

GOVERNMENT ZIRTIRI RESIDENTIAL SCIENCE COLLEGE

Subject : ZOOLOGY
Paper name : ENDOCRINOLOGY AND REPRODUCTION BIOLOGY
Paper No : ZOO/IV/EC/07
Semester : IV

A. Multiple choice questions [25 (5 from each unit)]

1. Vasopressin is a hormone secreted from
 - a) pituitary gland
 - b) adrenal gland
 - c) thyroid gland
 - d) pineal gland
2. Type I diabetes is also known as
 - a) gestational diabetes
 - b) juvenile onset diabetes
 - c) Obesity onset diabetes
 - d) none of the above
3. Dwarfism is due to low secretion of
 - a) LH
 - b) FSH
 - c) GH
 - d) PRL
4. Cretinism is an endocrinal disorder, caused by
 - a) hypothyroidism
 - b) hyperthyroidism
 - c) Both (a) and (b)
 - d) Both (b) and (c)
5. Androgen is not secreted by
 - a) Testes
 - b) Ovaries
 - c) Adrenal gland
 - d) Pituitary gland
6. There are ____ transmembrane helices in G-protein coupled receptor (GPCR)
 - a) 5
 - b) 6
 - c) 7
 - d) 8
7. The function of adenylyl cyclase is to
 - a) break down a protein hormone when it binds to its receptor
 - b) turn on a G-protein
 - c) cause the conversion of ATP to cAMP

GOVERNMENT ZIRTIRI RESIDENTIAL SCIENCE COLLEGE

- d) activate a protein kinase and inactivate cAMP
8. _____ controls the movement of the receptor to the nucleus in steroid hormone receptors
- Variable domain
 - DNA binding domain
 - Hinge region
 - Hormone binding domain
9. The peptide hormone's second messenger cAMP is converted to 5'-AMP by the enzyme
- phosphorylase
 - phosphodiesterase
 - transferase
 - adenyl cyclase
10. _____ helps the translocation of GLUT4 containing vesicles to the plasma membrane.
- Ca⁺⁺
 - Na⁺⁺
 - cFos
 - cJun
11. The hormone responsible for lowering calcium level in the blood is
- calcitonin
 - parathormone
 - thyroxine
 - tri-iodothyronine
12. The hormone responsible for rising the blood glucose level is
- insulin
 - glucagon
 - melatonin
 - calcitonin
13. The biological rhythm having a variation of over 24-hour period is called as
- Circadian rhythm
 - Circannual rhythm
 - Both of the above
 - None of the above
14. An external or environmental cue that entrains or synchronizes an organism's biological rhythms is termed as
- clock
 - synchronism
 - exogenic
 - zeitgeber
15. During parturition the appearance of the fetal head at the vaginal orifice is termed as
- dilation

GOVERNMENT ZIRTIRI RESIDENTIAL SCIENCE COLLEGE

- b) primigravid
 - c) crowning
 - d) frontal
16. Spermatogenesis occurred in _____ of the testes
- a) Vas deferens
 - b) Seminiferous tubules
 - c) Epididymis
 - d) Vas eferens
17. Inhibin is secreted by
- a) Epididymis
 - b) Sertoli cells
 - c) vas deferens
 - d) Leydig cell
18. During spermatogenesis, each spermatid
- a) divides by meiosis to produce four sperm cells
 - b) divides by mitosis to produce four sperm cells
 - c) divides by meiosis to produce two sperm cells
 - d) differentiates into a sperm cell
19. Follicle stimulating hormone prevents the apoptosis of _____ spermatogonia
- a) type A
 - b) type B
 - c) type A & B
 - d) None of the above
20. Vitellogenesis occurs when the oocyte reaches the _____ stage of meiotic prophase.
- a) leptotene
 - b) zygotene
 - c) pachytene
 - d) diplotene
21. The absence of menstrual flow is called
- a) menarche
 - b) apoptosis
 - c) amenorrhea
 - d) menopause
22. The main component of hormone responsible for the function of anabolic steroids is
- a) estrogen
 - b) progesterone
 - c) androgen
 - d) prostaglandins

GOVERNMENT ZIRTIRI RESIDENTIAL SCIENCE COLLEGE

23. The two main hormones of combined oral contraceptives are
- Prolactin and Oxytocin
 - Estrogen and Progestin
 - Estrogen and Testosterone
 - Progestin and Prolactin
24. In estrous cycle, the phase where female is sexually receptive is
- Proestrus
 - Estrus
 - Metestrus
 - Diestrus
25. are monoestrous animal.
- pigs
 - cows
 - squirrels
 - foxes

B. Fill up the blanks [15 (3 from each unit)]

- An excess of growth hormone after the closure of epiphyseal plates specifically leads to _____
- The so-called emergency hormones involved in the "fight-or-flight response" are _____
- The circulatory system which collects blood from the hypothalamus and, directs the blood into the anterior pituitary gland is _____
- The tyrosine kinase activity of the insulin receptor is localized at the _____ subunit.
- The enzyme responsible for the conversion of glucose to glycogen is _____
- cAMP is used as second messenger by _____ hormones
- The normal range of glucose level in human blood is _____
- Women who have given birth to more than one viable fetus is termed as _____
- The endocrine gland responsible for the body's circadian rhythm is _____
- The major yolk component of eggs is a protein called _____
- The type of pheromones having slower onset but last longer duration are termed _____
- Inside the testes, testosterone is synthesized and secreted from _____
- A hormonal contraception used by a woman after she has had unprotected intercourse is termed as _____
- A fifth hormone important in female reproduction is _____
- The stage in menstrual cycle where the ovum is released is called _____

GOVERNMENT ZIRTIRI RESIDENTIAL SCIENCE COLLEGE

Key Answers

A. Multiple choice questions

- | | | | | | | |
|--------|--------|--------|--------|--------|--------|--------|
| 1. a) | 2. c) | 3. c) | 4. a) | 5. d) | 6. c) | 7. c) |
| 8. c) | 9. b) | 10. a) | 11. a) | 12. b) | 13. a) | 14. d) |
| 15. c) | 16. b) | 17. b) | 18. d) | 19. a) | 20. d) | 21. c) |
| 22. c) | 23. b) | 24. b) | 25. d) | | | |

B. Fill up the blanks

1. Acromegaly
2. Epinephrine and norepinephrine
3. Hypothalamic-hypophyseal portal circulation
4. β
5. Glycogen synthase
6. Peptide
7. 70 to 110 mg/dL
8. Multiparae
9. Pineal gland
10. Vitellogenin
11. Primer pheromones
12. Leydig cell
13. Emergency contraception
14. Prostaglandin
15. Ovulation