

class : 9

Register
Number

COMMON ANNUAL EXAMINATION - 2024-25

SCIENCE

Time Allowed : 3.00 Hours

[Max. Marks : 75]

12x1=12

I. Choose the correct answer.

1. Clouds float in atmosphere because of their low -----
a) density b) Pressure c) Velocity d) Mass
 2. Heating effect of current is called -----
a) Joule heating b) Coulomb heating c) Voltage heating d) Ampere heating
 3. Transformer works on -----
a) AC only b) DC only c) Both AC and DC
 4. Ceres is a -----
a) Meteor b) Star c) Planet d) Asteroid
 5. Bond formed between a metal and non metal atom is usually -----
a) Ionic bond b) Covalent bond c) Coordinate bond
 6. Graphene is one atom thick layer carbon obtained from -----
a) Diamond b) fullerene c) graphite d) gas carbon
 7. One Nanometre is -----
a) 10^{-7} metre b) 10^{-8} metre c) 10^{-9} metre d) 10^{-4} metre
 8. Excretory Organ of tape Worm is -----
a) flame cells b) nephridia c) body surface d) solenocytes
 9. Bile helps in the digestion of -----
a) Proteins b) sugar c) fats d) Carbohydrates
 10. Diphtheria affects the -----
a) lungs b) throat c) blood d) liver
 11. ----- is the method of growing plants without soil
a) Horticulture b) Hydroponics c) Pomology d) None of these
 12. A presentation consists of many -----
a) Pages b) Slides c) Placeholders d) messages
- II. Answer any seven 7 questions only. Question No : 22 is compulsory. 7x2=14
13. State Pascal's law.
 14. Compare speed and Velocity.
 15. Match the following.

i) Electric Charge	- Ohm
ii) Potential difference	- ampere
iii) Electric current	- Coulomb
iv) Resistance	- Volt

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Parad 2rr

16. Ice is kept in a double - walled container. Why?
17. State whether true or false. If false correct the Statement
- Halley's comet appears after nearly 67 hours
 - The maximum number of electron in L shell is 10
18. Define Aqua regia
19. What is nematocyst?
20. Draw the structure of stomata and label the parts.
21. Mention any two mushroom preservation methods.
22. The frequency of a source of sound is 600 Hz. Calculate the number of times it vibrates in a minute.
- III. Write any seven question in detailed. (Q.No.32 is compulsory) 7x4=28
23. Write the rules that are followed in writing the symbols of units in SI system.
24. Differentiate convection and radiation.
25. Write the differences between elements and compounds and give an example for each.
26. Mention the uses of Robotic arms.
27. Write all possible isomers of C_2H_6O .
28. List out the differences between mitosis and Meiosis.
29. Explain the Structure of nephron.
30. Enumerate the advantages of Vermicompost over chemical fertilizer.
31. What is IUCN? What is the vision of IUCN?
32. Find the oxidation number of the element in the following compounds.
- C in CO_2
 - N in HNO_3

IV. Answer all the question.

3x7=21

33. a) Draw a neat diagram of a AC generator and explain its working. (OR)
- What is meant by supersonic speed? (2)
 - Verify experimentally the laws reflection of sound? (5)
34. a) i) List down the differences between ionic and Covalent compounds. (5)
- Why are noble gases inert in nature. (2) (OR)
- b) i) Explain the types of dyes based on their method of application. (5)
- What is Radio Carbon Dating? (2)
35. a) i) Give an account of Phylum Arthropoda. (5)
- What is nastic movement. (2) (OR)
- b) How are Vitamins useful to us? Tabulate the sources, deficiency / diseases and symptoms of fat soluble Vitamins.

Class : 9

Chennai district

Register
NumberPrepared by
Raji Ino 21.07.21

21/4/25

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12x1= 12

I. Choose the correct answer.

- Clouds float in atmosphere because of their low _____.
(a) density (b) Pressure (c) Velocity (d) Mass
- Heating effect of current is called _____.
(a) Joule heating (b) Coulomb heating (c) Voltage heating (d) Ampere heating
- Transformer works on _____.
(a) AC only (b) DC only (c) Both AC and DC
- Ceres is a _____.
(a) Meteor (b) Star (c) Planet (d) Asteroid
- Bond formed between a metal and non metal atom is usually _____.
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- Graphene is one atom thick layer carbon obtained from _____.
(a) Diamond (b) fullerene (c) graphite (d) gas carbon
- One Nanometre is _____.
(a) 10^{-7} metre (b) 10^{-8} metre (c) 10^{-6} metre (d) 10^{-9} metre 10^{-9} metre
- Excretory Organ of tape Worm is _____.
(a) flame cells (b) nephridia (c) body surface (d) solenocytes
- Bile helps in the digestion of _____.
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- Diphtheria affects the _____.
(a) lungs (b) throat (c) blood (d) liver
- _____ is the method of growing plants without soil
(a) Horticulture (b) Hydroponics (c) Pomology (d) None of these
- A presentation consists of many _____.
(a) Pages (b) Slides (c) Placeholders (d) messages

II. Answer any seven 7 questions only. Question No : 22 is compulsory.

7x2=14

- State Pascal's law. Pressure applied on liquid is transmitted uniformly throughout liquid.
- Compare speed and Velocity. Speed : Scalar quantity, unit ms^{-1} , Distance/time. Velocity : vector, unit ms^{-1} , Displacement/time.
- Match the following.

i) Electric Charge	- Ohm 4
ii) Potential difference	- ampere 3
iii) Electric current	- Coulomb 1
iv) Resistance	- Volt 2

CH/J/9/Sci/1

16. Ice is kept in a double - walled container. Why? *Vacuum between walls prevents heat to pass inside or outside.*

17. State whether true or false. If false correct the

Statement

- i) Halley's comet appears after nearly 67 hours *76 Years - False*
 ii) The maximum number of electron in L shell is 18 *8 - False*

18. Define Aqua regia *Mixture of HCl & HNO₃*

19. What is nematocyst? *Stinging cells in tentacles of coelenterates*

20. Draw the structure of stomata and label the parts. *↑*

21. Mention any two mushroom preservation methods. *Freezing, Drying*

22. The frequency of a source of sound is 600 Hz. Calculate the number of times it vibrates in a minute. *1 sec = 600 Hz*
 $\therefore 1 \text{ minute} = 600 \times 60 = 36000 \text{ Hz (Ans)}$

III. Write any seven question in detailed. (Q.No.32 is compulsory)

7x4=28

23. Write the rules that are followed in writing the symbols of units in SI system.

24. Differentiate convection and radiation.

25. Write the differences between elements and compounds and give an example for each.

26. Mention the uses of Robotic arms.

27. Write all possible isomers of C₂H₆O.

28. List out the differences between mitosis and Meiosis.

29. Explain the Structure of nephron.

30. Enumerate the advantages of Vermicompost over chemical fertilizer.

31. What is IUCN? What is the vision of IUCN? *International Union for Conservation of Nature & Natural Resources*

32. Find the oxidation number of the element in the following compounds.

a) $x + 2(-2) = 0$ *C in CO₂* $x = +4$ b) $1 + x + 3(-2) = 0$ *N in HNO₃* $1 + x - 6 = 0$ $x = +5$

IV. Answer all the question.

3x7=21

33. a) Draw a neat diagram of a AC generator and explain its working. (OR)

b) i) What is meant by supersonic speed? (2)

ii) Verify experimentally the laws reflection of sound? (5)

34. a) i) List down the differences between ionic and Covalent compounds. (5)

ii) Why are noble gases inert in nature. (2) (OR)

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ii) What is Radio Carbon Dating? (2)

35. a) i) Give an account of Phylum Arthropoda. (5)

ii) What is nastic movement. (2) (OR)

b) How are Vitamins useful to us? Tabulate the sources, deficiency / diseases and symptoms of fat soluble Vitamins.

CH/J/9/Sci/2