

M.Sc. 2nd Semester Examination, 2023

HUMAN PHYSIOLOGY

PAPER — PHY-202.1 & 202.2(Old)

Full Marks : 40

Time : 2 hours

The figures in the right hand margin indicate marks

Candidates are required to give their answers in their own words as far as practicable

PHY-202.1

[*Marks : 20*]

*(Community Health : Exercise Physiology
and Mass Fitness)*

GROUP — A

Answer any **two** questions from the following : 2 × 2

1. What do you mean by heat syncope ? 2

(Turn Over)

2. What is high altitude pulmonary edema ? 2
3. What do you understand by “eustress” and “distress” ? 2
4. What is range of motion (ROM) ? 2

GROUP – B

Answer any **two** questions from the following :

5. State the principles of anthropometry for ergonomic design. 4 × 2
4
6. Describe the exercise prescription for the patient with Parkinson’s disease. 4
7. Discuss different common mechanical injuries in workplace. Mention some safeguards against mechanical injuries. 3 + 1
8. State about the pathophysiology of Coal worker’s Pneumoconiosis (CWP). 4

GROUP – C

Answer any one question from the following : 8×1

9. (a) Describe the anaerobic energy release mechanism during muscular activity.
- (b) Mention different benefits of physical fitness activity. $5 + 3$
10. (a) What is body composition ?
- (b) How do you assess body composition of a human under water weighing method ?
- (c) What is fat free mass ? $2 + 5 + 1$

PHY-202.2

[Marks : 20]

GROUP – A

Answer any two questions from the following :

1. What is sarcopenia ? 2×2
2
2. What are orexigenic peptides ?
2

3. Mention two phyto-nutrients that can reduce aging related macular degeneration. 2
4. Mention the objectives of Applied Nutrition Programme. 2

GROUP – B

Answer any two questions from the following :

4 × 2

5. Discuss the role of leptin in the regulation of energy balance. Mention the role of orlistat in weight management. 2 + 2
6. Write the symptoms of iron deficiency anemia. Mention the stages of iron deficiency anemia. 2 + 2
7. Mention the causes of anemia in elderly. What are the causes and symptoms of iron overload? 2 + 2
8. Write a short note on Vitamin A prophylaxis programme. What are the objectives of the programme. 2 + 2

GROUP – C

Answer any **one** question from the following :

8 × 1

9. Discuss the mechanism of action of adiponectin. Discuss the merits and demerits of Atkins diet in weight management. What is chronic energy deficiency ? 3 + 3 + 2
10. What do you understand by physiological aging ? Mention the causes of obesity among elderly people. What are the primary causes of malnutrition in the elderly population ? 2 + 3 + 3
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