

**PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)**

**BSc DEGREE EXAMINATION MAY 2026
(Sixth Semester)**

Branch – **NUTRITION, FOOD SERVICE MANAGEMENT & DIETETICS**

MAJOR ELECTIVE COURSE – II PERFORMANCE NUTRITION

Time: Three Hours

Maximum: 75 Marks

SECTION-A (10 Marks)

Answer **ALL** questions

ALL questions carry **EQUAL** marks

(10 × 1 = 10)

Module No.	Question No.	Question	K Level	CO
1	1	Which one of the following is classified as a skill-related component of physical fitness? (i) Muscular strength (ii) Flexibility (iii) Speed (iv) Body composition	K1	CO1
	2	The organization ASOIF represents: (i) Winter Olympic sports (ii) Summer Olympic international federations (iii) National federations only (iv) School sports	K2	CO1
2	3	Bioelectrical Impedance Analysis (BIA) assesses body composition through the use of: (i) X-rays (ii) Sound waves (iii) Electrical current (iv) Water pressure	K1	CO2
	4	The term “muscle atrophy” refers to: (i) Growth of muscle (ii) Increase in strength (iii) Decrease in muscle size (iv) Bone growth	K2	CO2
3	5	Carbohydrate loading is mainly used for: (i) Short sprint events (ii) Long-duration endurance events (iii) Weight loss (iv) Flexibility	K1	CO3
	6	Fasting may result in: (i) Increased fat breakdown (ii) Increased glycogen storage (iii) Immediate muscle growth (iv) Improved sprint speed	K2	CO3
4	7	Iron plays a vital role in: (i) Oxygen transport (ii) Fat digestion (iii) Vision (iv) Hearing	K1	CO4
	8	Reduced bone density in female athletes may increase the risk of: (i) Hair growth (ii) Weight gain (iii) Fever (iv) Stress fractures	K2	CO4
5	9	An appropriate post-game meal should ideally include: (i) Carbohydrates and protein (ii) Only fat (iii) Only vitamins (iv) No fluids	K1	CO5
	10	A sports drink typically contains: (i) Alcohol (ii) Carbohydrates and electrolytes (iii) Only caffeine (iv) Only fat	K2	CO5

Cont...

SECTION - B (35 Marks)Answer **ALL** questions**ALL** questions carry **EQUAL** Marks

(5 × 7 = 35)

Module No.	Question No.	Question	K Level	CO
1	11.a.	Explain the benefits of aerobic exercises with suitable examples.	K2	CO1
		(OR)		
	11.b.	Outline the objectives and functions of sports authority of India.		
2	12.a.	Illustrate the acute effects of exercise on the cardiovascular system.	K2	CO2
		(OR)		
	12.b.	Describe bone density assessment and its significance in athletes.		
3	13.a.	Summarize the macronutrient requirements of athletes.	K3	CO3
		(OR)		
	13.b.	Compare protein metabolism during endurance and resistance exercise.		
4	14.a.	Apply the role of calcium and vitamin D in preventing bone injuries in athletes.	K3	CO4
		(OR)		
	14.b.	Suggest nutrition strategies to boost immune function for sports person.		
5	15.a.	Design a protein-rich meal plan for a strength-trained athlete.	K4	CO5
		(OR)		
	15.b.	Analyse the benefits and risks of consuming energy drinks before competition.		

SECTION - C (30 Marks)Answer **ANY THREE** questions**ALL** questions carry **EQUAL** Marks

(3 × 10 = 30)

Module No.	Question No.	Question	K Level	CO
1	16	Classify the components of fitness.	K2	CO1
2	17	Explain the types of muscle tissue and their characteristics.	K2	CO2
3	18	Analyse how exercise intensity affects fat oxidation in an endurance athlete.	K4	CO3
4	19	Apply principles of fluid balance to plan hydration before, during, and after exercise.	K3	CO4
5	20	Prepare a complete sports nutrition plan including pre-game, during-game, and post-game meals.	K5	CO5

Z-Z-Z

END