

( 4 )

7. What are the factors affecting nutrition in the elderly? Mention the risk factors for geriatric malnutrition. 2+2
8. What are the best practices in Anganwadi Services Scheme under ICDS programme? Mention some strategies to prevent malnutrition at the community level. 2+2

**GROUP—C**

Answer *any one* question : 8×1=8

9. What is physiological and pathological ageing? Give examples of two nutrients that can be recommended in the geriatric diet to prevent macular degeneration. Mention the problems associated with zinc deficiency in elderly. What is the importance of calorie restricted diet in old age? 2+2+2+2
10. Write a note on leptin receptors. “Lack of functional leptin receptors results in early-onset obesity”– Explain this statement. Discuss the role of bariatric surgery in management of obesity. 3+3+2

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**2024**

**M.Sc. 2nd Semester Examination**

**HUMAN PHYSIOLOGY**

**PAPER : PHY-202**

*Full Marks : 40*

*Time : 2 hours*

Answer **all** questions.

*The figures in the right-hand margin indicate marks.*

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

*Illustrate the answers wherever necessary.*

**SECTION-A**

**PAPER : PHY-202.1**

**( Community Health : Exercise, Physiology & Mass Fitness )**

**GROUP—A**

Answer *any two* questions : 2×2=4

1. What are the absolute contradictions for stress testing in cardiac patients. 2

( 2 )

2. Mention the hematological adaptation at high altitude. 2
3. Write on the ATP-PC system. 2
4. Write briefly on 'Wind chill effect'. 2

**GROUP—B**

Answer *any two* questions : 4×2=8

5. Describe briefly the exercise prescription for pregnancy. 4
6. Describe the cardiovascular responses to exercise in hot environment. 4
7. Write brief notes on 'heat syncope' and 'trench foot'. 2+2
8. Write briefly on the different ways of acquiring chemical hazards. 4

**GROUP—C**

Answer *any one* question : 8×1=8

9. What do you mean by five levels of body composition? Describe the method for assessing body composition by densitometry. 3+5

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( Continued )

( 3 )

10. Classify silicosis according to the severity of the disease. State some specific stressors that affect women in occupation. Describe the pathophysiology of coal worker's pneumoconiosis. 2+2+4

**SECTION-B**

**PAPER : PHY-202.2**

**( Community Health : Metabolic Disorder & Life Style Management )**

**GROUP—A**

Answer *any two* questions : 2×2=4

1. Write the symptoms of iron deficiency anemia. 2
2. What are the objectives of Mid-day meal programme? 2
3. Define leptin resistance. 2
4. What is sarcopenia? 2

**GROUP—B**

Answer *any two* questions : 4×2=8

5. How does dietary factors affect iron bioavailability? What is koilonychia? 2+2
6. Discuss the mechanism of action of sibutramine and orlistat in obesity management. What is Agouti related protein (AgRP)? (1+1)+2

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( Turn Over )