

**Total Pages—6 PG/IIIS/PHY/304.1 & 304.2/24
(CBCS)**

M.Sc. 3rd Semester Examination, 2024

PHYSIOLOGY

(Human Physiology)

PAPER – PHY-304.1 & 304.2

Full Marks : 50

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

GROUP – A

Answer any two questions from the following :

$2 \times 2 = 4$

1. What is meant by global warming?

2

(Turn Over)

2. Briefly explain the causes of diseases development. 2
3. What is E-waste ? 2
4. Mention some cerebral injuries in CO poisoning. 2

GROUP – B

Answer any two questions from the following :

4 × 2 = 8

5. Write down full form of IPCC. Briefly explain the interrelationship between climate and life on earth. 1 + 3
6. Write down the consequences of disease development due to external and internal environment. How could you calculate case fatality rate ? 3 + 1
7. Discuss briefly about the merits and demerits of landfill ? What are mega landfills ? 3 + 1
8. Discuss the effects of binding of CO with haemoglobin and cytochromes. 2 + 2

GROUP – C

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

$$8 \times 1 = 8$$

9. Write briefly on the impact of climate change on vector-borne diseases. Name the tick-borne and flea-borne diseases. What is climate science literacy ?

$$4 + (1 + 1) + 2$$

10. Discuss about the absorption, distribution, metabolism and causes of toxicity of different types of mercury. Discuss the mechanism of methyl mercury toxicity. What do you understand about mercury-thiol binding ?

$$3 + 3 + 2$$

PAPER : PHY-304.2

GROUP – A

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

$$2 \times 2 = 4$$

11. Explain the 'emotional' and 'social' domains of growth and development in human.

$$1 + 1$$

12. Write down the causes and symptoms of menopause. 1 + 1
13. What is savior sibling ? What is spermiogenesis ? 1 + 1
14. What is “three delays model” for the safety of a mother’s health ? 2

GROUP – B

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

$4 \times 2 = 8$

15. State the physical changes observed in girls due to onset of puberty. 4
16. “Age at menopause has remained constant while life expectancy has increased” –Justify the statement. Write about the low-birth-weight symptoms of a new born baby. 3 + 1

17. Discuss briefly about the causes of polycystic ovarian symptom. What are the underlying reasons for maternal mortality ? $2 + 2$
18. Describe the steps of spermatocytogenesis with different maturation phases of a spermatid. $2\frac{1}{2} + 1\frac{1}{2}$

GROUP – C

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

$$8 \times 1 = 8$$

19. Write on situation of 'low self-esteem' and 'social rejection' during adolescence of a human being. What are the outcomes of depression in adolescence ? Mention the role of antenatal clinics in preventing STI. What is pelvic inflammatory disease ? $3 + 1 + 2 + 2$
20. Write down the symptoms related to hormone deficiency during postmenopausal condition.

(6)

What types of physiological changes are observed during menopause ? Describe the different undifferentiated structures during the first 6 weeks of gestation. 2 + 3 + 3

[Internal Assessment – 10 Marks]
