



'সমানো মন্ত্র: সমিতি: সমানী'

UNIVERSITY OF NORTH BENGAL

B.Sc. Honours Part-III Examination, 2022

PHYSIOLOGY

PAPER-VIII

Time Allotted: 4 Hours

Full Marks: 100

The figures in the margin indicate full marks.

GROUP-A

Answer Question No.1 and any *two* from the rest

1. Write short notes on any *two* of the following: 5×2 = 10
 - (a) Diet prescription for peptic ulcer patients.
 - (b) IVF
 - (c) Immunization
 - (d) Structure and function of placenta.

2.
 - (a) What is oogenesis? 2
 - (b) Describe with diagram the process of oogenesis mentioning the role of LH, FSH and estradiol. 8
 - (c) Describe briefly the basic principle of immunological detection of pregnancy. 10

3.
 - (a) Discuss the development of urinogenital system in human fetus with suitable diagram. 8
 - (b) Discuss the changes that occur in human body after birth. 6
 - (c) Discuss the peculiarities of fetal circulation. 6

4.
 - (a) What is pulse polio immunization? Mention its strategies for Global Polio Eradication Initiative. 3+3
 - (b) Discuss the hazards of overpopulation and your knowledge to overcome the explosion of overpopulation. 10
 - (c) What are the basic principles of epidemiological survey? 4

5. Describe the causes and symptoms of the following disease: 5×4 = 20
 - (a) Osteomalacia
 - (b) Rickets
 - (c) Filaria
 - (d) Viral Hepatitis.

6. (a) Why milk secretion does not occur during pregnancy but occurs after parturition? 4
(b) What is suckling reflex? Describe the hormonal role of 'milk ejection' and parturition. 2+8
(c) Mention different phases of estrous cycle. 3
(d) Briefly mention any two tests for ovulation. 3

GROUP-B

Answer Question No. 7 and any two from the rest

7. Write short notes on any *two* of the following: 5×2 = 10
(a) ACU
(b) Transgenic animal
(c) Paracetamol
(d) Autoimmune diseases.
8. (a) Prepare a balanced diet chart of non-vegetarian male college student. 8
(b) What do you mean by diet therapy? 4
(c) Prepare a diet prescription of peptic ulcer and gout patients. 8
9. (a) Briefly describe the pathophysiological significance of the following blood constituents: $2\frac{1}{2} \times 4 = 10$
(i) Glucose (ii) Urea (iii) Bilirubin (iv) Ketone bodies
(b) Write notes on the following: 5+5 = 10
(i) Forensic medicine and DNA technology
(ii) Liver function tests and their significances.
- 10.(a) Describe the effect of xenobiotics on human health. 4
(b) Write brief notes on LD₅₀ and ED₅₀. 4
(c) State the mechanism of action of ethanol in human body. 6
(d) Write brief description on isotope in diagnostic physiology. 6
- 11.(a) Write the names of essential amino acids. Why are they essential? 2+2
(b) Describe the health promoting effects of lipid. 6
(c) Describe the process of absorption and transport of iron in humans. 10
12. Explain the following: 5×4 = 20
(a) rDNA technology
(b) Hybridoma technology
(c) ELISA
(d) Vector.

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