

Tsi9S

Tenkasi District
Common Annual Examination - 2024

Standard 9
SCIENCE
Part - I



Time: 3.00 Hours

Marks: 75

12x1=12

I. Choose the correct answer:

- 1) The area under velocity - time graph represents the
 a) Velocity of the moving object
 b) displacement covered by the moving object
 c) speed of the moving object
 d) acceleration of the moving object
- 2) Electroplating is an example for
 a) heating effect
 c) flowing effect
 b) chemical effect
 d) magnetic effect
- 3) A device in which the loss of heat due to conduction, convection and radiation is minimized is
 a) solar cell
 b) solar cooker
 c) thermometer
 d) thermos flask
- 4) The sound travel faster
 a) in liquids
 b) in gases
 c) in solids
 d) in vacuum
- 5) When we mix a drop of ink in water we get a
 a) Heterogeneous mixture
 c) Homogeneous mixture
 b) compound
 d) suspension
- 6) The number of protons, neutrons and electrons present respectively in $^{80}_{35}\text{Br}$ are
 a) 80, 80, 35
 b) 35, 55, 80
 c) 35, 35, 80
 d) 35, 45, 35
- 7) If Dobereiner is related with 'Law of triads' then Newland is related with
 a) Modern Periodic Law
 c) Law of octaves
 b) Hund's rule
 d) Pauli's Exclusion principle
- 8) Acids turn blue litmus paper to
 a) green
 b) red
 c) Orange
- 9) Chlorophyll in a leaf is required for
 a) photosynthesis
 c) transpiration
 b) tropic movement
 d) nastic movement
- 10) The structural and functional unit of the kidney is
 a) villi
 b) liver
 c) nephron
 d) ureter
- 11) The physician who discovered that scurvy can be cured by ingestion of citrus fruits is
 a) James lind
 b) Louis pasteur
 c) Charles Darwin
 d) Isaac Newton
- 12) A presentation consists of many
 a) pages
 b) slides
 c) placeholders
 d) messages

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

7x2=14

- 13) Match the following

a) Length	-	i) Kelvin
b) Mass	-	ii) metre
c) Time	-	iii) Kilogram
d) Temperature	-	iv) second

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- 14) Define electric current and give its unit.
- 15) **Fill in the blanks**
- Total number of electrons that can be accommodated in an orbit is given by
 - isotope is used in the nuclear reactors
- 16) State Modern periodic law
- 17) What is neutralization reaction? Give an example
- 18) **State whether true or false. If false, correct the statement.**
- Phloem is made up of tracheids
 - Vessels are found in collenchyma
- 19) How is the small intestine designed to absorb digested food?
- 20) Explain any two methods of food preservation
- 21) Define: Vaccine
- 22) What is the heat in joules required to raise the temperature of 25 grams of water from 0°C to 100°C? What is the heat in calories? (specific heat of water = 4.18 J/g°C)

III. Answer any 7 questions: [Q.No: 32 is compulsory]

7x4=28

- What is meant by atmospheric pressure?
 - State Pascal's law
- Differentiate step up and step down transformer
- Through which medium sound travels faster, iron or water? Give reason
 - What is meant by supersonic speed?
- Write the differences between elements and compounds and give example for each.
- Differentiate graphite and diamond.
- What is complex tissue? Name the various kinds of complex tissue?
- How will you differentiate different types of transpiration?
- What is an adulterant
 - What are the effects of consuming adulterated food?
- Give an account of different types of fish ponds used for rearing fishes
- Suggest the immunization schedule for a newborn baby till 12 months of age. Why it is necessary to follow the schedule?

IV. Answer all questions:

3x7=21

- Draw ray diagrams to show how the image is formed using a concave mirror, when the position of the object is (i) at C (ii) between C and F.
 - Mention the position and nature of image in each case

(OR)

Discuss the benefits of ISS.

- List out the differences between Ionic and covalent compounds

(OR)

Name various food additives and explain their functions.

- Give an account on Phylum Arthropoda

(OR)

What is water recycling? Explain the conventional waste water recycling treatment methods.