

BIOCHEMISTRY

Time: 3 hrs

Maximum marks: 70

(Very Short Answer Type Questions)

1 each

1. Define ATP.
2. Define respiration.
3. Phenylketonuria is caused by the deficiency of enzyme.....
4. Cholesterol is the precursor of
 - A) progesterone
 - B) estrogen
 - C) testosterone
 - D) all the above
5. Carbohydrate metabolism is mainly under the control of
 - A) Insulin
 - B) Glucagon
 - C) Both
 - D) none
6. Which of the following is a cell of immune system
 - A) B cell
 - B) T cell
 - C) Memory cell
 - D) All the three

(Very Short Answer Type Questions)

2each

7. What do you mean by deamination of amino acids?
or
Define Transamination?
8. Define amino acid metabolism?
9. Define decarboxylation in amino acids?
10. Define Lesch Nyhan syndrome?
11. Define salvage pathway?
12. Define CAM pathway?
13. Give role of auxin?
14. Why beta oxidation of fatty acids is named so?

(Short Answer Type questions)

3 each

15. Define Role of Vassopressin?
Or
Differentiate between Insulin and Glucagon?
16. What are the causes and symptoms of tyrosenemia?
17. Differentiate between humoral and cell mediated immunity?
18. What are the applications of genetic engineering?
19. Define communicable diseases?
20. Give the biochemical role of thyroxine?
21. What are the different types of DNA polymerases in prokaryotes?
22. Classify hormones on the basis of chemical nature?
23. Give biochemical role of testosterone?
24. Differentiate between different plant hormones?
25. Define activation of fatty acids?

(Long Answer Type Questions)

5 each

26. Describe the reactions of TCA cycle?

Or

Explain various types of photosystems in electron transport chain?

27. What is light phase of photosynthesis? Explain cyclic and non cyclic photophosphorylation?

Or

Elaborate the differences between C3 and C4 pathway?

28. Explain in detail Replication of DNA in Eukaryotes?

Or

Describe Transcription in prokaryotes?