

C 21681

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Name.....

Reg. No.....

FOURTH SEMESTER (CBCSS—UG) DEGREE EXAMINATION**APRIL 2022**

Biochemistry

BCH 4C 04—BIOCHEMISTRY—IV

(2020 Admissions)

Time : Two Hours

Maximum : 60 Marks

Section A*Answer all questions.**Each question carries 1 mark.*

- Which is not a peptide hormone ?
 - Insulin.
 - Oxytocin.
 - Glucagon.
 - Adrenaline
- Digestion of lipids begins in the _____.
 - Esophagus.
 - Mouth.
 - Small intestine.
 - Liver.
- Cori cycle takes place in the _____.
- Kornberg enzyme is _____.
 - DNA Polymerase I.
 - RNA polymerase.
 - DNA Polymerase II.
 - DNA Polymerase III.
- Name the site of fatty acid oxidation.
- _____ is an example of both glucogenic and ketogenic amino acid.
 - Alanine.
 - Isoleucine.
 - Lysine.
 - Arginine.

Turn over

7. Okazaki fragments can be seen on the _____.
- (a) Promoter region. (b) lagging strand.
(c) Terminator region. (d) Leading strand.
8. The site of biosynthesis of the hormone glucagon is _____.
- (a) Beta cells of pancreas. (b) Pituitary gland.
(c) Adrenal gland. (d) Alpha cells of pancreas.
9. Name the three stop codons in genetic code.

(9 × 1 = 9 marks)

Section B

*Answer atleast **six** questions.
Each question carries 3 marks.
All questions can be attended.
Overall Ceiling 18.*

10. State the role of HMG-CoA reductase in cholesterol biosynthesis.
11. What is urea cycle ? Mention its importance.
12. Define (a) Ori C ; and (b) Replication fork.
13. Write note on hormones of adrenal gland.
14. How amino acids are activated during translation ?
15. Write about the transamination reaction of amino acids. Give example.
16. What is β -oxidation and its significance ?
17. Give an account of the functions of thyroid gland hormones ?

(6 × 3 = 18 marks)

Section C

*Answer atleast **three** questions.
Each question carries 7 marks.
All questions can be attended.
Overall Ceiling 21.*

18. Briefly explain the steps involved in the transcription process of prokaryotes.
19. Explain Cori cycle.

20. Outline the reactions involved in fatty acid biosynthesis.
21. How are hormones classified based on their mechanism of action ?
22. Briefly describe different types of RNA and their functions.

(3 × 7 = 21 marks)

Section D

*Answer any **one** question.
The question carries 12 marks.*

23. Explain translation in prokaryotes.
24. Elaborate on digestion and absorption of lipids.

(1 × 12 = 12 marks)