

(4)

34. The ratio of Kinetic energy and momentum of an object of mass 'm' moving with velocity 'v' is given by
a) 2 b) $1/2$ c) $v/2$ d) $2v$
35. Which of the following is false?
a) 1 Joule = 1N/m b) Work and energy have the same unit
c) Power=work done/sec d) none of these
36. It is easier to swim in the sea than in a pond because
a) sea water is more pure b) sea water has lesser density
c) sea water has higher density d) none of these
37. Among the following media, sound travels fastest in
a) ethanol b) methanol c) sea water d) distilled water
38. Amitosis occurs in
a) Plants b) animals c) lower organisms d) six organs
39. Occurrence of variance in organism is due to
a) mitosis b) meiosis c) chromosomes d) none of these
40. Eukaryotes have double membraned
a) cell wall b) ribosomes c) RNA d) nucleus
41. The cells of floral parts contain
a) leucoplast b) chromoplast c) chloroplast d) none of these
42. Plant cells which keep dividing are
a) apical b) interauxillary c) lateral d) all of these
43. When I possess chlorophyll I am known as chlorenchyma. I am
a) collenchyma b) Sclerenchyma c) Parenchyma d) parenchyma
44. Which of the following is not a component of phloem?
a) Sieve tubes b) companion cells c) Vessels d) none of these
45. Which of the following muscles is/are involuntary?
a) striated b) smooth c) cardiac d) b & c above
46. Kingdom monera includes all
a) eukaryotes b) fungi c) plants d) prokaryotes
47. Which of the following is not included in gymnosperms?
a) Gnetophyta b) Ginkgophyta c) Gnetophyta d) none of these
48. Hydrophobia is a characteristic symptom of
a) Hepatitis B b) Hepatitis C c) Rabies d) Malnutrition
49. The biological term for health is
a) Pathology b) Mental health c) Homistasis d) Homiostatics.
50. During osmosis movement of
a) solute occurs b) solvent occurs
c) movement of solvent take place d) both solute and solvent moves

The End

18th STATE LEVEL COMPETITION - 2017

ORGD. BY: THE UNITED DEVELOPMENT ASSN. (UDA) KHANGABOK

H.Q. KHANGABOK, THOUBAL (MANIPUR)

Regd. No. 3/SR/TH/1999

CLASS-IX (SCIENCE)

Time: 1hr.

INSTRUCTION:

- There are 50 questions with four alternatives of which one is the correct/most appropriate answer. Each question carry 2 marks.
 - The correct/most appropriate choice should be marked in the answer sheet with a ball point pen only, by darkening the circle corresponding to the correct choice.
 - If any candidate is found using unfair means of any kind, he/she shall be expelled from the test without any prior warning.
 - Using any calculator/mobile phone etc. is strictly prohibited in exam. hall.
 - The decision of the Association with regard to the conduct of the Examination shall be final and binding to the candidate.
- Gases can be liquefied by
a) lowering pressure and temperature b) increasing pressure and temperature
c) increasing pressure and lowering temperature d) none of these
 - When we do physical activity sweating occurs, thereby the body system
a) counters the heat generated b) compensates the heat lost
c) either a or b above d) none of these
 - Chemically a substance is said to be pure if it contains
a) only one kind of atom b) only one element
c) only one element or one compound d) none of these
 - A 500ml glucose solution is marked 10% (mass/volume). What is the amount of glucose present in the solution?
a) 25g b) 10g c) 50g d) 2.5g
 - In a solid foam the dispersion medium is
a) solid b) liquid c) gas d) none of these
 - Which of the following is an example of liquid aerosol?
a) cloud b) smoke c) dust d) shoe polish
 - Distillation can not be used for separating mixture of liquids which
a) are completely miscible b) have different boiling points
c) decompose on boiling d) are partially miscible
 - In Joule-Thompson Effect
a) temperature is increased b) temperature is decreased
c) either a or b above d) none of these
 - The atomic mass of sodium is 23. What is the ratio of mass of one of carbon to that of sodium?
a) 23:1 b) 1:23 c) 12:23 d) $\frac{1}{2}$:23

Turn over

(2)

10. How many water molecules are present in 1.8 litre of water (take density of water = 1)
 - a) 1 mole
 - b) 10 moles
 - c) 100 moles
 - d) 9.022×10^{23} molecules
11. The formula of Magnesium phosphate is $Mg_3(PO_4)_2$, then the valency of phosphate is
 - a) 3
 - b) 2
 - c) 4
 - d) 1
12. The formula of Ferric sulphate is
 - a) $FeSO_4$
 - b) $Fe(SO_4)_2$
 - c) $Fe_2(SO_4)_3$
 - d) $Fe_3(SO_4)_2$
13. An atom consist of 26 electrons and its mass number is 58. What is the number of neutrons present in the nucleus of the atom?
 - a) 26
 - b) 32
 - c) 58
 - d) none of these
14. The difference in the mass number of isotopes of an element is due to the difference in
 - a) atomic number
 - b) number of protons
 - c) number of electrons
 - d) number of neutrons
15. How many electrons can be accommodated in the 3rd shell?
 - a) 3
 - b) 6
 - c) 9
 - d) 18
16. When was neutron discovered?
 - a) 1920
 - b) 1911
 - c) 1930
 - d) 1932
17. The charge present on an electron is
 - a) 1.6×10^{21} coulomb
 - b) 1.6×10^{19} coulomb
 - c) 1.6×10^{-19} coulomb
 - d) none of these
18. Choose the incorrect statement.
 - a) Isobars have the same mass number
 - b) Atoms of all elements contain electron, proton and neutron.
 - c) The number of electrons is equal to the number of protons in an atom
 - d) none of these
19. The number of atoms present in exactly 12 grams of C-12 isotope is
 - a) 6.022×10^{26}
 - b) 6.022×10^{23}
 - c) 6.022×10^{22}
 - d) 6.022×10^{23}
20. There is no atom that do not contain atleast one each of
 - a) electron & neutron
 - b) neutron & proton
 - c) electron & proton
 - d) electron, proton & neutron
21. The identity of an atom is decided by the number of _____ present in it.
 - a) electrons
 - b) protons
 - c) neutrons
 - d) nucleons
22. If the velocity of an object increases from an initial value 'u' to the final value 'v' in time 't', then the average velocity of the object is given by
 - a) $a = \frac{v-u}{t}$
 - b) $a = \frac{u+v}{t}$
 - c) $a = \frac{v-u}{t}$
 - d) none of these.

Turn Over

(3)

23. Which of the following is an example of uniformly accelerated motion ?
 - a) a freely falling object
 - b) minute hand in a clock
 - c) both a & b above
 - d) none of these
24. Velocity-time graph of a freely falling object
 - a) is parallel to x-axis
 - b) passes through origin and has a constant slope
 - c) is parabolic
 - d) none of these
25. When brake is applied to a moving car producing retardation of 10 ms^{-2} and comes to halt after 3 seconds. Calculate the distance it travelled during retardation ?
 - a) 30m
 - b) 90m
 - c) 45m
 - d) none of these
26. The impulse of a force acting on a body is equal to change in _____ of body produced by the force.
 - a) velocity
 - b) speed
 - c) momentum
 - d) acceleration
27. Suppose a force of 1N is applied on a marble placed on an endlessly long table with frictionless surface placed in vacuum. Which of the following is correct with respect to the motion of the marble?
 - a) marble will not move
 - b) marble will move but becomes slower & slower and finally stops
 - c) marble will move endlessly
 - d) none of these
28. A bullet of mass 0.002kg is fired horizontally from a pistol of mass 0.3kg. If the velocity of recoil of the pistol is $-\frac{1}{3} \text{ m/s}$. Find the velocity of the bullet.
 - a) 20m/s
 - b) 200m/s
 - c) 2000m/s
 - d) none of these.
29. Action-reaction act
 - a) on the same body
 - b) in opposite direction
 - c) along different lines
 - d) none of these.
30. The SI unit of Universal Gravitation constant is
 - a) Nm^{-2}
 - b) $\text{Nm}^2 \text{kg}^{-1}$
 - c) $\text{Nm}^2 \text{kg}^{-12}$
 - d) $\text{Nm}^2 \text{kg}^{-2}$
31. Find the height of the point reached by a stone thrown vertically upward with 19.6 m/s velocity
 - a) 9.8m
 - b) 19.6m
 - c) 39.2m
 - d) none of these
32. What would be the weight of an object on the moon if its mass on the surface of the earth is 25kg?
 - a) 40.83N
 - b) 245N
 - c) 4.18N
 - d) none of these
33. What will happen to the force between two bodies if the distance between them is doubled?
 - a) reduce to half
 - b) increase by half
 - c) reduce to one-fourth
 - d) none of these

Turn Over