# Based on Latest NCERT NEET Syllabus & NTA Guidelines



For

2025

## CHAPTERWISE-TOPICWISE

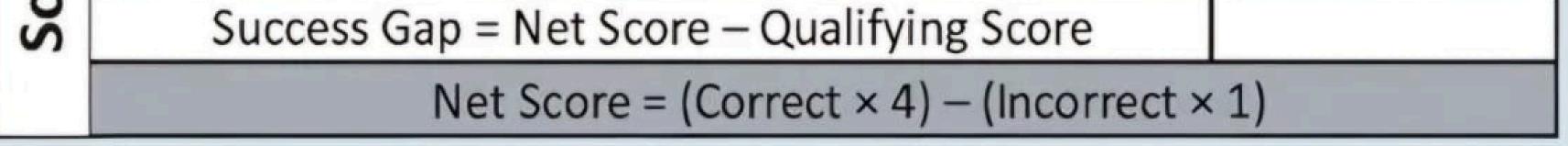


# DAILY PRACTICE PAPERS

### with Separate Solution Booklet

# BIOLOGY CLASS XI & XII

	DAILY PRACTICE PROBLEM DPP CHAPTERWISE CB22 - BIOLOGY				
10	Total Questions	45	Total Marks	180	
ษิ	Attempted		Correct		
ng	Incorrect		Net Score		
ori	Cut-off Score	45	Qualifying Score	60	
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# Contents

Class XI

- 1. The Living World
- 2. Biological Classification
- 3. Plant Kingdom
- 4. Animal Kingdom
- 5. Morphology of Flowering Plants
- 6. Anatomy of Flowering Plants
- 7. Structural Organisation in Animals
- 8. Cell-The Unit of Life
- 9. Biomolecules
- 10. Cell Cycle and Cell Division
- 11. Photosynthesis in Higher Plants
- 12. Respiration in Plants
- 13. Plant Growth and Development
- 14. Breathing and Exchange of Gases
- 15. Body Fluids and Circulation
- 16. Excretory Products and Their Elimination
- 17. Locomotion and Movement
- 18. Neural Control and Coordination



# Contents



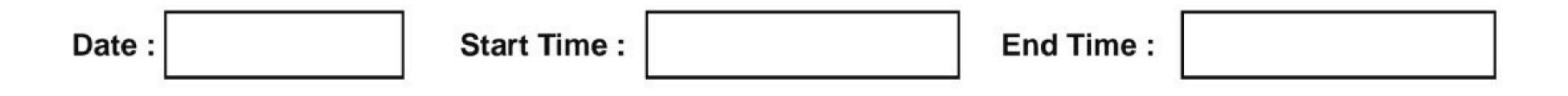
- 1. Sexual Reproduction in Flowering Plants
- 2. Human Reproduction
- 3. Reproductive Health
- 4. Principles of Inheritance and Variation
- 5. Molecular Basis of Inheritance
- 6. Evolution
- 7. Human Health and Diseases
- 8. Microbes in Human Welfare
- 9. Biotechnology: Principles and Processes
- 10. Biotechnology and Its Applications
- 11. Organisms and Populations
- 12. Ecosystem
- 1) Diadiyanaity and Canaanyatian

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## DPP - Daily Practice Problems

### Chapter-wise Sheets





SYLLABUS : Chemical Co-ordination and Integration

Max. Marks: 180 Marking Scheme: + 4 for correct & (-1) for incorrect

Time : 60 min.

INSTRUCTIONS : This Daily Practice Problem Sheet contains 45 MCQs. For each question only one option is correct. Darken the correct circle/ bubble in the Response Grid provided on each page.

- 1. Which hormone possesses anti-insulin effect?
  - (a) Cortisol (b) Calcitonin
  - (c) Oxytocin (d) Aldosterone
- 2. Which of the following is both exocrine and endocrine gland?
  - (a) Liver (b) Pancreas
  - (c) Thyroid (d) Adrenal
- 3. Chemically hormones are
  - (a) biogenic amines only
  - (b) proteins, steroids and biogenic amines
  - (c) proteins only
  - (d) steroids only
- 4. The blood calcium level is lowered by the deficiency of
  - (a) parathormone
  - (b) thyroxine
  - (c) both calcitonin and parathormone
  - (d) calcitonin
- 5. The technique used for estimation of minute amounts of hormones and drugs is called
- electrophoresis (a) electroencephalogram (b) fractionation (c) (d) radioimmunoassay Testosterone is produced by 6. sertoli cells (b) leydig's cells (a) (c) oxyntic cells (d) pituitary gland Which one of the following pairs correctly matches a 7. hormone with a disease resulting from its deficiency? Failure of ovulation (a) Luteinizing \_ Diabetes insipidus (b) Insulin Thyroxine Tetany (c) **Diabetes** mellitus (d) Parathyroid Which one of the following is not a second messenger in 8.
  - **8.** Which one of the following is not a second messenger if hormone action ?
    - (a) Calcium(b) Sodium(c) cAMP(d) cGMP
  - abcdRESPONSE 3. 4. abcd abcd5. (a)(b)(c)(d)2. (a)(b)(c)(d)1. 8. (a)(c)(d) GRID 7. (a)(b)(c)(d)6. abcd

Space for Rough Work





#### в-86

- **9.** Which of the following statements regarding glucagon is false?
  - (a) It is secreted by  $\alpha$ -cells islets of Langerhans.
  - (b) It acts antagonistically to insulin.
  - (c) It decreases blood sugar level.
  - (d) The gland responsible for its secretion is heterocrine gland.
- **10.** Which one of the following statements is correct?
  - (a) Neurons regulate endocrine activity, but not vice versa.
  - (b) Endocrine glands regulate neural activity and nervous system regulates endocrine glands.
  - (c) Neither hormones control neural activity nor the neurons control endocrine activity.
  - (d) Endocrine glands regulate neural activity but not *vice versa*.
- **11.** Match the source gland with respective hormone as well as the function correctly.

	Source gland	Hormone	Function
(a)	Anterior pituitary	Oxytocin	Contraction of uterus muscles during child birth
(b)	Posterior pituitary	Vasopressin	Stimulates reabsorption of water in the distal tubules in the nephron
(c)	Corpus luteum	Estrogen	Supports pregnancy
(d)	Thyroid	Thyroxine	Regulates blood calcium level

- (c) seminiferous tubules and provide nutrition to germ cells
- (d) pancreas and secrete cholecystokinin
- 14. The phase of menstrual cycle in humans that lasts for 7-8 days, is
  - (a) follicular phase (b) ovulatory phase
  - (c) luteal phase (d) menstruation
- 15. Blood glucose level in man is regulated by:
  - (a) insulin
  - (b) adrenaline
  - (c) glucagon and insulin
  - (d) All of the above
- **16.** Which of the following glands grows to the maximum size at puberty and then diminishes gradually?
  - (a) Thymus (b) Pituitary
  - (c) Thyroid (d) Adrenal
- **17.** Hypoglycemic hormone is
  - (a) Insulin (b) Glucagon
  - (c) Thyroxine (d) Calcitonin
- **18.** Which of the following diseases is caused by the under secretion of cortisol?
  - (a) Anaemia
  - (b) Addison's disease
  - (c) Hyperglycemia
  - (d) Mental illness or retardation
- 19. Glycogen is converted to glucose by(a) Insulin

- **12.** Which of the following is incorrect?
  - (a) Iodine is needed for thyroxine formation.
  - (b) Calcium regulates the excitibility of nerve fibres.
  - (c) Potassium plays an important role in the regulation of acid base balance in cell.
  - (d) Phosphorus helps to maintain the osmotic pressure of the body fluids.
- 13. Sertoli cells are found in
  - (a) ovaries and secrete progesterone
  - (b) adrenal cortex and secrete adrenaline

- (b) Glucagon
- (c) Galactose
- (d) Both glucagons and insulin
- 20. A decrease in the level of oestrogen and progesterone causes
  - (a) Growth and dilation of myometrium
  - (b) Growth of endometrium
  - (c) Constriction of uterine blood vessels leading to sloughing of endometrium or uterine epithelium
  - (d) Release of ovum from the ovary.
- **21.** Which of the following is a minerelocorticoid?
  - (a) Calciferol (b) Progesterone
  - (c) Adrenalin (d) Aldosterone
- 22. Which hormone interacts with membrane bound receptor and does not normally enter the target cell ?
  - (a) Follicle stimulating hormone
  - (b) Estrogen
  - (c) Thyroxin
  - (d) Cortisol

	abcd       12.abcd       13.abcd         abcd       17.abcd       18.abcd         abcd       22.abcd       18.abcd
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Space for Rough Work .





### DPP/CB22

- 23. The 24 hour (diurnal) rhythm of our body such as the sleepwake cycle is regulated by the hormone
  - Adrenaline (b) Melatonin (a)
  - Calcitonin (d) Prolactin (c)
- Steroid hormones transmit their information by 24.
  - stimulating the receptors present on cell membrance (a)
  - entering into the cell and modifying cellular contents (b)
  - entering into the cell and modifying nuclear organization (c)
  - the help of an intracellular second messenger (d)
- Increase in bleeding time and delay in blood coagulation 25. is due to the deficiency of which hormone?
  - Adrenaline (b) Noradrenaline (a)
  - (d) Thyroxine Parathormone (c)
- Estrogen and testosterone are steroid hormones, and **26**. most likely bind to
  - membrane ion channels (a)
  - enzyme-linked membrane reseptors (b)
  - G-protein coupled membrane receptors (c)
  - (d) cytoplasmic receptors
- The only unicellular exocrine glands in our body are 27.
  - Sweat glands (a)
  - Mucus secreting goblet cells (b)
  - Mammary glands (c)
  - (d) Sebaceous glands
- Steroid-based hormones are able to act inside the cell. This 28. is possible because
  - (a) there are no receptors for hormones on the cell surface.

- Hormones generally cause a response in a cell by 32.
  - (a) interacting directly with the cell's DNA.
  - (b) binding with a receptor and stimulating protein production.
  - (c) changing the polarity of the cell membrane and causing a cascade of events within the cell.
  - (d) halting all other cellular activity except the required response
- 33. Hormones are produced at a particular centralized site and transported throughout the organism by means of
  - (a) a series of synapses
  - (b) an integrated neural pathway system.
  - cellular communication (c)
  - (d) an internal transport system
- Injections of a hormone are sometimes given to strengthen 34. contractions of the uterus during childbirth. What hormone might this be?
  - (a) adrenocorticotropic hormone (ACTH)
  - (b) thyroxine

300.

200

100

0

300-

200

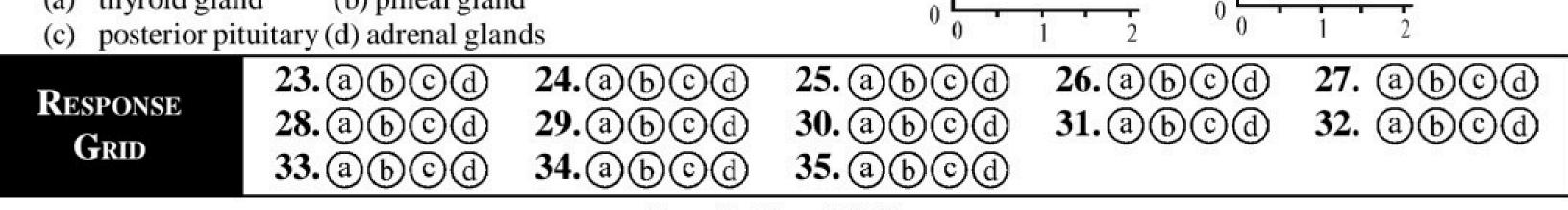
100

(a)

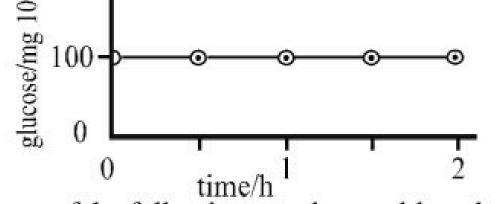
(c)

- (d) insulin (c) oxytocin
- The graph below illustrates the changes in blood sugar 35. concentration after a healthy man has drunk a glucose solution.

- hormones must interact with the nucleus to have an (b)effect.
- (c) proteins carry them into the cell.
- steroid-based hormones are hydrophobic molecules (d) that can pass through the cell membrane.
- **29.** Every time you eat a cookie or candy bar, your blood sugar increases. This triggers an increase in the hormone
  - (a) thyroxine. (b) epinephrine.
  - (c) glucagon. (d) insulin.
- 30. Target cells
  - (a) react specifically to a chemical messenger.
  - (b) have receptors for chemical messengers
  - secrete hormones (c)
  - (d) Both a and b
- Researchers have found increased levels of hormones from 31. the \_\_\_\_\_ in the blood of students preparing for final exams. These hormones are produced in response to stress.
  - (a) thyroid gland (b) pineal gland



Space for Rough Work



Which one of the following graphs would apply to a diabetic man in similar circumstances?

300 -

200

100

0

300 -

200

(**d**) 100

(b)





DPP/CB22

#### в-88

- 36. A paracrine hormone is
  - (a) a local hormone that acts on the cell that releases it.
  - (b) always acting on a wide variety of target tissues.
  - (c) a local hormone produced at one site but active at a different site in the body.
  - (d) none of the above
- 37. "Upregulation" of hormone receptors refers to
  - (a) increase in hormone receptor numbers with low hormone levels.
  - (b) increase in hormone receptor numbers with high neurotransmitter levels
  - (c) increase in hormone levels produced by increase in hormone receptor numbers
  - (d) decrease in hormone levels produced by decrease in hormone receptor numbers
- **38.** In an experiment, researchers removed the \_\_\_\_\_ of young mice, and as a result, these mice were able to accept organ transplants without rejection.
  - (a) pineal glands (b) thymus glands
  - (c) thyroid glands (d) parathyroid glands
- **39.** Which of the following is a common second messenger substance in hormone action ?
  - (a) Thyroid hormone (b) ADH

- **41.** Through negative feedback, a hormone may shut off the secretion of an anterior pituitary hormone by :
  - (a) stimulating the release of a (hypothalamic) releasing hormone
  - (b) inhibiting the release of a (hypothalamic) inhibiting hormone
  - (c) inhibiting the release of a (hypothalamic) releasing hormone
  - (d) all of the preceding.
- 42. ANF is a peptide hormone and is secrected from
  - (a) Gastrointestinal tract (b) Kidney
    - Post. Pituitary (d) None of these
- 43. Steroid hormones –

(c)

- (a) have only cell surface receptors
- (b) are lipophobic
- (c) act through altering the activity of proteins in the target cell
- (d) are produced by only adrenal cortex.
- **44.** The hormones that initiate ejection of milk, stimulates milk production and growth of ovarian follicles are respectively known as
  - (a) PRL, OT and LH (b) OT, PRL and FSH
  - (c) LH, PRL and FSH (d) PRH, OT and LH
- 45. A pregnant female deliver a baby who suffers from stunted

- (c) Cyclic AMP (d) Epinephrine
- **40.** Which of the following glands is considered the "master" endocrine gland in vertebrates ?
  - (a) Adrenal glands (b) Thyroid gland
  - (c) Hypothalamus (d) Pituitary gland

growth, mental retardation/low intelligence quotient and abnormal skin. This is the result of :

- (a) Low secretion of growth hormone
- (b) Cancer of the thyroid gland
- (c) Over secretion of pars distalis
- (d) Deficiency of iodine in diet

RESPONSE	36. abcd	37.abcd	38. abcd	39. abcd	40. abcd
Grid	<b>41.</b> @b©d	42. abcd	43. abcd	44. abcd	45. abcd

Space for Rough Work \_\_\_\_\_

DAILY PRACTICE PROBLEM DPP CHAPTERWISE 22 - BIOLOGY				
Total Questions	45	Total Marks	180	
Attempted Correct				
Incorrect		Net Score		
Cut-off Score	40	Qualifying Score	50	
Success Gap = Net Score – Qualifying Score				
Net Score = (Correct × 4) – (Incorrect × 1)				

