

CLASS-10TH**VGR COACHING CENTER
SCIENCE- CHAPTER 5,6,10,19,21,22****MARK-75****PART-A****CHOOSE THE CORRECT ANSWER**

1. The frequency, which is audible to the human ear is
a) 50 kHz b) 20 kHz c) 15000 kHz d) 10000 kHz
2. The sound waves are reflected from an obstacle into the same medium from which they were incident. Which of the following changes?
a) Speed b) frequency c) wavelength d) none of these
3. _____ aprons are used to protect us from gamma radiations
a. Lead oxide b. Iron c. Lead d. Aluminium
4. Proton - Proton chain reaction is an example of _____
a. Nuclear fission b. α - decay c. Nuclear fusion d. β - decay
5. Photolysis is a decomposition reaction caused by _____
a. heat b. electricity c. light d. mechanical energy
6. An inexhaustible resources is
a) wind power b) soil fertility c) wild life d) all of the above
7. Common energy source in village is
a) electricity b) coal c) biogas d) wood and animal dung
8. Powdered CaCO_3 reacts more rapidly than flaky CaCO_3 because of _____.
a. large surface area b. high pressure c. high concentration d. high temperature
9. The 'use and disuse theory' was proposed by _____.
a. Charles Darwin b. Ernst Haeckel c. Jean Baptiste Lamarck d. Gregor Mendel
10. The term Ethnobotany was coined by
a. Khorana b. J.W. Harsbberger c. Ronald Ross d. Hugo de Vries
11. Which type of cancer affects lymph nodes and spleen?
a) Carcinoma b) Sarcoma c) Leukemia d) Lymphoma
12. Polyphagia is a condition seen in
a) Obesity b) Diabetes mellitus c) Diabetes insipidus d) AIDS

PART-B**WRITE ANY 7 QUESTION****Q.NO 22 IS COMPULSORY**

13. Match: V

- a. Fe - 59 Age of fossil
- b. I - 131 Function of Heart
- c. Na - 24 Leukemia
- d. C - 14 Thyroid disease

14. Define one roentgen

15. Mention two cases in which there is no Doppler effect in sound?

16. Differentiate reversible and irreversible Reactions

17. The degenerated wing of a kiwi is an acquired character. Why is it an acquired character?

18. Mention the diseases caused by tobacco smoke.

19. What are the contributing factors for Obesity?

20. What are the agents of soil erosion?

21. How are e-wastes generated?

22. The hydroxide ion concentration of a solution is 1×10^{-11} M. What is the pH of the solution

PART-C**WRITE ANY SEVEN QUESTION****Q.NO 32 IS COMPLUSORY**

23. i) What do you understand by the term 'ultrasonic vibration'? (2)

ii) Name three animals which can hear ultrasonic vibrations (2)

24. i) Write any three features of natural and artificial radioactivity. (3)

ii) Define critical mass(1)

25. Explain the types of double displacement reactions with examples

26. What is a chemical equilibrium? What are its characteristics?
27. Define Ethnobotany and write its importance.
28. How is a cancer cell different from a normal cell ?
29. What is the importance of rainwater harvesting?
30. What are the consequences of deforestation?
31. i) How do you differentiate homologous organs from analogous organs? (3)
ii) What is metastasis? (2)
32. i) Use the analogy to fill in the blank (2)
- a) Spontaneous process : Natural Radioactivity, Induced process : _____
 - b) Nuclear Fusion : Extreme temperature, Nuclear Fission : _____
 - c) Increasing crops : Radio phosphorous, Effective functioning of heart : _____
 - d) Deflected by electric field : α ray, Null Deflection : _____
- ii) $^{88}\text{Ra}^{226}$ experiences three α - decay. Find the number of neutrons in the daughter element. (2)

PART-D

ANSWER ALL QUESTION

33. What is an echo? (2)
- a) State two conditions necessary for hearing an echo. (2)
 - b) What are the medical applications of echo? (2)
 - c) How can you calculate the speed of sound using echo? (1)

[OR]

- a) How does pH play an important role in everyday life? (4)
- b) Calculate the pH of 0.01 M HNO_3 (2)
- c) What are called thermolysis reactions? (1)

34. A) Compare the properties of alpha, beta and gamma radiations. (4)

b) Give any two uses of radio isotopes in the field of agriculture? (2)

c) What is stellar energy? (1)

[OR]

a) Explain the factors influencing the rate of a reaction (4)

b) Define combination reaction. Give one example for an exothermic combination reaction. (3)

35.

a) Suggest measures to overcome the problems of an alcoholic. (3)

b) Differentiate between Type-1 and Type-2 diabetes mellitus (3)

c) Expand the following abbreviations (1)

a). HIV b) BMI

[OR]

a) How does rainwater harvesting structures recharge ground water? (4)

b) State whether True or False. Correct the statements which are false (2)

Habitat destruction cause loss of wild life.

Nuclear energy is a renewable energy.

c) What would happen if the habitat of wild animals is disturbed? (1)

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