

**Class : 8**Register  
Number**COMMON HALF YEARLY EXAMINATION - 2024-25****SCIENCE**

[Max. Marks :100]

Time Allowed : 2.30 Hours]

YouTube/ Akwa Academy

10x1= 10

**I. Choose the correct answer.**

1. SI unit of temperature is -----  
a) celsius                      b) fahrenheit                      c) kelvin                      d) ampere
2. The spherical mirror used as a rear view mirror in the vehicle is  
a) concave mirror                      b) convex mirror                      c) plane mirror                      d) None of the above
3. Fuse is  
a) a switch                      b) a wire with low resistance  
c) a wire with high resistance  
d) a protective device for breaking an electric circuit
4. The non-metal which conducts electric current is  
a) carbon                      b) oxygen                      c) aluminium                      d) sulphur
5. Aerated water contains  
a) air                      b) oxygen                      c) carbon dioxide                      d) nitrogen
6. Water changes to ice at  
a) 0°C                      b) 100°C                      c) 102°C                      d) 98°C
7. Common cold in human is caused by -----  
a) Plasmodium                      b) Influenza                      c) Vibrio cholera                      d) Aphthovirus
8. Binominal Nomenclature was first introduced in the year  
a) 1970                      b) 1975                      c) 1978                      d) 1623
9. ----- cells are specialised cells that can be transformed into any kind of cells.  
a) Nerve                      b) Stem                      c) Heart                      d) Bone
10. Adam's apple is the growth of the -----  
a) Pharynx                      b) Thyroid                      c) larynx                      d) Parathyroid

**II. Fill in the blanks.**

10x1=10

11. Hydraulic lift works under the principle of -----
12. A calorimeter is a device used to measure the -----
13. If the thickness of a vibrating string is increased, its pitch -----
14. ----- is the basic material to manufacture urea.
15. A negatively charged ion is called -----
16. Chemical formula of calcium oxide is -----
17. Agar Agar is obtained from ----- algae.
18. The largest cell is egg of an -----
19. The place where two bones meet is termed as -----
20. ----- helps to prevent thyroid gland related diseases.

**III. State true or false. If false, correct the statement.**

10x1=10

21. Convection is the process by which the thermal energy flows in solids.
22. Water can conduct electricity.
23. If one coulomb of charge is flowing in one minute, it is called 'ampere'.
24. Sea water is suitable for irrigation as it contains dissolved salts.
25. Acids are bitter in taste.
26. A chemical reaction is a temporary reaction.
27. Chicken pox is a communicable disease.
28. Binomial name should contain more than two words.
29. Human beings are warm blooded in nature.
30. Cardiac muscle is a voluntary muscle.

TPR/M.8/Sci/1

**IV. Match the following.**

10x1=10

- |                         |   |                               |
|-------------------------|---|-------------------------------|
| 31. Barometer           | - | Frequency below 20Hz          |
| 32. Dispersion of light | - | Frequency more than 20000 Hz. |
| 33. Ultrasonics         | - | Rainbow.                      |
| 34. Infrasonics         | - | Atmospheric pressure          |
| 35. Carbon dioxide      | - | at 45 to 50 years of age      |
| 36. Neutrons            | - | Cholesterol and other steroid |
| 37. Anode rays          | - | Amino acid                    |
| 38. Amino acids         | - | Goldstein                     |
| 39. Fatty acids         | - | James Chadwick                |
| 40. Menopause           | - | Fire extinguisher             |

**V. Answer any 15 questions:**

15X2=30

41. Name the three scales of temperature.
42. **Assertion** : Broad straps are used in bags.  
**Reason** : Broad straps last for long.
- a) Both assertion and reason are true and reason is the correct explanation of assertion.  
b) Both assertion and reason are true, but reason is not the correct explanation of assertion.  
c) Assertion is true, but reason is false.                      d) Both assertion and reason are false.
43. Give any two applications of a concave and convex mirror.
44. Define specific heat capacity.
45. What is earthing?
46. A sound wave travels 2000 m in 8 s. What is the velocity of the sound?
47. Downward force : Weight :: Upward force offered by liquid :-----
48. How does planting trees help in reducing noise pollution?
49. Tabulate the differences between metals and non-metals.
50. What is the role of a catalyst in a chemical reaction?
51. What is global warming?
52. **Balance the following chemical equation.**
- a)  $\text{Na} + \text{O}_2 \rightarrow \text{Na}_2\text{O}$                       b)  $\text{Ca} + \text{N}_2 \rightarrow \text{Ca}_3\text{N}_2$
53. Write any four physical properties of acids
54. Vinu and Priyan take their lunch at school. Vinu eats lemon rice and Priyan eats curd rice. Both lemon rice and curd rice are sour in taste. What is the reason?
55. Write the four types of bacteria, based on their shape.
56. Write any two economic importance of fungi.
57. Define – Metabolism.
58. What are the functions of skeleton in human body?
59. Explain the importance of cleanliness during the time of menstrual cycle in girls.
60. Draw and label the structure of Chlamydomonas.
- VI. Answer any 6 questions.**
61. List out the base quantities with their units.
62. What is reflection? Write a short note on regular and irregular reflection.
63. Explain series and parallel circuit.
64. What are the effects of acid rain? How can we prevent them?
65. Explain the different ways by which water gets polluted.
66. What are the uses of acids?
67. How microorganisms are useful in the field of medicine?
68. Differentiate between inhalation and exhalation.
69. Write a short note on different types of muscles.
70. What are the physical changes that occur in boys and girls during adolescence?

6x5=30

TPR / 8 / Sci / 2