

Date: 11/11/2021 Subject: Biology

Topic : Human Reproduction Class: Standard XII

- Primary oocyte is formed by which type of cell division? Meiosis - I В. Meiosis - II Mitotis D. Amitosis Menstrual flow occurs due to lack of: A. LH B. Estrogen C. Progesterone D. FSH 3. Ejaculation of a human male contains 200 - 300 million sperms, of which for normal fertility _____ % sperms should have normal shape and _____ % must show vigorous motility.
 - **A.** 40, 60
 - **B.** 70, 30
 - **c**. 60, 40
 - **D.** 30, 70



Androgen binding protein (ABP) is secreted by which cells?

Sertoli cells

	В.	Leydig cells
	C.	Sperm
	D.	Follicular cell
5.	Sperm	natids are transformed into spermatozoa by which process?
	A.	Spermiogenesis
	B.	Spermiation
	C.	Spermatocytosis
	D.	Spermatogenesis
6	\^/biab	of the following does not exhibit internal fortilization?
6.	vvnicn	of the following does not exhibit internal fertilization?
	A.	Frog
	В.	Lizard
	C.	Cow
	D.	Crow
7.	Extra	embryonic membranes of embryo are derived from
	A.	follicle cells
	В.	inner cell mass
	C.	formative cell
	D.	trophoblast

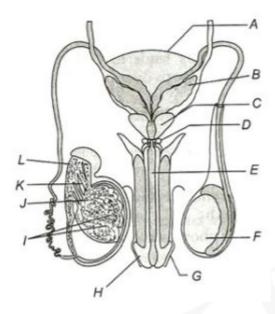


8	The hormone that induces ovulation is produced by	1
Ο.	The hornorie that induces ovulation is produced b	у .

- A. hypothalamus
- B. adenohypophysis
- **c**. ovary
- D. neurohypophysis
- 9. Select the correct option with respect to the hormone and its site of production.
 - A. Progesterone Graafian follicle
 - **B.** Human placental lactogen Corpus luteum
 - C. Follicle stimulating hormone Hypothalamus
 - D. Human chorionic gonadotropin Placenta



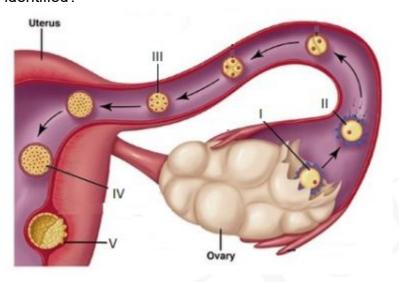
10. Identify A, B, C and D in the given diagram.



- A. A-Urinary bladder, B-Bulbourethral gland, C-Prostate gland, D-Seminal vesicles
- **B.** A-Urinary bladder, B-Seminal vesicles, C-Prostate gland, D-Bulbourethral gland
- A- Prostate gland, B- Seminal vesicles, C- Urinary bladder, D-Bulbourethral gland
- D. A- Bulbourethral gland, B- Urinary bladder, C- Seminal vesicles, D-Prostate gland
- 11. Hormones secreted by the corpus luteum are:
 - A. hCG, hPL, Progesterone, Prolactin
 - **B.** hCG, hPL, Estrogen, Relaxin, Inhibin
 - C. Progesterone, Estrogen, Relaxin, Inhibin
 - **D.** LH, Progesterone, Estrogen, Gluco-corticoids



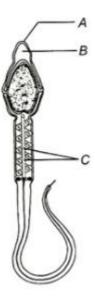
12. The image given below depicts a diagrammatic sectional view of the female reproductive system of humans. Which set of I-V have been correctly identified?



- A. I Zygote, II Ovum, III Morula, IV Blastocyst, V Implantation of blastocyst
- **B.** I Ovum, II Morula, III Zygote, IV Blastocyst, V Implantation of blastocyst
- I Ovum, II Zygote, III Morula, IV Blastocyst, V- Implantation of blastocyst
- D. I Ovum, II Zygote, III Blastocyst, IV Morula, V Implantation of blastocyst



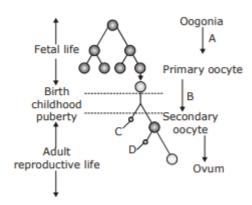
13. Identify A, B and C in the given human sperm diagram.



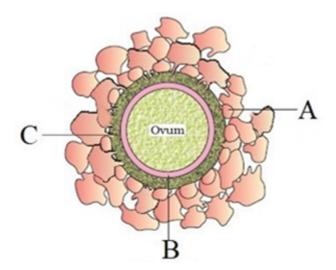
- **A.** A-Acrosome, B-Plasma membrane, C-Mitochondria
- **B.** A-Plasma membrane, B-Acrosome, C-Mitochondria
- C. A- Plasma membrane, B-Mitochondria, C-Acrosome
- **D.** A-Mitochondria, B-Plasma membrane, C-Acrosome



14. Identify A, B, C and D in the schematic representation of oogenesis.



- A. A-Mitosis and differentiation, B-Meiosis I and II, C-Second polar body, D-First polar body
- **B.** A-Mitosis, B-Meiosis II, C-Ovum, D-First Polar Body
- **C.** A-Mitosis and differentiation, B-Meiosis I, C-First polar body, D-second polar body
- D. A-Meiosis I, B-Meiosis II, C- First polar body, D- Second polar body
- 15. Label the following layers around ovum properly.



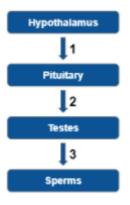
- A. A Zona Pellucida; B Corona Radiata; C Perivitelline Space
- B. A Corona Radiata; B Zona Pellucida;C Perivitelline Space
- C. A Corona Radiata; B Perivitelline Space; C Zona Pellucida



- 16. Which of the following cells synthesize androgens?
 - A. Leydig cells
 - B. Sertoli cells
 - C. Zona glomerulosa
 - D. Myometrium
- 17. Choose the correct option with respect to the assertion and reason given. Assertion (A): Not all copulations lead to fertilisation and pregnancy in human beings.
 - Reason (R): Fertilisation can only occur if the ovum and sperms are transported simultaneously to the ampullary region of the fallopian tube.
 - A. [A] is true and [R] is false.
 - **B.** [A] is false and [R] is true.
 - **C.** Both [A] and [R] are true and [R] is a correct explanation to [A].
 - **D.** Both [A] and [R] are true but [R] is not a correct explanation to [A].



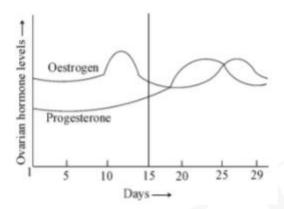
18. Study the image related to spermatogenesis and name the hormones involved at each stage of the following flow chart.



- **A.** 1 GnRH, 2 LH, 3 FSH
- B. 1 GnRH, 2 LH, 3 Testosterone
- **C.** 1 LH, 2 FSH, 3 GnRH
- **D.** 1 FSH, 2 LH, 3 GnRH



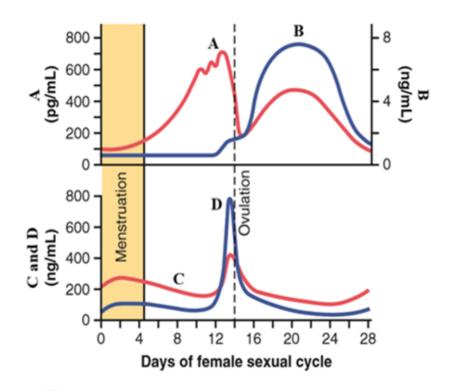
- 19. Read the graph and correlate the uterine events that takes place according to the hormonal levels on:
 - A. 6-15 days
 - B. 16-25 days
 - C. 26-28 days (if the ovum is not fertilized)



- A. A-Degeneration of endometrium, B-Myometrium thickens, becomes vascularized ready to receive and implant embryo, C-Regeneration of endometrium
- B. A-Degeneration of endometrium, B-Endometrium thickens, becomes vascularized, ready to receive and implant embryo, C-Regeneration of endometrium
- A-Degeneration of endometrium, B- Endometrium thickness, becomes vascularized, ready to receive and implant embryo, C-Regeneration of endometrium
- D. A-Regeneration of endometrium, B- Endometrium thickens, becomes vascularized ready to receive and implant embryo, C-Degeneration of endometrium



20. Refer to hormonal levels in menstrual cycle and select the incorrect option accordingly.



- A. B Hormone responsible for uterine changes
- **B.** D Hormone responsible for ovulation
- **C.** A Cessation of secretion can lead to Osteoporosis
- D. C Secreted by Corpus luteum