

**M.B.B.S. DEGREE EXAMINATION**  
**FIRST YEAR**  
**PAPER II – BIOCHEMISTRY**  
**MULTIPLE CHOICE QUESTIONS**

**Time: 30 Minutes**

*Q.P. Code: 526056*

**Maximum : 20 Marks**

**Answer All Questions**

**Write one correct answer in the box provided in the Answer Script. No overwriting should be done.**

**III. Multiple Choice Questions:**

**(20 x 1 = 20)**

1. Which amino acid hydroxylation require iron?
  - A) Proline.
  - B) Tyrosine.
  - C) Cysteine.
  - D) Leucine.
  
2. Which of the following analyte analysis require fasting specimen?
  - A) Serum Uric Acid.
  - B) Serum Alkaline Phosphatase.
  - C) Serum Triglycerides.
  - D) Serum Protein.
  
3. The following ions can be quantitatively analyzed using flame photo meter EXCEPT
  - A) Sodium.
  - B) Lithium.
  - C) Calcium.
  - D) Cadmium.
  
4. Which of the following hormones uses cAMP as second messenger?
  - A) Glucagon.
  - B) Atrial Natriuretic Peptide.
  - C) Insulin.
  - D) Estrogen.
  
5. Which of the following syndrome has primary hyper aldosteronism?
  - A) Down syndrome.
  - B) Gilbert syndrome.
  - C) Conn's syndrome.
  - D) Cushing syndrome.

6. Which of the following enzymes uses selenium as cofactor?
- A) Hexokinase.
  - B) Transaminase.
  - C) Ferrochelatase.
  - D) 5' Deiodinase.
7. Which of the following is nonheme iron containing protein?
- A) Cytochrome C<sub>1</sub>.
  - B) Catalase.
  - C) Nitric Oxide Synthase.
  - D) Transferrin.
8. The following anti oxidants are used commercially in food industry EXCEPT
- A) Butylated Hydroxy Toluene (BHT).
  - B) Butylated Hydroxy Anisole (BHA).
  - C) Vitamin – E.
  - D) Vitamin – A.
9. In which organelle does the Aldehyde Dehydrogenase produces the toxic Acetaldehyde
- A) Cytosol.
  - B) Endoplasmic Reticulum.
  - C) Mitochondria.
  - D) Membrane of the Cell.
10. Care should be taken while correcting metabolic acidosis to prevent sudden
- A) Hyperkalemia.
  - B) Hypokalemia.
  - C) Hyponatremia.
  - D) Hypernatremia.
11. High anion gap metabolic acidosis occurs in all of the following conditions EXCEPT
- A) Lactic Acidosis.
  - B) Diabetic Keto Acidosis.
  - C) Renal Tubular Acidosis.
  - D) Salicylate Poisoning
12. Diagnostic criteria for [SIADH- Syndrome of inappropriate anti diuretic hormone secretion] include all, EXCEPT
- A) Hyponatremia (<135mmol/L).
  - B) Urine Sodium (>20 mmol/L).
  - C) Urine Osmolality (>100 mOsm/kg).
  - D) Increased Plasma Osmolality.

13. Post-transcriptional processing of primary transcript mRNA does not include

- A) Poly A – tailing.
- B) 5' Capping.
- C) Removal of Introns.
- D) Proof Reading.

14. Mushroom toxin – Amanitin blocks the enzyme

- A) DNA Polymerase.
- B) RNA Polymerase - II.
- C) RNA Polymerase- I.
- D) RNA Polymerase - III.

15. Anticancer agent methotrexate inhibits the enzyme

- A) Thio Redoxin Reductase.
- B) Dihydro Folate Reductase.
- C) Ribonucleotide Reductase.
- D) Thymidylate Synthase.

16. Enzyme involved in the purine salvage pathway is

- A) Adenine Phospho Ribosyl Transferase.
- B) Phosphor Ribosyl Amidotransferase.
- C) Glycinamide Ribonucleotide Synthetase.
- D) Phospho Ribosyl Synthase.

17. HHH Syndrome includes the following EXCEPT

- A) Homocitrullinuria.
- B) Hyperornithinemia.
- C) Hypo Uricemia.
- D) Hyperammonemia.

18. The first line of defense for trapping Ammonia is conversion of

- A) Glutamate to Glutamine.
- B) Urea Synthesis.
- C) Glycine to Glutathione.
- D) Serine to glycine.

19. Factors causing decreased absorption of calcium include the following EXCEPT

- A) Parathyroid hormone.
- B) Phytic acid.
- C) Oxalates.
- D) Phosphates.

20. Which of the following is a Ferroxidase?

- A) Hemosiderin.
- B) Ferritin.
- C) C Reactive Protein.
- D) Ceruloplasmin.

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