

## MODULE 9: VITAMINS AND COENZYMES

**Q.1.** Classify the following vitamins into fat or water soluble categories?

- (a) Vitamin A
- (b) Thiamin
- (c) Folate
- (d) Vitamin C
- (e) Vitamin B<sub>12</sub>

**Ans:**

**Fat soluble:** Vitamin A

**Water soluble:** Thiamin, Folate, Vitamin C, Vitamin B<sub>12</sub>

**Q.2.** State the cofactor associated and function of the following vitamins?

- (a) Lipoic acid
- (b) Nicotinic acid
- (c) Pyridoxine
- (d) Pantothenic acid

**Ans:** The rate of reaction is enhanced by many factors. Active site assists by:

- (a) Lipoamide
- (b) Nicotinamide adenine dinucleotide (NAD<sup>+</sup>); Nicotinamide adenine dinucleotide phosphate (NADP<sup>+</sup>);
- (c) Pyridoxal phosphate
- (d) Coenzyme A

**Q.3.** State what do these abbreviations stand for? Name corresponding vitamins

- (a) FAD
- (b) NADP<sup>+</sup>
- (c) THF
- (d) TPP

**Ans:**

- (a) FAD: Flavin adenine dinucleotide; Vitamin B2 (riboflavin)
- (b) NADP<sup>+</sup> : Nicotinamide adenine dinucleotide phosphate; Nicotinic acid
- (c) THF: Tetrahydrofolic acid; Folic acid
- (d) TPP: Thiamine pyrophosphate; Vitamin B1 (Thiamine)

**Q.4.** Name the vitamins associated with the following diseases?

- (a) Beriberi
- (b) Scurvy
- (c) Pellagra
- (d) Night blindness

**Ans:** (a) Thiamine                      (b) Vitamin C                      (c) Niacin                      (d) Vitamin A