

MONTHLY TEST - QUESTION PAPER

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STD: X

MARKS: 50

SUB: SCIENCE (UNIT-5, 6, 10, 19, 20, 21)

TIME: 1.30hrs

PART-I

Choose the most suitable answer and write the code with corresponding answer (5×1=5)

1. What is the minimum distance needed for an echo?
a) 17.2m b) 20m c) 25m d) 50m
2. _____ Isotope is used for the treatment of cancer.
a) Radio Iodine b) Radio Cobalt c) Radio Carbon d) Radio Nickel
3. The ideal P^H for blood is _____
a) 7.4 b) 2.0 c) 8 d) 6.5
4. The theory of natural selection for evolution was proposed by _____
a) Lamarck b) Ronald Ross c) Mendel d) Charles Darwin
5. Cancer of the epithelial cells is called _____
a) Leukemia b) sarcoma c) Carcinoma d) Lipoma

PART-II

Answer Any Four of the following: (4×2=8)

(Question number 11 is compulsory)

6. Mention two cases in which there is no Doppler effect in sound?
7. Define critical mass.
8. Define combination reaction. Give one example for an exothermic combination reaction.
9. (i).Name two maize hybrids rich in amino acid lysine.
(ii).Distinguish between somatic gene therapy and germ line gene therapy.
10. What are the contributing factors for obesity?
11. A source producing a sound of frequency 500Hz is moving towards a listener with a velocity of 30 ms⁻¹. The speed of the sound is 330 ms⁻¹. What will be the frequency heard by listener?

PART- III

iii. Answer any Four of the following:

(Question number 17 is compulsory) (4×4=16)

12. What are the factors that affect the speed of sound in gases?

13. (i).Write any two features of natural and artificial radioactivity. www.Padasalai.Net
(ii).Give any two uses of radio isotopes in the field of agriculture.
- 14.How do you differentiate homologous organs from analogous organs?
- 15.(i).Define Genetic engineering.
(ii).State the applications of DNA finger printing technique.
16. (i).List out the prevention and controlling measures of AIDS.
(ii).How does insulin deficiency occur?
17. (i).The hydroxide ion concentration of a solution is $1 \times 10^{-11} \text{M}$. What is the P^{H} of the solution?
(ii).Define ionic product of water.

PART-IV

Note. (i) Answer all the questions:

(3×7=21)

18. a. (i).What is an echo?
(ii).State two conditions necessary for hearing an echo.
(iii).What are the medical applications of echo?
(iv).How can you calculate the speed of sound using echo?
(OR)
- b.(i).Differentiate nuclear fission and nuclear fusion.
(ii).Compare the any five properties of alpha, beta and gamma radiations.
- 19.a. (i). What is a chemical equilibrium? What are its characteristics?
(ii).A solid compound 'A' decomposes on heating into 'B' and a gas 'C' on passing the gas 'C' through the water, it becomes acidic. Identify A, B and C.
(OR)
- b. Explain the factors influencing the rate of a reaction.
20. a. (i).How does fossilization occurs in plants?
(ii).Define Ethnobotany and write any one importance.
(OR)
- b. (i).Discuss the importance of biotechnology in the field of medicine.
(ii).Differentiate between Type -1 and Type -2 diabetes mellitus.

****** ALL THE BEST ******

Kindly Send me your district Questions & Keys to email id - Padasalai.net@gmail.com

