NOVEMBER 2017 1709114/UBYM41A

| Time | e : Three hours Maximum : 75 marks |
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| | PART A — $(10 \times 2 = 20 \text{ marks})$ |
| | Answer any TEN questions. |
| | Each question carries 2 marks. |
| 1. | What are essential fatty acids? |
| 2. | Define acid number. |
| 3. | Write the structure of cholesterol. |
| 4. | What is sphingomyelin? |
| 5. | Define denaturation of DNA. |
| 6. | What is meant by hyperchromicity? |
| 7. | What is a nucleotide? Give example. |
| 8. | What are Lipoprotein? |
| 9. | Name the modified bases present in tRNA. |
| 10. | What is SnRNA? |
| 11. | Write the biological significance of flavonoids. |
| | |

12. Write the functions of penicillin.

PART B — $(5 \times 5 = 25 \text{ marks})$

Answer any FIVE questions.

Each question carries 5 marks.

- 13. Discuss about the biological functions of fats.
- 14. Explain about Iodine number and saponification number.
- 15. Describe briefly on the functions of cholesterol.
- 16. What are lipoproteins? Write their types.
- 17. Write the properties of DNA.
- 18. Briefly discuss the structure and functions of mRNA.
- 19. Explain about the biological significance of heme.

PART C — $(3 \times 10 = 30 \text{ marks})$

Answer any THREE questions.

Each question carries 10 marks.

- 20. Explain in detail about the classification of lipids.
- 21. Give an account on
 - (a) Stigmasterol
 - (b) Lecithin.
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- 22. Elaborately discuss the structure of DNA.
- 23. Give an account on the secondary structure of tRNA.
- 24. Write the biological importance and significance of
 - (a) Indole ring compounds.
 - (b) Carotenoid.



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