First Year B.Sc Optometry Degree Examinations - June 2015

CHEMISTRY

Time : 3 hrs   **Max marks : 80**

- **Answer all questions**
- **Draw diagram wherever necessary**

Essay: **(2x15=30)**

1. What is geometrical isomerism. Discuss the methods that can be used to differentiate between geometrical isomers taking the example of maleic and fumaric acids.

2. What are electrophilic addition reactions. Explain with examples.

Short notes   **(5x5=25)**

3. Methods used to purify sols.

4. How will you convert fructose to glucose.

5. Mechanism for sulphonation of benzene.

6. How can you obtain sulpha drug from acetanilide

7. What is partition chromatography. Explain with one example.

Answer briefly   **(10x2=20)**

8. Applications of colloids in medicine.

9. Chemical name and structure of vitamin A

10. Ruff degradation

11. How can you isolate benzene from petroleum.

12. What is meant by racemization.

13. Draw the structure of tertiary butyl carbonium ion.

14. Define Rf value.

15. What are adrenocortical hormones.

16. What is invert sugar.

17. What are the uses of cellulose.

Fill in the blanks   **(5x1=5)**

18. Method used to ascend the aldose series is known as…………………..

19. A substance that stabilizes an emulsion is called ……………

20. The state of hybridization of carbon in methane is …………………..

21. Epimer of glucose is…………………

22. The female sex hormones are called…………………………

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