

B.Sc./4th Sem (H)/PHYS/24(CBCS)/New

2024

4th Semester Examination

PHYSIOLOGY (Honours)

Paper : C 9-T

(Physiological Responses Environment and Drugs)

(New Syllabus)

[Revised Syllabus, w.e.f. Session 2022-23]

[CBCS]

Full Marks : 40

Time : Two Hours

The figures in the margin indicate full marks.

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

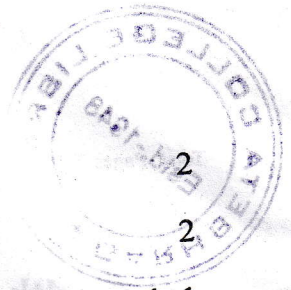
Group - A

Answer any *five* of the following questions : $2 \times 5 = 10$

1. What is complete agonist? 2
2. Define primary, secondary and tertiary pollutants with examples. 2
3. What is therapeutic index? 2

P.T.O.

(2)



4. What is TD50? 2
5. What is frost bite? 2
6. What are diuretics? Give example. 1+1
7. What is bio-magnification? 2
8. What are the differences between mutagen and carcinogen? 2

Group - B

Answer any **four** of the following questions : 5×4=20

9. Discuss the mechanism of drug biotransformation. 5
10. What are the physiological responses to cold environment and how does the body get acclimatized to the cold environment? 3+2
11. What is hyperbaric therapy? What are the effects of noise on human health? 2+3
12. What is oxidative stress? What are the roles of GPX and SOD in combating oxidative stress? 3+(1+1)
13. What is mountain sickness? How do climbers acclimatize to mountain sickness? 3+2
14. Describe the mechanism of action of tubocurarine and nicotine on neuromuscular junctions. 2½+2½

(3)

Group - C

Answer any **one** of the following questions : $10 \times 1 = 10$

15. Discuss the mechanism of action of propranolol. What are the health impacts of air pollution? What are transdermal patches? $5+4+1$
16. Describe the effects of narcotic analgesics on the central nervous system and discuss the mechanism of action of these drugs. How does physostigmine affect cholinergic neurotransmission? $(4+2)+4$
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P.T.O.

(4)

B.Sc./4th Sem (H)/PHYS/24(CBCS)/Old

2024

4th Semester Examination
PHYSIOLOGY (Honours)

Paper : C 9-T

(Gastrointestinal Function)

(Old Syllabus)

[CBCS]

Full Marks : 40

Time : Two Hours

*The figures in the margin indicate full marks.
Candidates are required to give their answers
in their own words as far as practicable.*

Group - A

Answer any *five* of the following questions : 2×5=10

1. What is Meissner's nerve plexus? State its functions. 1+1
2. What is pancreatitis? 2
3. What is GERD? 2
4. Write down two histological characteristics of salivary glands. 1+1
5. Define steatorrhea. 2
6. What are Kupffer cells? Mention its functions. 1+1

(5)

7. State the composition of bile salts. 2

8. State the function of Wharton's duct and Stensen's duct.
1+1

Group - B

Answer any *four* of the following questions : 5×4=20

9. Write a short note on dietary fibres. What is dysphagia?
4+1

10. Write a short note on gastritis. What are chylomicrons?
3+2

11. Briefly discuss the digestion of carbohydrates in GI tract.
5

12. State the process and advantages of sham feeding. 2+3

13. Discuss the regulation of gastric secretion. 5

14. What is xerostomia? Describe the histological structures of gastric glands. 2+3

Group - C

Answer any *one* of the following questions : 10×1=10

15. Write short notes on the following : 5+5

(a) Gastrin

(b) Composition and Function of Saliva

16. Briefly discuss the digestion and absorption of lipids in the GI tract. 5+5