Reg. No. \_\_\_\_\_\_\_\_\_\_\_\_\_



**End Semester Examination – Nov / Dec – 2019**

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| **Code :** | **17AG1003** | **Duration :** | **3hrs** |
| **Sub. Name :** | **FUNDAMENTALS OF PLANT BIOCHEMISTRY** | **Max. Marks :** | **100** |

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| **Q. No.** | **Questions** | **Course Outcome** | **Marks** |
| **PART – A (20 X 1 = 20 MARKS)** | | | |
| 1. | The membrane surrounding the vacuole is known as \_\_\_\_\_\_\_\_\_\_. | CO2 | 1 |
| 2. | Non Pigmented plastids are called \_\_\_\_\_\_\_\_\_\_. | CO1 | 1 |
| 3. | The breakdown of glycogen to glucose is called as \_\_\_\_\_\_\_\_\_\_. | CO2 | 1 |
| 4. | The Hexose monophosphate shunt is also called as \_\_\_\_\_\_\_\_\_\_. | CO2 | 1 |
| 5. | Give an example of aromatic aminoacid. | CO1 | 1 |
| 6. | Isomerism is due to \_\_\_\_\_\_\_\_\_\_ carbon atom. | CO2 | 1 |
| 7. | Cellulose is \_\_\_\_\_\_\_\_\_\_ made up of glucose. | CO2 | 1 |
| 8. | Name a non-reducing disaccharide. | CO2 | 1 |
| 9. | Proteins are polymers of \_\_\_\_\_\_\_\_\_\_. | CO1 | 1 |
| 10. | Name the sulfur containing essential amino acid \_\_\_\_\_\_\_\_\_\_. | CO1 | 1 |
| 11. | \_\_\_\_\_\_\_\_\_\_ proposed the term enzyme. | CO3 | 1 |
| 12. | An example of milk Protein is \_\_\_\_\_\_\_\_\_\_. | CO1 | 1 |
| 13. | Who Proposed lock and key theory? | CO3 | 1 |
| 14. | Terpenes are synthesized through \_\_\_\_\_\_\_\_\_\_ path way. | CO1 | 1 |
| 15. | The carbohydrate present in the nucleic acid is \_\_\_\_\_\_\_\_\_\_. | CO2 | 1 |
| 16. | Triacylglycerols are fatty acid esters of \_\_\_\_\_\_\_\_\_\_. | CO2 | 1 |
| 17. | Vinegar is nothing but \_\_\_\_\_\_\_\_\_\_. | CO2 | 1 |
| 18. | The synthesis of RNAs from DNA is called \_\_\_\_\_\_\_\_\_\_. | CO3 | 1 |
| 19. | An example of liquid wax is \_\_\_\_\_\_\_\_\_\_. | CO2 | 1 |
| 20. | The term Biochemistry was coined by \_\_\_\_\_\_\_\_\_\_. | CO1 | 1 |

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| **PART – B (10 X 5 = 50 MARKS)**  **(Answer any 10 from the following)** | | | |
| 21. | Cassify aminoacids based on polarity. | CO2 | 5 |
| 22. | Outline the reactions of glycolysis. | CO2 | 5 |
| 23. | Write a note on genetic code. | CO3 | 5 |
| 24. | Explain mutarotation in sugars. | CO2 | 5 |
| 25. | Explain the β-oxidation of fatty acids. | CO2 | 5 |
| 26. | What are essential amino acids? Give example. | CO2 | 5 |
| 27. | What are the six major classes of enzyme in enzyme classification? | CO3 | 5 |
| 28. | What are secondary metabolites? Name any five groups of phyto Compounds. | CO3 | 5 |
| 29. | Give the role of cell wall in food industries. | CO1 | 5 |
| 30. | Write short notes on physical properties of carbohydrates. | CO2 | 5 |
| 31. | Classify vitamins and list their functions. | CO3 | 5 |
| 32. | Describe the secondary structure of proteins. | CO2 | 5 |

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| **PART – C (2 X 15 = 30 MARKS)**  **(Answer any 2 from the following)** | | | | |
| 33. | a. | Describe the structure of DNA. | CO2 | 8 |
| b. | Explain the mechanism of enzyme action with example. | CO3 | 7 |
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| 34. |  | Describe the classification and properties of Carbohydrates. | CO2 | 15 |
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| 35. |  | Explain in detail the Kreb’s cycle and indicate the enzymes and cofactors at appropriate places. | CO2 | 15 |