

P. Pages : 2

Time : Three Hours

**AW - 3158**

Max. Marks : 80

- Notes :
1. Answer **three** question from Section A and **three** question from Section B.
  2. Diagrams and Chemicals equations should be given wherever necessary.
  3. Illustrate your answer necessary with the help of neat sketches.

**SECTION - A**

1. What are enzymes? Explain enzyme specificities. Give Examples. 14

**OR**

2. State the factors influencing enzyme reactions. Give the effect of enzyme concentration on enzyme reactions. 14

3. a) Explain Kreb's Cycle. State energetics in terms of ATP. 8

- b) Explain the terms:- 5

- i) Glycolysis. ii) Pentose Phosphate Pathway (PPP).

**OR**

4. a) Draw Urea Cycle. State its Importance. 8

- b) What do you mean by:- 5

- i) Transamination ii) Oxidative deamination.

5. a) Explain vitamin B<sub>1</sub> in terms of biochemical structure, sources, RDA & deficiency symptoms. 8

- b) Classify the vitamins. Give examples. 5

**OR**

6. a) Draw the structure of vitamin B<sub>12</sub>. State its biochemical role. 8

- b) What are micro & macro minerals. Explain their functions. 5

**SECTION - B**

7. What is BMR? State the factors affecting BMR. 14

**OR**

8. How BMR is measured Clinically. State it's Importance. 14

9. a) State the functions of foods. 8  
b) Explain the RDA's of carbohydrates & Fat. 5

**OR**

10. a) What are the antinutritional factors in foods. 8  
b) State the methods to determine Nutritional Evaluation of proteins. 5
11. a) Explain Beer's Law of photometry. 8  
b) State the techniques of biochemical analysis of foods. 5

**OR**

12. a) Explain the principle & working of spectrophotometer. 8  
b) Differentiate between colorimetry & spectrophotometry. 5

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