

Reg. No. 

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**FNDFNC 361**

**Credit Based Sixth Semester B.Sc. (FND) Degree  
Examination, September 2022  
(2020 – 21 and Earlier Batches)  
NUTRITIONAL BIOCHEMISTRY – II**

Time : 3 Hours

Max. Marks : 80

PART – A

I. Answer **any ten** of the following : **(10×2=20)**

- 1) a) Write the structure of TPP.
- b) Mention any two biological role of copper.
- c) What are essential aminoacids ? Give example.
- d) Give the functions of rRNA.
- e) Define T<sub>m</sub>. How it is related to GC content ?
- f) What is Diuresis ? How it is caused ?
- g) Give any two functions of Vitamin E.
- h) Name the hormones secreted by adrenal medulla.
- i) Give any two biological functions of fluorine.
- j) Write the structure of ATP.
- k) What are incomplete proteins ? Give example.
- l) What are nucleosides ? Give example.

PART – B

II. Answer the following : **(4×15=60)**

- 2) a) Explain  $\alpha$ -helix. **4**
  - b) Give the classification of-aminoacids based on functions. **4**
  - c) Describe prokaryotic translation with a neat diagram. **7**
- OR
- 3) a) Give the classification of aminoacids based on polarity. **5**
  - b) Write a note on peptide bond. **3**
  - c) Explain the classification of proteins based on solubility. **7**

P.T.O.



- 4) a) Explain Watson-Crick model of DNA with a neat diagram. **4**  
b) Give an account on base excision DNA repair. **4**  
c) Describe transcription in prokaryotes. **7**

OR

- 5) a) Explain the Clover-leaf model of tRNA. **5**  
b) Write a note on wobble hypothesis. **3**  
c) Describe DNA replication in prokaryotes. **7**
- 6) a) Explain the biochemical functions of Vit. B1. **4**  
b) Give the biochemical role sodium. **4**  
c) Give an account on biological role and deficiency disorders of Vit. D. **7**

OR

- 7) a) Explain Wald's visual cycle. **5**  
b) Write a note on biochemical role of iron and zinc. **3**  
c) Explain the biological role and deficiency disorder of Vit. B6. **7**
- 8) a) Explain the biochemical functions of Insulin. **4**  
b) Write a note on oxytocin and prolactin. **4**  
c) Describe the biological functions and deficiency disorders of thyroxine. **7**

OR

- 9) a) Explain the functions of testosterone and estrogen. **5**  
b) Write a note on ADH. **3**  
c) Describe the biochemical functions and deficiency disorders of GH. **7**
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