

QB365 Question Bank Software

10th Science Important Questions with Answer Keys For - 2024

10th Standard

Science

Total Marks : 50

CHOOSE THE CORRECT ANSWER:

50 x 1 = 50

- 1) Impulse is equals to
 - (a) rate of change of momentum
 - (b) rate of force and time
 - (c) **change of momentum**
 - (d) rate of change of mass
- 2) Newton's III law is applicable
 - (a) for a body is at rest
 - (b) for a body in motion
 - (c) **both a & b**
 - (d) only for bodies with equal masses
- 3) A small bulb is placed at the principal focus of a convex lens. When the bulb is switched on, the lens will produce
 - (a) a convergent beam of light
 - (b) a divergent beam of light
 - (c) **a parallel beam of light**
 - (d) a coloured beam of light
- 4) A convex lens forms a real, diminished point sized image at focus. Then the position of the object is at
 - (a) focus
 - (b) **infinity**
 - (c) at 2f
 - (d) between f and 2f
- 5) If V_B , V_G , V_R be the velocity of blue, green and red light respectively in a glass prism, then which of the following statement gives the correct relation?
 - (a) $V_B = V_G = V_R$
 - (b) $V_B > V_G > V_R$
 - (c) **$V_B < V_G < V_R$**
 - (d) $V_B < V_G > V_R$
- 6) If a substance is heated or cooled, the change in mass of that substance is
 - (a) positive
 - (b) negative
 - (c) **zero**
 - (d) none of the above
- 7) Kilowatt hour is the unit of
 - (a) resistivity
 - (b) conductivity
 - (c) **electrical energy**
 - (d) electrical power
- 8) The frequency, which is audible to the human ear is
 - (a) 50 kHz
 - (b) **20 kHz**
 - (c) 15000 kHz
 - (d) 10000 kHz
- 9) In the nuclear reaction ${}_6X^{12} \xrightarrow{\alpha \text{ decay}} {}_Z Y^A$, the value of A & Z.
 - (a) 8, 6
 - (b) **8, 4**
 - (c) 4, 8
 - (d) cannot be determined with the given data
- 10) Which of the following is a triatomic molecule?
 - (a) Glucose
 - (b) Helium
 - (c) **Carbon dioxide**
 - (d) Hydrogen
- 11) During transpiration there is loss of
 - (a) Carbon dioxide
 - (b) Oxygen
 - (c) **Water**
 - (d) None of the above
- 12) Which of the following process requires energy?
 - (a) **Active transport**
 - (b) Diffusion
 - (c) Osmosis
 - (d) All of them
- 13) Where you will create category of blocks?
 - (a) Block palette
 - (b) **Block menu**
 - (c) Script area
 - (d) sprite
- 14) Parallel forces acting in the same direction, the resultant force is _____
 - (a) $F_{\text{net}} = F_1 - F_2$
 - (b) **$F_{\text{net}} = F_1 + F_2$**
 - (c) $F_{\text{net}} = F_2 - F_1$
 - (d) $F_{\text{net}} = F_2 + F_1$
- 15) SI unit of G is

(a) $\text{Nm}^2\text{kg}^{-2}$ (b) Nm^2kg^2 (c) $\text{Nm}^{-2}\text{Kg}^2$ (d) $\text{Nm}^{-2}\text{kg}^{-2}$

16) Convex lenses are used in

(a) camera (b) magnifying lens (c) microscope (d) **all the above**

17) The amount of light entering the human eye is

(a) Ciliary muscles (b) **Pupil** (c) Cornea (d) Iris

18) Convex lens focus a real, point sized image at focus, the object is placed _____.

(a) At focus (b) Between F and 2F (c) **At infinity** (d) At 2F

19) SI unit of heat is

(a) calorie (b) **joule** (c) kilo calorie (d) kelvin

20) The expansion of _____ can be seen when a thermometer is placed in warm water.

(a) Solids (b) **Liquids** (c) Gases (d) plasma

21) Which of the statements given below is true?

(a) **The real expansion is always more than that of apparent expansion**

(b) The real expansion and apparent expansion are equal

(c) The real expansion is always lesser than that of apparent expansion (d) None of the above

22) A heating element used in the electric iron box and the electric heater is

(a) Tungsten (b) **Nichrome** (c) Lead (d) All the above

23) In which one of the following heating effect the current is undesirable?

(a) electric iron (b) **electric motor** (c) fuse wire (d) electric bulb

24) Earthquake produces _____.

(a) Ultrasound (b) **Infrasound** (c) audible sound (d) none

25) _____ are sound waves with a frequency greater than 20 kHz.

(a) Audible waves (b) infrasonic waves (c) **infrasonic waves** (d) a and c

26) The velocity with which the wave travels through the medium is called _____.

(a) **Wave velocity** (b) particle velocity (c) either a or b (d) none

27) According to Doppler effect, when the source and the listener are moving towards each other, the apparent frequency is

(a) **more than the actual frequency** (b) less than the actual frequency (c) equal to the actual frequency

(d) more or less than the actual frequency

28) If the exposure is about 100 R, it may causes _____.

(a) skin disorder (b) hair loss (c) **leukemia** (d) death

29) Minimum size of a system in which at least 1 neutron is available for further fission is called _____.

(a) cut - off size (b) **critical size** (c) range of reactor (d) capability criteria

30) Isotope of _____ element is used to age of old oil painting.

(a) **Carbon** (b) Californium (c) Americium (d) Phosphorous

31) The vapour density of the Helium gas is

(a) Equal to 1 (b) Less than 1 (c) **Greater than 1** (d) 0

32) Volume of 2 mole of hydrogen gas is

(a) 22.4 litre (b) **44.8 litre** (c) 2 litre (d) 11.2 litre

33) Solubility of CaO _____ with the increases in temperature.

(a) increases (b) **decreases** (c) remains constant (d) None of these

- 34) Physical changes are called as _____.
- (a) **Reversible reaction** (b) Irreversible reaction (c) Periodic (d) Non-periodic
- 35) Ethyl alcohol is mainly manufactured by
- (a) destructive distillation of wood (b) **fermentation of molasses** (c) dehydrogenation
(d) Oxidation of ethane in the presence of $K_2Cr_2O_7/H^+$
- 36) In _____ vascular bundles, Xylem and phloem are present in different radii alternating with each other.
- (a) **Collateral** (b) Bicollateral (c) Concentric (d) Radial
- 37) The shape of the wound in the skin of the host caused by leech is _____
- (a) V (b) X (c) U (d) **Y**
- 38) Blood group _____ Was recognized by Decastello and Steini in 1902.
- (a) A (b) B (c) **AB** (d) O
- 39) It is slightly alkaline, non-living intercellular substance which constitutes about 55% of the blood.
- (a) Formed elements (b) **Plasma** (c) Lymph (d) Blood cells
- 40) The term Auxin was introduced by _____
- (a) Went (b) **Kogi** (c) Charles Darwin (d) Kurosawa
- 41) Mark the one, which is NOT a physiological effect of auxin?
- (a) Cell elongation (b) **Stem elongation** (c) Cell differentiation (d) Rooting
- 42) Regeneration is seen in _____
- (a) Plasmodium (b) Spirogyra (c) **Hydra** (d) Amoeba
- 43) The uterus prepares itself to receive the fertilized egg every _____
- (a) Year (b) Day (c) Week (d) **Month**
- 44) According to Lamarck, the acquired characters are transmitted to the offspring by the process of _____
- (a) **mutation** (b) inheritance (c) gradual change (d) degeneration
- 45) For his contributions to the world food supply, Dr. Norman E. Borlaug was awarded the Nobel Peace Prize in the year _____.
- (a) 1960 (b) **1970** (c) 1972 (d) 1975
- 46) World AIDS Day is observed on _____
- (a) **1st December** (b) 15th December (c) 24th November (d) 1st May
- 47) The statutory warning found in all cigarette advertisements and packs is
- (a) Quit smoking today to get happiness tomorrow (b) **Smoking is injurious to Health.**
(c) We need to burn calories daily, not tobacco. (d) Tobacco is killing us, don't let it kill you.
- 48) _____ is not obtained from petroleum.
- (a) **Biogas** (b) Diesel (c) Gasoline (d) LPG
- 49) Medical wastes are disposed by _____ method.
- (a) Segregation (b) Sanitary landfill (c) **Incineration** (d) Composting
- 50) The device which helps in explaining the concepts easily through pictures is known as ' _____ Communication Device'.
- (a) Art (b) Tele (c) Mobile (d) **Visual**