**DEPARTMENT OF SCHOOL EDUCATION**

**Government NEET Coaching-Screening Test 2019-20**

**Time: 60min**

 **Marks:240**

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**Instructions:**

**1) Answer all the questions**

**2) For Every correct answer Four marks will be given**

**3) For Every wrong answer One mark will be deducted**

CHOOSE THE CORRECT ANSWER 60x4=240

|  |  |
| --- | --- |
| 1. | What will happen to the acceleration of a body at its highest position, if it is thrown vertically upwards? |
|  | a) Zero | b) increases | c) decreases  | d) constant |
| 2. | A bower bowls a ball of mars 0.25kg, which reaches the batsman with a speed of 5 m/s. it is hit by the batsman with the bat so that it flies away with a speed of 25 m/s in the same direction. What is the impulse of force on the ball? |
|  | a) 125 Kg m/s | b) 7.5 Kg m/s | c) 5 Kg m/s | d) 5 Kg m/$s^{2}$ |
| 3. | A boy jumps to a height of 0.3 m from the earth’s surface to what height can he jump in moon by spending the same energy if g moon = $\frac{1}{6}$ g earth? |
|  | a) 0.3m | b) 20m | c) 1.8m | d) .05m |
| 4. | 49 divisions of main scale coincide with 50 divisions of vernier scale in a vernier calipers find the least count if 1 main scale divisions is 0.5 mm  |
|  | 1. .01mm
 | 1. 0.1mm
 | 1. 0.5mm
 | 1. 1mm
 |
| 5 | A glass rod is rubbed with silk glass rod becomes positively charged due to  |
|  | 1. Loss of electrons
 | 1. Gain of electrons
 | 1. Loss of protons
 | 1. Gain of protons
 |
| 6. | Resistors R1, R2 **……** Rn are all connectedin parallel. The effective resistance of this combination will be |
|  | a) less than least value | b) greater than highest value | c) sum of resistances  | d) mean value of all resistances |
| 7 | Choose the correct statement from the following  |
|  | 1. Magnetic lines of force outside the magnet start from south pole end at north pole
 | 1. Magnetic lines of force inside the magnet start from north pole end at south pole
 |
|  | c) Magnetic lines of force start from positive charge end at negative charge | d) Magnetic lines of force inside the magnet start from south pole end at north pole |
| 8 | Number of images formed by 2 plane mirrors kept parallel so that its reflecting sides face each other will be |
|  | a) 2 | b) 4 | c) infinite | d) 1 |
| 9  | Which one of the following will always from virtual correct and diminished image? |
|  | a) convex mirror | b) concave mirror | c) convex lens | d) plane mirror |
| 10 | 2 lenses have their optic powers as -2D and 1.5D their combination will have focal length of  |
|  | a) -1m | b) +1m | c) -2m | d) +2m |
| 11 | What is the work done by centripetal force acting on a particular executing circular motion at constant speed |
|  | a) Positive | b) Negative | c) Zero | d) Positive or Negative |
| 12. | Two masses 25Kg and 100Kg are placed at a distance of 1M. force exerted by 25 Kg on 100 Kg =F1 force exerted by 100 Kg on 25 Kg =F2 choose the correct statement |
|  | a) F1> F2 | b) F1< F2 | c) F1= F2 | d) F1= 4F2 |
| 13 | Bursting of cycle tube is an example for  |
|  | a) Isobaric process | b) Isochoric process | c) Isothermal process | d) Adiabatic process |
| 14 | 100 gm of water at 80$℃$ is mixed with 100 gm of water at 30$℃$ what will be common temperature of mixture |
|  | a) 45$℃$ | b) 60$℃$ | c) 55$℃$ | d) 50$℃$ |
| 15 | When a wave travels from one medium to another which characteristic of the wave will not change? |
|  | a) Wave length | b) velocity | c) frequency | d) wave no |

16 The equivalent mass of Potassium Permanganate in alkaline medium is \_\_\_\_\_\_\_\_

 Mn$O\_{4}^{-}$+2$ H\_{2}$O+ 3$e^{-}$ $\rightarrow $ Mn$O\_{2}$+ 4O$H^{-}$

1. 31.6 b) 52.7 c) 79 d) None of these
2. For ‘d‘ electron the orbital angular momentum is \_\_\_\_\_\_\_\_\_\_\_
3. $\frac{\sqrt{2h}}{2π}$ b) $\frac{\sqrt{2h}}{2π}$ c) $\frac{\sqrt{2X4h}}{2π}$ d) $\frac{\sqrt{6h}}{2π}$

18 What would be the IUPAC name for an element with atomic number 222?

a) bibibiium b) bididium c) didibium d) bibibium

19 Which of the following has the highest hydration energy?

1. Mgcl2 b) Cacl2 c) Bacl2 d) Srcl2

20 Maximum deviation from ideal gas is expected from

1. CH**4** (g) b) NH**3** (g) c) H**2** (g) d) N**2** (g)

21 Heat of combustion is always \_\_\_\_\_

1. Positive b) Negative c) Zero d) Either positive or negative

22 Phenol dimerises in benzene having Van’t Hoff factor 0.54 what is the degree of association?

1. 0.46 b) 92 c) 46 d) 0.92

23 The percentage of ‘s’ character of the hybrid orbitals in methane, ethane, ethene and ethyne

 are respectively

1. 25,25,33.3,50 b) 50,50,33.3,25 c) 50,25,33.5,50 d) 50,25,25,50

24 In an organic compound Phosphorus is estimated as \_\_\_\_\_\_\_\_\_

1. Mg2P2O7 b) Mg3(PO4)2 c) H3PO4 d) P2O5

25 Which of the group has highest +**I** effect \_\_\_\_

1. CH3 - b) CH3- CH2- c) (CH3) 2 – CH- d) (CH3) 3– C-

26 Peroxide effect (Kharasch effect) can be studied in case of

1. Oct – 4 ene b) hex-3- ene c) pent-1- ene d) but-2- ene

27 The carbo cation formed in $S\_{N}^{1}$ reaction of alkyl halide in the slow step is

1. $sp^{3} $hybridised b) $sp^{2}$ hybridised c) *sp* hybridised d) None of these

28 Bio Chemical oxygen demand value is more than 17 ppm indicates a water to be \_\_\_

1. Highly polluted b) poor in dissolved oxygen c) rich in dissolved oxygen d) low COD

29 Producer gas is

1. H2O (g) b) CO+ H2O c) CO+ H2 d) CO+N2

30 Which of the following pairs of d orbitals will have electron density along the axis

a)$ dz^{2}, dxz$ b)$ dxz, dyz$ c) $dz^{2}, dx^{2}$-$y^{2}$ d) $dxy, dx^{2}-y^{2}$

|  |  |
| --- | --- |
| 31 | Identify the Archaebacterium  |
|  | a) Acetobacter | b)Erwinia | c) Treponema | d) Methanobacterium |
| 31 | Which of the plant group has gametophyte as a dominant phase?  |
|  | a) Bryophytes | b) pteridophytes | c) Gymnosperms | d) Angiosperms |
| 33 | Which of the following is a polycarpic perennial? |
|  | a) Bambusa | b) Mangifera | c) Agave | d) Musa |
| 34 | Vexillary aestivation is the characteristic of the family |
|  | 1. Asteraceae
 | 1. Brassicaceae
 | 1. Fabaceae
 | 1. Solanaceae
 |
| 35 | The taxonomy which involves the similarities and dissimilarities among the immune system of different taxa is termed as  |
|  | 1. chemotaxonomy
 | 1. Molecular systematics
 | 1. Serotaxonomy
 | 1. Numerical taxonomy
 |
| 36. | The two subunits of ribosomes remain united at critical ion level of  |
|  | a) Magnesium | b) Calcium | c) Sodium | d) Ferrous |
| 37 | The correct sequence in cell cycle is  |
|  | 1. S-M-G1-G2
 | 1. S -G1-G2-M
 | 1. G1-S- G2- M
 | 1. M- G1-G2-S
 |
| 38. | Which of the following is an secondary metabolites? |
|  | 1. Enzymes
 | 1. Amino acids
 | 1. Vitamins
 | 1. Pigments
 |
| 39. | Apical cell theory was proposed by  |
|  | a)Strassburgur | b) Hofmeister | c) Schleiden | d) Mettenius |
| 40  | The common bottle cork is a product of  |
|  | a) Dermatogen | b) Phellogen | c) xylem | d) Vascular cambium |
| 41 | Select the total stem parasite from the following  |
|  | a) Zizyphus | b) orobanche | c) Loranthus | d) Viscum |
| 42. | Select the correct combination   |
|  | a) Hooked leaf tip - zincc) Curled leafmargin – Potassium | b) Delayed flowering – d) Little leaf - Boron | Calcium |  |
| 43. | For every CO2 molecule entering the C3 cycle the number of ATP and NADPH required |
|  | a) 3 ATP+ 3 NADPH | b) 3 ATP+ 2NADPH | c) 2 ATP+ 2 NADPH | d) 2 ATP+ 3NADPH |
| 44 | The compound which links glycolysis and kreb’s cycle is |
|  | a) Acetyl COA | b) Citric Acid | c) Succinic acid | d) Pyruvic acid |
| 45 | Which of the following is an intermediate day plant? |
|  | a) Sugarcane | b) Potato | c) Tobacco | d) Wheat |
| 46 | Which of the following have the highest number of species in nature? |
|  | a) Insects | b) Birds | c) Angiosperms | d) Fungi |
| 47 | Pneumatic bones are seen in  |
|  | a) mammals | b) Aves | c) Reptiles  | d) Sponges  |
| 48 | Which of the following organisms is viviparous? |
|  | a) Periplaneta americana | b) Diplotera punctata |
|  | c) Eurycotis floridana | d) Blattella germanica |
| 49. | In which of the following disorders the immune cells attack and inflame the membranes around the joints? |
|  | 1. Rheumatoid arthritis
 | 1. Stickler syndrome
 | 1. Sjogren’s syndrome
 | 1. Hypersensitivity
 |
| 50 | Choose the copper containing pigment |
|  | 1. Oxyhaemoglobin
 | 1. Haemoglobin
 | 1. Haemocyanin
 | 1. Chlorocruorin
 |
| 51. | An adult has 32 permanent teeth which are of four different types and are called |
|  | a) Thecodont  |  b) Heterodont | c) Diphyodont | d) Lophodont |
| 52 | Pneumotaxic centre is present in  |
|  | a) Pons | b) Cerebrum | c) Cerebellum | d) Medulla oblongata |
| 53  | Electrocardiogram is a measure of  |
|  | a) Heart rate | b) Ventricular contraction | c) Volume of blood pumped | d) Electrical activity of heart  |
| 54 | A patient with blood group ‘A’ was injured in an accident and lost blood which blood group should the doctor use? |
|  | a) AB | b) A/O | c) B/O | d) AB/A/B |
| 55 | The effect of antidiuretic hormone on the kidney is to increase |
|  | a) excretion of water | b) excretion of Na+ | c) Permeabillity of the distal nephron to water | d) Glomerular filtration rate |
| 56 | Contraction of muscle is caused by |
|  | a) Myosin | b) Actin | c) ATP | d) Actomyosin |
| 57 | Cones are sensitive to |
|  | a) Dim light only | b) Bright light only | c) Both dim and bright light | d) None of these |
| 58 | Pineal gland secretes \_\_\_\_\_\_\_\_\_ hormone |
|  | a) MSH | b) Melatonin | c) FSH | d) Insulin |
| 59 | Amphibians belong to the super class |
|  | a) Pisces | b) Agnatha | c) Gnathostomata | d) tetrapoda |
| 60 | Which of the following structures does not belong to the “ limbic System”? |
|  | a) Amygdala | b) Cingulate gyrus | c) hippocampus | d) Lymphocytes |

**ANSWER KEY**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 1 | **D** | 16 | **B** | 31 | **D** | 46 | **A** |
| 2 | **C** | 17 | **D** | 32 | **A** | 47 | **B** |
| 3 | **C** | 18 | **D** | 33 | **B** | 48 | **B** |
| 4 | **A** | 19 | **A** | 34 | **C** | 49 | **A** |
| 5 | **A** | 20 | **B** | 35 | **C** | 50 | **C** |
| 6 | **A** | 21 | **B** | 36 | **A** | 51 | **B** |
| 7 | **D** | 22 | **D** | 37 | **C** | 52 | **A** |
| 8 | **C** | 23 | **A** | 38 | **D** | 53 | **D** |
| 9 | **A** | 24 | **A** | 39 | **B** | 54 | **B** |
| 10 | **C** | 25 | **D** | 40 | **B** | 55 | **C** |
| 11 | **C** | 26 | **C** | 41 | **A** | 56 | **D** |
| 12 | **C** | 27 | **B** | 42 | **C** | 57 | **B** |
| 13 | **D** | 28 | **A** | 43 | **B** | 58 | **B** |
| 14 | **C** | 29 | **D** | 44 | **A** | 59 | **D** |
| 15 | **C** | 30 | **C** | 45 | **A** | 60 | **D** |