

## **BIOLOGY**

## **BOOKS - PREMIERS PUBLISHERS**

## **HUMAN REPRODUCTION**

**Textbook Questions Answers** 

1. The mature sperms are stored in the

A. Seminiferous tubules

- B. Vas deferens
- C. Epididymis
- D. Seminal vesicle

### **Answer: C**



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

A. Sertoli cells

- B. Leyding cell
- C. Epididymis
- D. Prostate gland

### **Answer: B**



- **3.** 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: A**



- **4.** The male homologue of the female clitoris is
  - A. Scrotum
  - B. Penis

- C. Urethra
- D. Testis

## **Answer: B**



- **5.** The site of embryo implantation is the
  - A. Uterus
  - B. Peritoneal cavity
  - C. Vagina

D. Fallopian tube

## **Answer: A**



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

A. Allantois

B. Amnion

C. Chorion

D. Yolk sac

**Answer: A** 



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

A. Oestrogen

B. FSH

C. Prolactin

D. Oxytocin

## **Answer: C**



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# 8. Mammalian egg is

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

### **Answer: C**



- **9.** The process which the sperm undergoes before penetrating the ovum is
  - A. Spermiation
  - B. Cortical reaction
  - C. Spermiogenesis
  - D. Capacitation

#### **Answer: D**



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## 10. Painful menstruation is termed as

- A. Dysmenorrhoea
- B. Menorrhagia
- C. Amenorrhoea
- D. Oligomenorrhoea

**Answer: A** 

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

A. Mucous

B. Colostrum

C. Lactose

D. Sucrose

Answer: B



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## 12. Colostrum is rich in

A. Ig E

B. lg A

C. Ig D

D. lg M

#### **Answer: B**



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

- A. Leyding cells
- B. Hypothalamus
- C. Sertoli cells
- D. Pituitary gland

**Answer: C** 



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



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## **15.** Find the wrongly matched pair :

Column - I	Column - II
(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



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

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

- A. Assertion and Reason are true, Reason is the correct explanation of Assertion.
- B. Assertion and Reason are true, Reason is not the correct explanation of Assertion.
- C. A is true, Reason is false.

D. Both Assertion and Reason are false.

#### **Answer: A**



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

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

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

## Answer: C



- **18.** A -Head of the sperm consists of acrosome and mitochondria.
- R -Acrosome contains spiral rows of mitochondria.
  - A. Assertion and Reason are true, Reason is the correct explanation of Assertion.
  - B. Assertion and Reason are true, Reason is not the correct explanation of Assertion.
  - C. A is true, Reason is false.
  - D. Both Assertion and Reason are false.

## **Answer: D**



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



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



**21.** Expand the acronyms



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22. Expand the acronyms

LH



**23.** Expand the acronyms hCG



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**24.** Expand the acronyms

hPL



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



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



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



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



29. What is inhibin? State its functions.



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



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



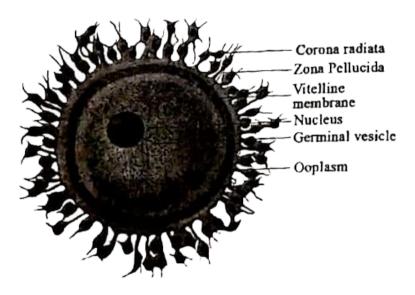
**32.** Name the hormones produced from the placenta during pregnancy.



**33.** Define gametogenesis.



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



2.2 Diagrammatic view of the human ovum



**35.** Give a schematic representation of spermatogenesis and oogenesis in humans.



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



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**37.** List the various menstrual disorders.

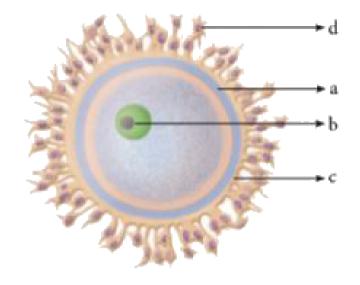


**38.** Explain the role of oxytocin and relaxin in parturition and lactation.



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





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



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Name the ovarian hormone and the pituitary hormone that have caused the above - mentioned events.





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





Write the - difference between C and H.



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# Other Important Questions Answers Choose The Correct Answer

## **1.** Match the following:

(p)	Inhibin	(i)	acidic fluid
(q)	Scortum	(ii)	Sertoli cells
(r)	Seminal vesicle	(iii)	Thermoregulator
(s)	prostrate	(iv)	vesiculase

A. (p)-(iv), (q)-(iii), (r)-(ii), (s)-(i)

B. (p)-(iii), (q)-(iv), (r )-(i), (s)-(ii)

C. (p)-(ii), (q)-(iii), (r )-(iv), (s)-(i)

D. (p)-(iv), (q)-(iii), (r )-(i), (s)-(ii)

### **Answer: C**



## 2. Match the following:

(p) GnRH	(i) Sertoli cells
(q) FSH	(ii) Leydig cells
(r) ABP	(iii) Hypothalamus
(s) Testosterone	(iv) Pituitary gland

#### **Answer: D**



**3.** The fusion of male and female gametes is called as:

A. Oogenesis

B. Fertilization

C. Gastrulation

D. Spermiation

**Answer: B** 



- 4. The hormone inhibin is secreted by:
  - A. Pituitary
  - B. Leyding cells
  - C. Sertoli cells
  - D. Endometrium

## **Answer: C**



<b>5.</b> Bulborethral	gland	is	otherwise	called	as	:
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- A. Prostate gland
- B. Seminal vesicle
- C. Coper's gland
- D. Skene's gland

## **Answer: C**



6. The mammary glands are modified:

A. Sebaceous glands

B. Green glands

C. Sweat glands

D. Bartholin's gland

**Answer: C** 



**7.** The acrosomal membrane distegrates by the proteolytic enzyme called :

A. Leutinising hotmone

B. Hyaluronidase

C. Lactogenase

D. Prolactin

**Answer: B** 



- **8.** Choose the odd man out
  - A. human Chorionic Gonadotropin
  - B. Follicle Stimulating Hormone.
  - C. human Chorionic Somatomammotropin
  - D. human Placental Lactogen.

### **Answer: B**



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9. Choose the odd one.

- A. Seminal vesicle
- B. Prostrate gland
- C. Coper's gland
- D. Bartholin's gland

## **Answer: D**



- **10.** Indicate the odd one.
  - A. Gametogenesis

- B. Spermiogenesis
- C. Spermatogenesis
- D. Oogenesis

### **Answer: B**



- 11. Choose the odd man out
  - A. Hyaluronidase
  - B. FSH Follicle Stimulating Hormone

- C. LH Lutenizing Hormone
- D. ABP Androgen Binding Protein

**Answer: A** 



- **12.** Find out the odd one.
  - A. Labia majora
  - B. Labia minora
  - C. Zona pellucida

# D. Hymen

#### **Answer: C**



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# **13.** Choose the corect pair.

Column - I	Column - II
(a) Thermoregulator	testes
(b) Sertoli cells	nourishment to sperm
(c) Leydig cells	inhibin
(d) Tunica albuginea	inner covering



# **14.** Which of the following pairs is wrong?

Column - I	Column - II
(a) Seminal vesicle	Accessory gland.
(b) Prostate gland	Slightly acidic fluid
(c) Vesiculase	Anticoagulating enzyme
(d) Bulbourethral gland	Lubrication



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# 15. Choose the correct pair.

Column - I	Column - II,
(a) Alveoli	vaginal gland
(b) Endometrium	lining of ovary
(c) Labia majora	mammary gland
(d) Lactiferous sinus	reservoir of milk

# **16.** Choose the incorrect pair.

Column - I	Column - II
(a) Non-cleidoic	presence of egg shell.
(b) Vitelline membrane	inner membrane
(c) Menopause	non-reproductive phase.
(d) Graafian follicle	corpus luteum



# 17. Which of the following is the correct pair?

Column - I	Column - II
(a) Blastomere	4 cell stage
(b) Blastocyst	100 cell stage
(c) Trophoblast	multi-layered stage
(d) Epiblast	120 cell stage



spermatogenesis.

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**18.** Assertion: Leyding cells surrounding the seminiferous tubules are endocrine in nature.

Reason: They secrete testosterone hormone

which initates the process of

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

## **Answer: A**



- **19.** Assertion: the seminal vesicles secrete a slightly acidic fluid called seminal plasma.
- Reason: Seminal plasma helps in the movement of the sperm.
  - A. Assertion and Reason are true, Reason is the correct explanation of Assertion.
  - B. Assertion and Reason are true, Reason is not the correct explanation of Assertion.
  - C. Assertion is true, Reason is false.
  - D. Both Assertion and Reason are false.

#### **Answer: D**



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**20.** Assertion: the medulla of ovarian stroma is a loose connective tissue with abundant blood vessels, lymphatic vessels and nerve fibres.

Reason: In the medulla, the various stages of ovarian follicles are present.

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

## Answer: C



21. Assertion: Acrosome is a small cup like pointed structure at the tip of the nucleus of sperm, which helps the sperm to pentrate the ovum during fertilization.

Reason: Acrosome contains a proteolytic enzyme, hyaluronidase popularly known as sperm lysin which helps to penetrate the ovum during fertilization.

A. Assertion and Reason are true, Reason is

the correct explanation of Assertion.

B. Assertion and Reason are true, Reason is

not the correct explanation of Assertion.

C. Assertion is true, Reason is false.

D. Both Assertion and Reason are false.

## **Answer: A**



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**22.** Assertion: During luteal phase of menstrual cycle, the Graadian follicle is transformed into a transitory endocrine gland

called corpus luteum.

Reason: Corpus luteum secretes large amount of Oestrogen, which is essential for the maintenance of endometrium.

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

#### **Answer: C**



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**23.** Which of the following is correct statement?

A. At the end of gametogenesis in females, each primary Oocyte gives rise to only one haploid ovum.

- B. At the end of gametogenesis in females, each primary Oocytes gives rise to four haploid ovum.
- C. At the end of gametogenesis in females, each primary Oocyte gives rise three polar bodies and two ovum.
- D. None of the above.

## **Answer: A**



## 24. Choose the incorrect statement:

- A. Human ovum is non cleidoic in nature.
- B. Human ovum is alecithal in nature.
- C. Human ovum contain a small nucleus in the cytoplasm
- D. Human ovum is microscopic in nature.

#### **Answer: C**



## 25. Indicate the correct statement

- A. The Acrosome of sperm possess nebenkern.
- B. The middle piece of sperm contain mitochondrial sprial.
- C. The proximal centriole of sperm gives rise to axial filament.
- D. None of the above.

#### **Answer: B**

## **26.** Choose the incorrect statement

A. Inhibin is a hormone involved in the negative feedback control of sperm production.

B. Leydily cells are endocrine in nature.

C. Vesiculase enzyme is a proteolytic enzyme.

D. Corpus luteum secretes lot of progesterone.

## **Answer: C**



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**27.** Which of the following is a correct statement?

A. Mammary glands are modified sebaceous glands.

- B. It is functional in males and rudimentary in females.
- C. Mammary glands are modified sweat gland.
- D. None of the above.

## Answer: C



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Other Important Questions Answers Answer The Following

**1.** Define gametogenesis.



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**2.** Name two reproductive hormones secreted by pituitary gland.



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3. What is organogenesis?



4. What are sertoli cells? Explain its functions.



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5. Leydig cells are endocrine in nature. Justify.



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**6.** Name the accessory ducts associated with male reproductive system.



7. Explain the function of seminal vesicle.



**8.** Mention the female accessory reproductive organs.



9. What are the three layers of uterus wall?

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10. Explain the functions of skene's gland.



11. Define spermiogenesis



12. Explain the term mitochondrial spiral.



**13.** What are the phases of menstrual cycle? Indicate the changes in the ovary and uterus.



**14.** Explain briefly about LH surge.



**15.** What is menopause?



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**16.** Explain the morula stage.



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17. Define monozygotic twins.



18. Parturition



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19. What is colostrum?



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20. Expand the following abbreviations:

**WABA** 



**21.** Expand the following abbreviations:

**WHO** 



**22.** What is the constitution of seminiferous tubule?



**23.** Distinguish between sertoli cells and leydig cells.



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**24.** Name the accessory glands of the male reproductive system.



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**25.** Explain the structure of penis.





**26.** Describe the structure of Uterus.



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27. Distinguish between Bartholin's glands and skene's glands.



**28.** Explain briefly the normal development of breast.



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**29.** Name the hormones involved in regulation of spermatogenesis.



**30.** Write down the events in follicular phase of menstrual cycle.



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**31.** What is implantation?



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



**33.** What is Polycystic ovary syndrome (PCOS)?



**34.** Name the accessory glands of the male reproductive system.



**35.** Draw a labelled diagram of female reproductive system.



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**36.** (b) Explain the structure and function of mammary glands.



**37.** Explain the sequence of events in the fertiization process in human.

