

2022

M.Sc.

2nd Semester Examination

HUMAN PHYSIOLOGY

PAPER—PHY-202

Full Marks : 50

Time : 2 Hours

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

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

*Illustrate the answers wherever necessary.*

**UNIT-202.1 COMMUNITY HEALTH :EXERCISE  
PHYSIOLOGY AND MASS FITNESS**

**Group-A**

Answer any two questions. 2×2

1. Write about 'ATP-PC system'. 2

2. Write briefly on "wind chill effect". 2
3. What are 'asbestos bodies' and 'ferruginous bodies'? 1+1
4. What is "Caplan's syndrome"? 2

### Group-B

Answer any *two* questions. 2×4

5. Describe different components of health related fitness. 4
6. How can you prevent 'Bagassosis lung disease'? 4
7. Write a brief note on "heat cramps" and "trench foot". 2+2
8. Write about the benefits of static exercise. 4

### Group-C

Answer any *one* question. 1×8

9. (a) Describe how "responsibility" and "control" influences occupational stress.
- (b) State about some particular stressors that affect women in occupation.  $(2\frac{1}{2}+2\frac{1}{2})+3$
10. (a) Why silicosis patient are susceptible to tuberculosis?

- (b) Differentiate different types of silicosis diseases.
- (c) Explain how amphibolic asbestos fibers induce formation of pleural plaques in lung interstitial space? 2+2+4

## UNIT-202.2 COMMUNITY HEALTH : ERGONOMICS AND OCCUPATIONAL HEALTH

### Group-A

Answer any *two* questions. 2×2

1. What are orexigenic peptides? 2
2. Why are soya isoflavones recommended in the diet of elderly? 2
3. Mention the beneficiaries of mid-day-meal programme. 2
4. What are the symptoms of iron deficiency anemia? 2

### Group-B

Answer any *two* questions. 2×4

5. Discuss the role of Neuropeptide Y(NPY) in energy balance? What is a db/db mice? 3+1

6. Mention the beneficiaries and objectives of National Nutritional Anemia Prophylaxis Programme (NNAPP)? 2+2
7. What is physiological aging? Mention the causes of osteoporosis in elderly. 1+3
8. Mention the steps for management of iron deficiency anemia at the community level. 4

### Group-C

Answer any *one* question. 1×8

9. Describe briefly about the adipocyte factors associated with etiology of obesity. Mention the functions of adiponectin. Discuss about the merits and demerits of bariatric surgery in management of obesity. State the mechanism of action of orlistat. 3+2+2+1
10. Why a calorie restricted diet is recommended for aged people? Mention the factors affecting nutrition in elderly. What are the biomarkers and haematological indices of iron deficiency anemia? Discuss the potential role of NaFeEDTA in iron fortification. 2+2+2+2

[ *Internal Assessment - 10 Marks* ]