

DR KANAILAL BHATTACHARYYA COLLEGE

B.SC. HONOURS SEMESTER-4 INTERNAL ASSESSMENT (JUNE 2022)

SUBJECT- PHYSIOLOGY HONOURS

PAPER- CC8

(DIGESTION AND METABOLISM)

FM-10

TIME- 30 MINS

ANSWER ANY 10 FROM THE FOLLOWING:

10 X 1= 10

1. What is enterohepatic circulation of bile?
2. Define oxidative deamination.
3. What is glycogenin?
4. State the importance of Cori cycle in human.
5. What is peristalsis?
6. Mention the difference between hexokinase and glucokinase.
7. What causes obstructive jaundice?
8. What is GALT?
9. Why TCA cycle is called an amphibolic pathway?
10. Name Complex-I of ETC and one of its inhibitors.
11. What do you mean by redox potential?
12. Name the causative organism of peptic ulcer.
13. What is anaplerosis?
14. What is significance of thermogenin?
15. State the location and function of Brunner's gland.
16. Write down any two importance of pentose phosphate pathway.
17. What do you mean by postprandial alkaline tide?
18. What are gall stones?
19. What is deglutition reflex?
20. State the chemical name and the function of carnitine.

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PAPER- CC9

(MOLECULAR BIOLOGY)

FM-10

TIME- 30 MINS

ANSWER ANY 10 FROM THE FOLLOWING:

10 X 1= 10

1. Mention any two properties of cancer cells.
2. Write any two applications of gene therapy.
3. What is Svedberg's unit?
4. What is the current international unit of radioactivity?
5. What are oncogenes?
6. What do you mean by codon–anticodon interaction?
7. What are plasmids?
8. Write down any two properties of genetic code.
9. What is an Okazaki piece?
10. What do you mean by R_f value in chromatography?
11. Write one use of SDS-PAGE.
12. Define point mutation with example.
13. What is the difference between western and northern blot?
14. Give examples of the uses of any two radioactive bio-molecules in metabolic study.
15. What is a transgenic organism? Give example.
16. What is the difference between inducible and repressible operon?
17. What does the Wobble hypothesis propose?
18. What is RT-PCR?
19. What is transcriptome?
20. What are physical and chemical mutagens? Give example.

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SUBJECT- PHYSIOLOGY HONOURS

PAPER- CC10

(NUTRITION AND DIETATICS)

FM-10

TIME- 30 MINS

ANSWER ANY 10 FROM THE FOLLOWING:

10 X 1= 10

1. What are anti-vitamins? Give example
2. Define specific dynamic action (SDA).
3. What causes Beriberi?
4. Mention any two importance of dietary fibers.
5. Define adult consumption unit (ACU).
6. What is the daily requirement of protein and calcium in a pregnant woman?
7. Mention the deficiency symptoms of Cyanocobalamin.
8. What is NPU?
9. State the importance of Folic acid in diet.
10. What do you mean by protein spacers? Give examples.
11. State the dietary importance of Sodium and Potassium.
12. What is hypervitaminosis? Give example.
13. Mention any two dietary sources of Vitamin D and Iron.
14. What is the normal value of BMR in adult male and female?
15. What do you mean by positive and negative nitrogen balance?
16. What do you mean by biological value (BV) of protein?
17. What is PER?
18. Mention one metabolic function of Biotin.
19. Mention the R.Q. of carbohydrate and fat.
20. State one biological function of fluoride.

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B.SC. HONOURS SEMESTER-4 INTERNAL ASSESSMENT (JUNE 2022)

SUBJECT- PHYSIOLOGY HONOURS

PAPER- SEC B1

(DETECTION OF FOOD ADDITIVE, ADULTERANTS AND XENOBIOTICS)

FM-10

TIME- 30 MINS

ANSWER ANY 10 FROM THE FOLLOWING:

10 X 1= 10

1. What are xenobiotics? Give example.
2. What do you mean by the term bioaccumulation?
3. How can you identify the presence of Rhodamin B in chili powder?
4. What is the full form of PFA?
5. Give example of a food additive used as flavor enhancer.
6. What causes Minamata disease?
7. Where does phase-I xenobiotic metabolism occur?
8. Name two persistent organic pollutants.
9. What is the chemical nature of dioxin?
10. Mention two sources of Bisphenol A exposure in human body.
11. What is the causative element of Chinese restaurant syndrome?
12. Give example of a food additive used as preservative.
13. Name the toxic element causing 'rain-drop pigmentation' in the skin of affected individuals.
14. State two uses of metanil yellow.
15. Mention an identification test for metanil yellow in turmeric powder.
16. State two pathophysiological effects of lead.
17. Name two endogenous xenobiotics.
18. What is the primary source of exposure of PCB in human?
19. What do you mean by detoxification of xenobiotics?
20. State two pathophysiological effects of dioxin.