

M.Sc. 3rd Semester Examination, 2023

PHYSIOLOGY

(Human Physiology)

PAPER – PHY-304.1 & 304.2(CBCS)

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

PAPER – PHY-304.1

[Marks : 20]

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

1. How do higher pollen concentrations in the air due to climate change impact health ?

2 × 2

2

(Turn Over)

2. What is meant by waste to energy conversion? 2
3. How does epidemiology help in the improvement of health? 2
4. Mention the exogenous sources of CO. 2

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

5. What is meant by Ozone depletion? Write a brief note about earth's natural greenhouse effect. 4×2
1 + 3
6. Briefly describe the 'Iceberg Concept' of disease. Mention the biological hazards responsible for disease development. 2 + 2
7. What are the major environmental concerns related to landfill? What do you understand by ecological sanitation? $2 + 2$
8. Discuss the role of Carbon Monoxide (CO) poisoning on haemoglobin and other protein binding? 2 + 2

C. Answer any *one* question from the following : 8 × 1

9. What is puberty ? Mention four major changes observed in girls during puberty. Discuss the mechanism of mercury toxicity with special reference to mercury-thiol binding. 2 + 2 + 4

10. Write down the common steps in establishing a relationship between exposure and disease. How can you measure point of prevalence ? Mention the difference between sewage and sludge. Define co-composting ? 3 + 1 + 2 + 2

PAPER — PHI-304.2

[Marks : 20]

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

1. Define adolescence and iatrogenic infection. 1 + 1

2. What complications may arise during delivery and postpartum conditions of mother? 2
3. What is endometriosis? Mention its causes. 1 + 1
4. What is savior sibling? When is the bipotential gonadal ridge found during fetal development. 1 + 1

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

5. Write down briefly the genetic control of male sex determination. 4×2 4
6. Discuss the causes of subfertility in women. Mention the symptom of pelvic inflammatory disease. 2 + 2
7. Describe the treatment protocol of menopausal complications through HRT system. 4

8. What are meant by 'mental' growth and development ? What is placenta previa ? Define Miscarriage. 2 + 1 + 1

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

- 8 × 1
9. What is puberty ? Mention four major changes observed in girls during puberty. Discuss the socio-economic factors associated with STI. Briefly describe the different steps of spermatogenesis. 1 + 2 + 2 + 3
10. Briefly mention the diagnosis process adopted for ectopic pregnancy. Which medicines are prescribed for the treatment of endometriosis. Define "Near-miss" according to WHO. Describe briefly the neonatal complications. 2 + 2 + 1 + 3

[Internal Assessment – 10 Marks]
