Q.1. With the help of food pyramid, describe the macro and micro nutrient requirements in athletes.

    OR

    Explain the concept of carbo-loading and choice of nutrients during pre and post events.

(10)

Q.2. Can the field of sports science be regarded as a multi-disciplinary field? Explain how athletic performance gets affected through multiple disciplines.

    OR

    Describe how sports nutrition has evolved throughout the years.

(10)

Q.3. With the help of a sketch diagram, explain the neuroendocrine system during exercise.

    OR

    How does the cardiorespiratory system function during exercise? Do different exercises lay different oxygen demand? Explain briefly.

(10)

Q.4. What are Ergogenic aids? List different nutritional aids in use for sports persons.

    OR

    What are hypokinetic disorders? Briefly describe a few with suggested training regime.

(2+8=10)
Q.5. Explain the factors affecting the nutritional requirements for junior athletes and female athletes.  

(5+5=10)

Q.6. Differentiate between:  
(a) Health and skill related fitness  
(b) Metabolic and haemodynamic responses  

(5+5=10)

Q.7. What are the consequences of dehydration? List the pre event hydration and during event hydration recommendations.  

(10)

Q.8. “The energy requirements largely depends on the body size, level of physical activity and energy expenditure”? Justify by providing the requirements for various group events/physical activities.  

(10)

Q.9. Describe the following terms (any five):  
(a) Female athlete triad  
(b) Skill related fitness  
(c) Recovery phase  
(d) Thermoregulation  
(e) Hitting the wall  
(f) Delayed onset muscle soreness (DOMS)  
(g) Fast glycolytic muscle fibres  

(5x2=10)

Q.10. A Fill in the blanks:  
(i) The primary fuel for exercise is __________.  
(ii) Foods that lower the blood glucose levels are known as __________.  
(iii) Endurance athletes rely mostly on __________ energy systems.  
(iv) Glycogen is stored in __________ and __________.  
(v) Cardiovascular endurance is a __________ related fitness.  

B State True or False:  
(i) Sports supplements should be taken alongwith diet.  
(ii) Type I muscles are more adapted for aerobic work.  
(iii) A high protein, low carbohydrate meal is recommended as a post event meal.  
(iv) During anaerobic exercise the haemodynamic response restricts the blood movement and increases the pressure.  
(v) Fat should be consumed more during power events to provide more energy.  

(5+5=10)