



**PAA-21262-N**

Seat No. \_\_\_\_\_

**First Year (Basic) B. Sc. (Nursing) Examination**

**August - 2018**

**Nutrition & Biochemistry**

Time : 3 Hours]

[Total Marks : 75

- Instructions :** (1) Write each section in separate answer book.  
(2) Attempt part of a question at one place.

**SECTION - I (Nutrition) (45 Marks)**

- 1** Long essay : (any **one**) **1×15=15**  
(1) (a) Define vitamins. **2**  
(b) Classification of vitamins. **3**  
(c) Write functions of Vitamin A, sources and **10**  
deficiency of Vitamin A.

**OR**

- (2) (a) What are the principles of cooking ? **5**  
(b) Explain common methods of cooking. **10**
- 2** Write short-notes on following : (any **three**) **5×3=15**  
(1) Measurement of Energy  
(2) Functions of proteins  
(3) Nutritional problems in India  
(4) Water distribution and Water Loss  
(5) What are the sources of Fats ?

- 3** Briefly answer the following : (any **five**) **3×5=15**  
(1) Body Mass Index  
(2) Weaning  
(3) Define water intoxication  
(4) Rickets  
(5) Enlist various dietary source of Zinc  
(6) BMR  
(7) Write any two functions of fat.

**SECTION - II (Biochemistry) (30 Marks)**

- 1** Long essay : (any **one** out of two) **10×1= 10**
- (1) Explain in Detail about TCA cycle, it's energetics and regulation
  - (2) Write in detail about the synthesis and breakdown of "Haem" and the disorders associated with Bilirubin metabolism
- 2** Write notes on : (any **three** out of five) **5×3=15**
- (1) Electrophoresis
  - (2) Glycolysis
  - (3) Urea cycle
  - (4) Protein metabolism
  - (5) Transport of lipids.
- 3** Short answers : (any **five** out of six) **1×5=5**
- (1) Functions of lysosomes
  - (2) Significance of HMP shunt
  - (3) Mention the types of immunoglobulins
  - (4) Define co-enzymes
  - (5) Golgi complex
  - (6) Name the specialized products formed from glycine.
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