

TILAK MAHARASHTRAVIDYAPEETH, PUNE
M.SC. IN NUTRITION & FOOD SCIENCE
EXAMINATION : DECEMBER 2023
FOURTH SEMESTER

Sub. : Sports Nutrition & Fitness Nutrition (M.Sc. CB-413)

Date: 07/12/2023

Total marks: 60

Time: 2.00 pm to 4.30 pm

Instructions: 1) All questions are compulsory.
 2) Figures to the right indicate full marks.

Q. 1 Select the correct alternative. (10)

- 1) Which among the following is the purest form of whey?
 - a) Whey concentrate
 - b) Whey isolate
 - c) Raw whey
 - d) Whey hydrolysate
- 2) BCAAs include ____
 - a) Isoleucine
 - b) Valine
 - c) Lysine
 - d) Both a & b
- 3) ____ helps in fat metabolism.
 - a) Carnitine
 - b) Choline
 - c) Creatine
 - d) Both a & b
- 4) Prolonged use of carbohydrate loading can lead to
 - a) Hypertension
 - b) Blood thickening
 - c) Type II DM
 - d) All of the above
- 5) _____ is aerobic form of sport.
 - a) swimming
 - b) basketball
 - c) football
 - d) high jump
- 6) In creatine loading phase, ____ of creatine is suggested a week prior to the competition.
 - a) 50g/d
 - b) 10g/d
 - c) 20g/d
 - d) 70g/d
- 7) ____ is a sports psychology technique that helps an athlete to cope with the intense pressure that comes from competition.
 - a) Anxiety relief technique
 - b) Rehabilitation
 - c) Mental toughness
 - d) Motivation & team building
- 8) Blood doping is done with the help of _____.
 - a) EPO
 - b) Blood transfusion
 - c) HIF Factor
 - d) All of the above
- 9) ____ refers to elevated blood sugar levels or above 180 mg/dL.
 - a) Hyperglycemia
 - b) Hypoglycemia
 - c) Isoglycemia
 - d) None of the above
- 10) Excess caffeine intake can lead to
 - a) Insomnia
 - b) Arrhythmia
 - c) Tachycardia
 - d) All of the above

Q. 2 Answer the following questions. (Any Two)

(30)

- 1) What are sports drinks? Give its types.
Also, elaborate on the importance of hydration in athletes.
- 2) Give the nutritional requirements of a power (non-endurance) athlete.
- 3) Plan a day's diet (pre-season) for a 27 year old badminton player; height 6'2; weight 76; Diet- Non Vegetarian (No need of calculations).
Training timings: 5am-6:30 am & 6pm to 7:30 pm.
Also, suggest dietary guidelines for the same.

Q. 3. Write a Short Note (Any Four)

(20)

- 1) Ergogenic Aids
- 2) Importance of supplementation in athletes
- 3) Benefits of a personalized diet to athlete
- 4) Sports Injuries
- 5) Types of Whey supplementation
- 6) Benefits of sports psychology