



COMMON SECOND REVISION TEST – 2023

Standard X

Reg.No. :

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SCIENCE

Time: 3.00 hrs.

Part - I

Marks: 75

I. Choose the correct answer:

12 x 1 = 12

1. Power of a lens is $-4D$, then its focal length is
 - a) 4 m
 - b) -40 m
 - c) -0.25 m
 - d) -2.5 m
2. SI unit of resistance is
 - a) mho
 - b) joule
 - c) ohm
 - d) ohm meter
3. _____ aprons are used to protect us from gamma radiations.
 - a) lead oxide
 - b) iron
 - c) lead
 - d) aluminium
4. The volume occupied by 4.4 g of CO_2 at STP
 - a) 22.4 litre
 - b) 2.24 litre
 - c) 0.24 litre
 - d) 0.1 litre
5. Charged particles are called as _____.
 - a) atom
 - b) molecule
 - c) ions
 - d) compound
6. Blue Vitriol is _____.
 - a) CCl_4
 - b) $CaSO_4 \cdot 2H_2O$
 - c) $MgSO_4 \cdot 7H_2O$
 - d) $CuSO_4 \cdot 5H_2O$
7. Who introduced pH notation?
 - a) Darwin
 - b) Daniel
 - c) Lamarck
 - d) Sorensen
8. In leech locomotion is performed by
 - a) anterior sucker
 - b) setae
 - c) parapodia
 - d) contraction and relaxation of muscles
9. Node of Ranvier is found in
 - a) muscles
 - b) axons
 - c) dendrites
 - d) cyton
10. Pusa Komal is a disease resistant variety of _____.
 - a) sugarcane
 - b) rice
 - c) cow pea
 - d) maize
11. Where does alcohol effect immediately after drinking?
 - a) eyes
 - b) auditory region
 - c) liver
 - d) central nervous system
12. Which software is used to create animation?
 - a) Paint
 - b) PDF
 - c) MS Word
 - d) Scratch

Part - II

II. Answer any 7 questions. (Q.No.22 is compulsory)

7 x 2 = 14

13. Define one calorie.
14. State Ohm's law.
15. What is the audible range of frequency?
16. Define Hydrated salt.
17. Write the factors influencing the rate of a reaction.
18. Match the following :
 1. Blue vitriol - $CaSO_4 \cdot 2H_2O$
 2. Gypsum - CaO
 3. Deliquescence - $CuSO_4 \cdot 5H_2O$
 4. Hygroscopic - $NaOH$

(2)

X Science

19. Why are the rings of cartilages found in trachea of rabbit?
20. What are synthetic auxins? Give examples.
21. What are allosomes?
22. A sound wave has a frequency of 200 Hz and speed of 400 ms^{-1} in a medium. Find the wavelength of the sound wave.

Part - III

III. Answer any 7 questions. (Q.No.32 is compulsory)

7 x 4 = 28

23. Define inertia. Give its classification.
24. Differentiate convex lens and concave lens.
25. i) What is an Echo?
ii) State two conditions necessary for hearing an echo.
26. How does pH play an important role in everyday life?
27. What is called homologous series? Give any three of its characteristics.
28. Define Ethnobotany and write its importance.
29. Biofortification may help in removing hidden hunger. How?
30. i) What are Psychotropic drugs?
ii) How does Insulin deficiency occur?
31. Enumerate the importance of forest.
32. The hydroxide ion concentration of a solution is $1 \times 10^{-11} \text{ M}$. What is the pH of the solution?

Part - IV

IV. Answer all the questions.

3 x 7 = 21

(Draw diagrams wherever necessary)

33. a) i) State Snell's Law.
ii) List any five properties of light.
(OR)
b) Compare the properties of Alpha, Beta and Gamma radiations.
34. a) Explain the factors influencing the rate of a reaction.
(OR)
b) Explain the mechanism of cleansing action of soap.
35. a) How is the structure of DNA organised? What is the biological significance of DNA?
(OR)
b) How does rain water harvesting structures recharge groundwater?
