

Reg No : Name :

B.Sc DEGREE (CBCS) REGULAR / IMPROVEMENT / REAPPEARANCE EXAMINATIONS, MAY 2024

Second Semester

B.Sc Clinical Nutrition and Dietetics Model III

Complementary Course - CN2CMT03 - BIOCHEMISTRY-GENERAL BIOCHEMISTRY

2017 ADMISSION ONWARDS

0A5C1D3E

Time: 3 Hours

Part A

Answer any ten questions.

Each question carries 2 marks.

- 1. Explain the major application of radioisotopes in industrial microbiology.
- 2. What is meant by PIPs?
- 3. What is meant by Number 6 Plastics?
- 4. Who is the Father of Genetic Engineering? What was his award winning experiment?
- 5. What is a blunt end?
- 6. Which organisms cause periodontal disease?
- 7. Trypanosoma cruzi.
- 8. What are the common symptoms of sickle cell anaemia?
- 9. Which genes are involved in type 2 diabetes?
- 10. How can gene knockout be useful?
- 11. Gel electrophoresis.
- 12. What is Meselson and Stahl experiment?

(10×2=20)

Part B

Answer any **six** questions.

Each question carries **5** marks.

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Max. Marks: 80



- 13. Talk about the harmful effects of artificial fertilisers.
- 14. Compare and contrast between biofertilisers and synthetic fertilisers.
- 15. Write a note on the biological and non biological methods of gene transfer after cloning.
- 16. How can we diagnose AIDS in the initial stages?
- 17. Write a note on DNA in the diagnosis of Alzheimer's disease.
- 18. Briefly explain the topic 'Artificial chromosomes'.
- 19. Who constitutes a bioethics committee and why?
- 20. Write a note on Thermal Cyclers.
- 21. What are the steps involved in DNA fingerprinting?

(6×5=30)

Part C

Answer any **two** questions. Each question carries **15** marks.

- 22. Write an essay on the ecofriendly methods we can utilise to reduce the carbon footprint left by synthetic plastics.
- 23. Elaborate on the different types of vectors employed in gene cloning.
- 24. Elaborate on the uses of genetic engineering in real life.
- 25. Explain the hybridisation methods employed in genetic engineering.

(2×15=30)