

## MCQ ON VITAMINS

1. Vitamin A or retinal is a

- (A) Steroid    (B) ***Polyisoprenoid compound containing a cyclohexenyl ring***  
(C) Benzoquinone derivative    (D) 6-Hydroxychromane

2.  $\beta$ -Carotene, precursor of vitamin A, is oxidatively cleaved by

- (A)  ***$\beta$ -Carotene dioxygenase*** (B) Oxygenase \\\n(C) Hydroxylase    (D) Transferase

3. Deficiency of Vitamin A causes

- (A) ***Xerophthalmia***    (B) Hypoprothrombinemia  
(C) Megaloblastic anemia    (D) Pernicious anemia

3. Carr-Price reaction is used to detect

- (A) Vitamin A    (B) Vitamin D    (C) ***Ascorbic acid***    (D) Vitamin E

4. The most potent Vitamin D metabolite is

- (A) 25-Hydroxycholecalciferol    (B) ***1,25-Dihydroxycholecalciferol***  
(C) 24, 25-Dihydroxycholecalciferol    (D) 7-Dehydrocholesterol

5. Creatinuria is caused due to the deficiency of vitamin

- (A) A    (B) K    (C) ***E***    (D) D

6. Vitamin K is involved in posttranslational modification of the blood clotting factors by acting as cofactor for the enzyme:

(A) **Carboxylase**      (B) Decarboxylase      (C) Hydroxylase      (D) Oxidase

7. Concentration of pyruvic acid and lactic acid in blood is increased due to deficiency of the vitamin

(A) **Thiamin**      (B) Riboflavin      (C) Niacin      (D) Pantothenic acid

8. Vitamin B1 coenzyme (TPP) is involved in

(A) **Oxidative decarboxylation**      (B) Hydroxylation  
(C) Transamination      (D) Carboxylation

9. Magenta tongue is found in the deficiency of the vitamin

(A) **Riboflavin**      (B) Thiamin      (C) Nicotinic acid      (D) Pyridoxine

10. The pellagra preventive factor is

(A) Riboflavin      (B) Pantothenic acid      (C) **Niacin**      (D) Pyridoxine

11. Niacin or nicotinic acid is a monocarboxylic acid derivative of

(A) **Pyridine**      (B) Pyrimidine      (C) Flavin      (D) Adenine

12. Niacin is synthesized in the body from

(A) **Tryptophan**      (B) Tyrosine      (C) Glutamate      (D) Aspartate

13. Pellagra occurs in population dependent on

(A) Wheat      (B) Rice      (C) **Maize**      (D) Milk

14. Pantothenic acid is a constituent of the coenzyme involved in

(A) Decarboxylation      (B) Dehydrogenation  
(C) **Acetylation**      (D) Oxidation

15. The precursor of CoA is  
(A) Riboflavin (B) Pyridoxamine (C) Thiamin (D) ***Pantothenate***
16. 'Burning foot syndrome' has been ascribed to the deficiency of  
(A) ***Pantothenic acid*** (B) Thiamin (C) Cobalamin (D) Pyridoxine
17. 'Xanthurenic acid index' is a reliable criterion for the deficiency of the vitamin  
(A) ***Pyridoxal*** (B) Thiamin (C) Pantothenic acid (D) Cobalamin
18. Biotin is a coenzyme of the enzyme  
(A) ***Carboxylase*** (B) Hydroxylase (C) Decarboxylase (D) Deaminase
19. Folate deficiency causes  
(A) Microcytic anemia (B) Hemolytic anemia  
(C) Iron deficiency anemia (D) ***Megaloblastic anemia***
20. Niacin can be synthesised in human beings from  
(A) Histidine (B) Phenylalanine (C) Tyrosine (D) ***Tryptophan***
21. Pantothenic acid contains an amino acid which is  
(A) Aspartic acid (B) Glutamic acid  
(C)  $\beta$ -Alanine (D)  ***$\beta$ -Aminoisobutyric acid***
22. Coenzyme A contains a nitrogenous base which is  
(A) ***Adenine*** (B) Guanine (C) Choline (D) Ethanolamine
- 23 . Pyridoxal phosphate is a coenzyme for

- (A) Glycogen synthetase      **(B) Phosphorylase**  
(C) Both (A) and (B)      (D) None of these

24. Pyridoxine deficiency can be diagnosed by measuring urinary excretion of

- (A) Pyruvic acid      (B) Oxaloacetic acid      **(C) Xanthurenic acid** (D) None of these

25. When eggs are cooked

- (A) Biotin is destroyed but avidin remains unaffected  
**(B) Avidin is inactivated but biotin remains unaffected**  
(C) Both avidin and biotin are inactivated  
(D) Both avidin and biotin remain unaffected

26. Chemically, lipoic acid is

- (A) Saturated fatty acid      (B) Unsaturated fatty acid  
(C) Amino acid      **(D) Sulphur containing fatty acid**

27. Deficiency of vitamin B12 can be diagnosed by

- (A) Carr-Price reaction      (B) Ames assay  
(C) Watson-Schwartz test      **(D) Schilling test**

28. Anti-oxidant activity is present in

- (A)  $\beta$ -Carotene**      (B) Retinol      (C) Retinoic acid      (D) All of these

29. Nyctalopia is

- (A) Drying of eyes      (B) Destruction of cornea  
(C) Blindness      **(D) Inability to see in dimlight**

30. Ascorbic acid can reduce

- (A) 2, 4-dinitro benzene      **(B) 2, 6-Dichlorophenol Indophenol**  
(C) 2, 4-dibromobenzene      (D) 2, 6-dibromo benzene

31. Sterilized milk is devoid of

- (A) Vitamin A (B) Vitamin B1      **(C) Vitamin C** (D) Vitamin D

32. Antirachitic vitamin is

- (A) Vitamin A      (B) Vitamin D      (C) Vitamin E      **(D) Vitamin K**

33. Convulsive episodes occur when there is a severe deficiency of:

- (A) Pyridoxine**      (B) Folic acid      (C) Thiamine      (D) Riboflavin

34. Which of the following vitamin is involved in coenzyme function in transaminations?

- (A) Nicotinamide      **(B) Pyridoxine**      (C) Thiamine      (D) Riboflavin

35. During deficiency of thiamine the concentration of the following compound rises in blood and intracellular fluid:

- (A) Glycogen (B) Sugar      (C) Amino acids      **(D) Pyruvic acid**

36. Transketolase activity is affected in

- (A) Biotin deficiency      (B) Pyridoxine deficiency  
(C) PABA deficiency      **(D) Thiamine deficiency**