C 2707

Name.....

Reg. No.....

FOURTH SEMESTER P.G. DEGREE EXAMINATION, APRIL 2021

(CCSS)

M.Sc. Human Physiology

PSG 4E 07—SPORTS PHYSIOLOGY

(2019 Admissions)

Time : Three Hours Maximum : 80 Marks

Draw neat labeled diagrams wherever necessary.

I. Long Essay. Answer any *four* :

1 Explain the acute and chronic effects of anaerobic training on the endocrine system.

2 Describe external factors that influence adaptations to acute and chronic aerobic exercise including altitude, sex, and blood doping and detraining.

3 Describe in details the respiratory changes during exercise.

4 Describe the basic energy systems available to supply ATP during exercise.

5 Describe Biomechanical Factors in Human strength.

6 Discuss the acute and chronic effects of anaerobic training on the cardiovascular system.

(4 × 10 = 40 marks)

II. Write short notes on any *eight* :

7 Exercise's effects diabetic patients.

8 Recommended lipid intake.

9 Lactate production and utilization

10 Endurance exercise.

11 Factors contributing to human strength and power.

12 Cellular manifestations of fatigue.

13 Recommended intake of carbohydrate for a sedentary adult person.

14 Female athlete triad.

15 Mention the cause of increasing pulmonary ventilation.

16 VO2 Max.

(8 × 5 = 40 marks)

C 2705

Name.....

Reg. No.....

FOURTH SEMESTER P.G. DEGREE EXAMINATION, APRIL 2021

(CCSS)

M.Sc. Human Physiology

PSG 4E 05—DIET AND NUTRITION

(2019 Admissions)

Time : Three Hours Maximum : 80 Marks

I. Long Essay Answer any *four* :

1 Explain the sources, daily requirement, physiological functions and deficiency manifestation of proteins.

2 Describe the nutritional importance of Vitamin D under the following headings : A) Source, B) Daily requirements, C) Physiological functions, D) Deficiency manifestations.

3 Describe the concept of diet planning. What are the needs of diet planning, and explain the factors to be considered while planning diet ?

4 Describe the different methods of food storage with their merits and demerits.

5 Explain the concept of food habits and food selection. Describe the various factors influencing food selection and its impact on personal health.

6 Describe the different types of food adulteration. Explain the methods to detect food adulteration and to prevent food adulteration.

(4 × 10 = 40 marks)

II. Short essays Write short notes on any *eight* :

7 Nutrition importance of iron.

8 Vitamin C deficiency.

9 Diet planning for elderly people.

10 Causes and manifestations of vitamin K deficiency.

11 Protein energy malnutrition.

12 Balanced diet.

13 Nutritional importance of carbohydrates.

14 Influence of culture and religion on food selection.

15 Sources and deficiency symptoms of vitamin B12.

16 Effect of heat on food.

(8 × 5 = 40 marks)

C 2704

Name.....

Reg. No.....

FOURTH SEMESTER P.G. DEGREE EXAMINATION, APRIL 2021

(CCSS)

M.Sc. Human Physiology

PSG 4C 15—ADVANCES IN NEUROSCIENCES

(2019 Admissions)

Time : Three Hours Maximum : 80 Marks

Draw neat labelled diagrams wherever needed.

I. Long essay: answer any *four* :

1 Describe the physiological basis of learning and memory. Add a note on different types of memory loss.

2 Explain the functions of basal ganglia. Describe the causes, symptoms and management of Parkinsonism.

3 Define Stress. Explain the impact of stress on health and add a note on non-pharmacological management of stress.

4 Describe the psycho physiology of consciousness.

5 Describe Roger Sperry's experiments on split brain and the conclusions drawn from this experiment.

6 Define Stress. Explain the impact of stress on various organ systems. Add a note on stress relieving mechanism.

(4 × 10 = 40 marks)

II. Write short notes on any *eight* :

7 Alcoholism.

8 Management of depression.

9 Ischemic stroke.

10 Mood elevators.

11 Clinical features of hemisection of spinal cord.

12 Electroencephalogram and its clinical uses.

13 Theories of sleep.

14 Neurotrophic factors.

15 Therapeutic uses of tissue transplant.

16 Role of limbic system in emotion.

(8 × 5 = 40 marks)