# PSG COLLEGE OF ARTS & SCIENCE (AUTONOMOUS)

#### **MSc DEGREE EXAMINATION MAY 2018**

(Third Semester)

#### Branch – CLINICAL NUTRITION AND DIETETICS

# **CORE ELECTIVE-II HEALTH & FITNESS**

Time: Three Hours

Maximum: 75 Marks

### **SECTION -A (30 Marks)**

Answer ALL questions

ALL questions carry EQUAL Marks

 $(5 \times 6 = 30)$ 

a Explain the principle of hydrostatic weighing and BOD – POD techniques of body composition assessment.

OR

- b Define physical fitness. What are the objectives of maintaining physical fitness?
- 2 a How does aerobic and anaerobic exercises affect skeletal, cardiovascular and respiratory activity?

OR

- b Define energy balance. How to achieve energy balance through physical activity?
- 3 a Write short note on ergogenic aids in sports.

OR

- b Explain on high altitude nutrition.
- 4 a Explain the association between oxidative stress and antioxidants.

OR

- b List the foods that may increase oxidative stress and foods that counteract the oxidative stress.
- 5 a How does the psychoactive and vasoactive substances affect health?

OR

b List the adverse effects of smoking and alcohol and drug addiction on sports performance.

## **SECTION -B (45 Marks)**

Answer any **THREE** questions

ALL questions carry EQUAL Marks

 $(3 \times 15 = 45)$ 

- 6 a Differentiate WHR and waist height ratio.
  - b How are they related to physical fitness and health?
- Explain the role of carbohydrate, protein and fat during aerobic and anaerobic exercises.
- 8 Write briefly on pre carbohydrate loading and significance of fluid intake for sports personnel.
- 9 Explain the role of stress management techniques in oxidative stress during exercise.
- Explain the consequences of drugs misuse and abuse.

  Differentiate addiction and dependence. What are the laws regulating / governing drug addiction in sports?