

Please check whether you have got the right question paper.

- N.B:
1. Answer all the questions.
 2. All questions carry equal marks.

Q.1 Answer the following (Any Three)

(15)

- a) Harmful side-effects of using anabolic steroids.
- b) Selection criteria for a good quality Whey Protein. Give the best timing of its use.
- c) Enlist the type and give ideal composition of the Weight Gainer supplement to be recommended for an ectomorph underweight client with busy schedule, who is unable to eat frequently.
- d) Name the amino acid supplement you would prescribe for a person with poor energy levels during exercise with dosage and timing.
- e) Explain five key differences in the composition & use of a MRP and Weight Gainer.

Q.2 Discuss the following (Any Three)

(15)

- a) Two major benefits of CoQ10 (Coenzyme Q10) supplements. Give the ideal dosage and timing for an endurance athlete.
- b) Role of vitamin and mineral in management of osteoporosis. Explain the ideal composition with quantity of these vitamin/minerals in a supplement.
- c) Give two benefits of Omega 3 fatty acid. Enlist the omega-3 supplement for a vegetarian male overweight client and recommend the ideal dosage and timing.
- d) Explain and justify which individuals will have higher requirement for antioxidant vitamins C supplement. Give dosage and timing.
- e) Primary benefit/function of the following supplements
 - I. Vitamin B2 (Riboflavin)
 - II. Iron
 - III. Vitamin K
 - IV. Beta-carotene
 - V. Biotin

Q.3 Answer the following (Any Three)

(15)

- a) Three important benefits of creatine. Describe the single dose of creatine monohydrate and its ideal timing of use.
- b) Five differences between creatine monohydrate and advanced forms of creatine.
- c) Five precautions to be taken while using caffeine-based fat burners.
- d) Five mechanisms of action of Herbal Testosterone-boosters.
- e) What is the one primary benefit of the following supplements?
 - I. Beta-alanine
 - II. Bioflavonoid
 - III. Nettle root extract
 - IV. Shilajit
 - V. Grape seed extract

Q.4 Explain the following (Any Five)

(15)

- a) What are the three primary functions of Arginine?
- b) What is the 'ideal concentration' and 'preferred sources' of carbohydrates in a sports drink?
- c) What is prohibited list? When is the list updated and when does it come into effect?
- d) Give the names of any three Herbal Testosterone-boosters.
- e) Name the active component(s) in the following herbs:
 - I. Turmeric
 - II. Milk Thistle
 - III. Grape seed extract
- f) Which are the three forms of protein supplements?
- g) Name three vegan proteins available in supplements.
- h) Name three supplements that act as Insulin sensitisers.
