...

- A. 10 days
- B. 4-5 days
- C. 1 day
- D. 10-12 days

**Answer:**



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172. Where does the fertilised ovum get implanted in ectopic pregnancy?

- A. Uterus
- B. Endometrium
- C. Fallopian tube
- D. Ectoderm

**Answer:**



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173. \_\_\_\_\_ twins are conjoined twins, who are joined during birth.

- A. Siamase twins
- B. Monozygotic twins
- C. Dizygotic twins
- D. Fraternal twins

**Answer:**



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174. Which organ is a temporary endocrine organ?

- A. Umbilical cord

B. Uterus

C. Ovary

D. Placenta

**Answer:**



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**175.** Hormone not produced by placenta is .....

A. Human chorionic gonadotropin

B. Oestrogen

C. Progesterone

D. Follicle stimulating hormone

**Answer:**



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176. Describe the important steps in muscle contraction.

- A. Progesterone
- B. Inhibin
- C. Oestrogen
- D. HCG

**Answer:**



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177. Which hormone stimulates the synthesis of testosterone?

- A. Human placental lactogen
- B. Oestrogen
- C. Progesterone
- D. All of the above

**Answer:**



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**178.** Which week is celebrated as World Breast feeding week?

A. January 1st week

B. March 1st week

C. August 1st week

D. December 1st week

**Answer:**



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**179.** Which is not a function of reproductive system?

A. To produce gametes

- B. To produce hormones
- C. To nurture developing offspring
- D. To maintain homeostasis

**Answer:**

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**180.** Endocrine disorder that affects women in their reproductive period

- A. Polycystic ovary syndrome
- B. Endometriosis
- C. Interstitial cystitis
- D. Uterine fibroid

**Answer:**

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181. Select the correct sequence

A.

$C \leq \text{ova} \geq \rightarrow \text{Zygote} \rightarrow \text{Fertilization} \rightarrow M \text{ or } \underline{a} \rightarrow \text{Bl} * \underline{a} \rightarrow G$

B.

$\text{Fertilization} \rightarrow \text{Zygote} \rightarrow C \leq \text{ova} \geq \rightarrow M \text{ or } \underline{a} \rightarrow \text{Bl} * \underline{a} \rightarrow G$

C.

$\text{Fertilization} \rightarrow \text{Zygote} \rightarrow \text{Bl} * \underline{a} \rightarrow M \text{ or } \underline{a} \rightarrow C \leq \text{ova} \geq \rightarrow G$

D.

$\text{Fertilization} \rightarrow C \leq \text{ova} \geq \rightarrow M \text{ or } \underline{a} \rightarrow \text{Bl} * \underline{a} \rightarrow \text{Zygote} \rightarrow G$

Answer:



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182. A matured sperm has

- A. Acrosome and mitochondria alone
- B. Head and middle piece only
- C. Head neck and tail alone
- D. Head, neck, middle piece and tail

**Answer:**

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**183.** A protective layer around testes is

- A. Tunica adventicia
- B. Tunica vasculosa
- C. Tunica albuginea
- D. Tunica media

**Answer:**

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184. Match the following with correct sequence

1. Parturition-a. Attachment of zygote to uterine wall
2. Gestation- b. Release of egg from Graafian follicle
3. Ovulation-c. Delivery of baby from uterus
4. Conception- d. Duration period of pregnancy
5. Implantation-e. Formation of zygote by fusion of the egg and sperm

A. 1- c, 2-d, 3-b, 4-e, 5-a,

B. 1-a, 2-b, 3-c, 4-d, 5-e

C. 1-e, 2-a, 3-b, 4-d, 5-c

D. 1-d, 2-a, 3-c, 4-b, 5-e,

**Answer:**



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185. \_\_\_\_\_ is an organelle that help the sperm to penetrate the ovum

- A. Zona pellucida
- B. Acrosome
- C. Middle piece
- D. Tail

Answer:



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186. Match the following correct sequence

- |                    |                    |
|--------------------|--------------------|
| 1. Foetus          | - a. Relaxin       |
| 2. Seminal vesicle | -b. Hyaluronidase  |
| 3. Acrosome        | -c. Prostaglandins |
| 4. Ovary           | -d. Oxytocin       |

A. 1-d, 2-c, 3-b, 4-a,

B. 1-a, 2-b, 3-c, 4-d,

C. 1-c, 2-c, 3-b, 4-d

D. 1-d, 2-a, 3-c, 4-b,

**Answer:**



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**187.** What is the size of ovaries?

A. 3-4 cm long

B. 2-4 cm long

C. 1-2 cm long

D. 5-6 cm long

**Answer:**



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**188.** Which is not the function of placenta?

- A. To deliver nutrients to embryo
- B. To deliver oxygen to embryo
- C. To remove wastes from embryonic blood
- D. To nourish mother

**Answer:**



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**189.** Ovary is attached to the pelvic wall and the uterus by a ligament called

- A. Infundibulum
- B. Tunica albuginea
- C. Mesovarium

D. Ovarian follicles

**Answer:**



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**190.** Average age of menopause is

A. 40-50 yrs

B. 50-60 yrs

C. 40-45 yrs

D. 30-40 yrs

**Answer:**



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**191.** Gestational period of human pregnancy

A. 260 days

B. 250 days

C. 280 days

D. 200 days

**Answer:**



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**192.** Which tissue layer covers the ovary?

A. Tunica vaseulosa

B. Mesovarium

C. Cuboidal epithelium

D. Tunica vaginalis

**Answer:**



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**193.** The female uterus is

- A. 3 inch long 1 inch wide
- B. 3 inch long 2 inch wide
- C. 2 inch long 2 inch wide
- D. 2 inch long 1 inch wide

**Answer:**



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**194.** \_\_\_\_\_ causes "Let down" reflex, ejection of milk from the alveoli of mammary glands

- A. Progesterone
- B. Estrogen
- C. Oxytocin

D. Colostrum

**Answer:**



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**195.** Descent of the foetus causes dilation of cervix and vaginal canal resulting in a neurohormonal reflex called

- A. Foetal ejection reflex
- B. Ferguson reflex
- C. Braxton Hicks reflex
- D. Both a and b

**Answer:**



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**196.** Colostrum is rich in

A. IgA

B. IgE

C. IgD

D. IgO

**Answer:**



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**197.** The first ejaculation of the semen in male is called as.....

A. Orchidectomy

B. Prostatitis

C. Spermarche

D. Spermatogenesis

**Answer:**



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**198.** Orchidectomy is the surgical removal of

- A. Liver
- B. Kidney
- C. Testis
- D. Ovary

**Answer:**



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**199.** Mammalian placenta originates from

- A. Allantois and chorin

B. Allantois and Yolk sac

C. Allantois and uterine wall

D. Allantois and amnion

**Answer:**



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200. Failure of spermatogenesis is called \_\_\_\_\_ .

A. Azoospermia

B. Zoospermia

C. Oligospermia

D. None of the above

**Answer:**



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**201.** Largest human cell

- A. Sperm
- B. Ovum
- C. Leydig cells
- D. Sertoli cell

**Answer:**



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**202.** Which of the following releases inhibin to control spermatogenesis?

- A. Rete testis
- B. Follicle cells
- C. Leydig cells
- D. Sertoli cell

**Answer:**



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**203.** The distal narrow end of uterus is called-----

A. Vagina

B. Cervix

C. Hymen

D. Clitoris

**Answer:**



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**204.** A-Oxytocin causes the "Let-Down" reflex

R-Oxytocin causes the actual ejection of milk from the alveoli of the mammary gland

A. A and R are true, R is the correct explanation of A

B. A and R are true, R is not the correct explanation of A

C. A is true, R is false

D. Both A and R are false

**Answer:**



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**205.** A : Spermatogenesis is initiated due to the increase in the release of GnRH. R : GnRH stimulates the anterior pituitary gland to secrete inhibin.

A. A and R are true, R is the correct explanation of A

B. A and R are true, R is not the correct explanation of A

C. A is true, R is false

D. Both A and R are false

**Answer:**



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**206.** A : LH and FSH attain peak level in the middle of the menstrual cycle.

R : LH and FSH surge induces the release of the ovum

- A. A and R are true, R is the correct explanation of A
- B. A and R are true, R is not the correct explanation of A
- C. A is true, R is false
- D. Both A and R are false

**Answer:**

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**207.** A : Sperm deposited in the female reproductive tract undergo capacitation.

R : Sperms are temporarily stored in the epididymis

- A. A and R are true, R is the correct explanation of A
- B. A and R are true, R is not the correct explanation of A
- C. A is true, R is false
- D. Both A and R are false

**Answer:**

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**208.** Write a note on menstrual cycle.

- A. A and R are true, R is the correct explanation of A
- B. A and R are true, R is not the correct explanation of A
- C. A is true, R is false
- D. Both A and R are false

**Answer:**

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**209.** A : Cryptorchidism is the failure of one or both testes to descend into the scrotum

R : Azoospermia refers to the failure of spermatogenesis.

- A. A and R are true, R is the correct explanation of A
- B. A and R are true, R is not the correct explanation of A
- C. A is true, R is false
- D. Both A and R are false

**Answer:**



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