

## Class 11 Entrance Model Questions

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- The centromere in a chromosome is
  - Primary constriction
  - Tertiary constriction
  - Secondary constriction
  - Quaternary constriction
- If  $x$  is a negative integer then value of  $|x|$  is
  - $x$
  - $-x$
  - $x.x$
  - $ax$
- Acceleration produced on freely falling body is independent of
  - Mass of the earth
  - Universal gravitational constant
  - Mass of the falling body
  - Distance between centre of earth and falling body
- Which of the following pair of elements belongs to same period of the periodic table?
  - P, Se
  - Mg, Sb
  - Ag, Cl
  - Ca, Zn
- Why \_\_\_\_\_ return money?
  - did you not
  - you didn't
  - did not you
  - didnt you
- Which of the following changes to seed?
  - Ovary
  - Integument
  - Ovule
  - Nucellus
- Set A contains 7 elements and set B contains 3 elements then the maximum number of elements in  $A \cup B$  and  $A \cap B$  are
  - 3,3
  - 7,3
  - 9,5
  - 10,3
- If the earth sudden stops rotating, weight of the body at earth's surface will
  - Increase
  - Decrease
  - Become zero
  - Remain unaffected
- Maximum number of covalent bonds by which two atoms can be bonded to each other is
  - four
  - two
  - three
  - no fixed number
- If I hadn't come along at that moment, Jim \_\_\_\_\_ the one arrested instead of the real thief.
  - might have been
  - may have been
  - can have been
  - would be
- Which of the following is not a chromosomal disorder?
  - Cholera
  - Down's syndrome
  - Colorblindness
  - Haemophilia
- Let  $f$  and  $g$  be the functions defined by  $f(x) = \frac{x}{x+1}$  and  $g(x) = \frac{x}{1-x}$  then  $f \circ g(x)$  is
  - $x$
  - $x-1$
  - $1/(x-1)$
  - $1/x$
- Which of the following is a vector quantity?
  - Energy
  - Pressure
  - Acceleration
  - Mass
- Which of these particles has more electrons than neutrons?
  - $Ba^{2+}$
  - $Al^{3+}$
  - $O^{2-}$
  - $Li^+$

15. \_\_\_\_\_ until midnight last night  
 a) I have been reading      b) I read      c) I was reading      d) I have read
16. Callus is formed in \_\_\_\_\_.  
 a) Cutting      b) Layering      c) Tissue culture      d) Grafting
17. The x-intercept of the graph of  $5x + 6y - 30 = 0$  is  
 a) 4 unit      b) 8 unit      c) 6 unit      d) 5 unit
18. What is the unit of power?  
 a)  $\text{Js}^{-1}$       b)  $\text{Kgms}^{-1}$       c)  $\text{Nm}^{-2}$       d)  $\text{Nm}^2\text{kg}^{-2}$
19. A gas formed by passing ammonia over heated sodium metal is  
 a)  $\text{N}_2$       b)  $\text{H}_2$       c)  $\text{NO}$       d)  $\text{N}_2\text{O}$
20. The elements of a good paragraph are \_\_\_\_\_.  
 a) topic sentence, body and conclusion      c) thesis statement, conclusion, examples  
 b) topic sentence, body, examples      d) topic sentence, introduction, conclusion
21. Hybridisation is the crossing of plants which have  
 a) Similar genotype      c) Dissimilar genotype  
 b) Similar phenotype      d) Dissimilar species
22. Two lines are said to be parallel; if the difference of their slope is  
 a) -1      b) 0      c) 1      d) none of these
23. At what temperature, the Centigrade and Fahrenheit scales are equal?  
 a)  $-40^\circ\text{C}$       b)  $273^\circ\text{C}$       c)  $-273.15^\circ\text{C}$       d) It is not possible
24. Which of the following is not a green house gas?  
 a) water vapour      b)  $\text{O}_2$       c)  $\text{CO}_2$       d)  $\text{CH}_4$
25. Pick out the word which is correctly spelt:  
 a) resiliense      b) resilience      c) resillence      d) resilient
26. Which of the following conditions results in a  $2n$  offspring?  
 a)  $2n \times 2n$       b)  $n \times 2n$       c)  $n \times n$       d)  $2n \times n$
27. For what value of  $m$  are the two vectors  $\vec{a} = \vec{i} - 2\vec{j}$  and  $\vec{b} = 4\vec{i} + m\vec{j}$  orthogonal?  
 a)  $m = 3$       b)  $m = \frac{-1}{2}$       c)  $m = 2$       d)  $m = -4$
28. Which of the following factor does not affect upthrust?  
 a) Density of liquid      c) Density of the object  
 b) Acceleration due to gravity      d) Volume of the object
29. Which is an example of thermosetting polymer?



43. A convex lens of focal length 10 cm is placed at a distance of 12 cm from a wall. How far from the lens should an object be placed so as to form its real image on the wall?
- a) 30 cm                                      b) 45 cm                                      c) 50 cm                                      d) 60 cm
44. Octane with molecular formula  $C_8H_{18}$  has
- a) 24 covalent bonds                      b) 25 covalent bonds                      c) 26 covalent bonds                      d) 27 covalent bonds
45. It is very cold today and \_\_\_\_\_.
- a) it's snowing                              b) it snows                                      c) its snowing                                      d) it snowing
46. Which of the following is correct for DNA?
- a) A=T    b) A=G    c) G-A    d) T-A
47. If  $A = \begin{pmatrix} \cos\alpha & \sin\alpha \\ -\sin\alpha & \cos\alpha \end{pmatrix}$  then  $AA^T =$
- a) 0    b) I    c) 1    d) -1
48. Far-sightedness is also known as
- a) Hypermetropia                              b) Myopia    c) Cataract    d) Presbyopia
49. The two reactions are shown below:  
 Reaction M:  $CaO + SiO_2 \longrightarrow CaSiO_3$   
 Reaction N:  $ZnCO_3 \longrightarrow ZnO + CO_2$   
 Which reaction is an example of a combination reaction and a decomposition reaction?
- a) Both reactions are examples of combination reaction  
 b) Both reactions are the examples of a decomposition reaction  
 c) Reaction M is an example of a combination reaction and reaction N is an example of decomposition reaction  
 d) Reaction M is an example of a decomposition reaction and reaction N is an example of combination reaction
50. The correct antonym of the underlined word in the sentence, 'The new receptionist is a brash young man' is
- a) arrogant                                      b) handsome                                      c) kind    d) polite
51. How many chromosomes are there in cell of bee?
- a) 16 pairs                                      b) 32 pairs                                      c) 36 pairs                                      d) 46 pairs
52. The probability that a card drawn from a pack of 52 cards will be diamond or a king is
- a) 1/16    b) 1/5    c) 4/52    d) 4/13
53. The SI unit of electric current is
- a) Volt    b) Faraday    c) Ampere    d) Volt
54. Which of the following belongs to the homologous series of alkynes?
- a)  $C_6H_6$     b)  $C_2H_6$     c)  $C_2H_4$     d)  $C_3H_4$

55. 'Ten thousand saw I at a glance' is an example of \_\_\_\_\_.  
 a) assonance                      b) oxymoron                      c) hyperbole                      d) metaphor
56. Metamorphosis is not found in :  
 a) Human                      b) frog                      c) Honey bee                      d) butterfly
57. If  $\cos x = \frac{2}{3}$  then  $\tan x$  is equal to  
 a)  $\frac{5}{\sqrt{2}}$                       b)  $\sqrt{\frac{5}{2}}$                       c)  $\frac{\sqrt{5}}{2}$                       d)  $\frac{2}{\sqrt{5}}$
58. Which of the following is the good conductor of electricity?  
 a) Paper                      b) Iron                      c) Glass                      d) Ebonite
59. Hematite is an Ore of  
 a) Fe                      b) Ag                      c) Zn                      d) Cu
60. A suitable tag question of "So you are getting married, \_\_\_\_\_?" is \_\_\_\_\_?  
 a) will you                      b) aren't you                      c) are you                      d) don't you
61. Soma is associated with  
 a) Erythrocytes                      b) Leucocytes                      c) Neuron                      d) Nephron
62. If  $\frac{a}{b} = \frac{2}{3}$  then  $\frac{5a-4b}{6a+2b} =$   
 a) 1:6                      b) -1:6                      c) 1:9                      d) -1:9
63. The number of turns in the primary coil of a transformer is double that of the secondary coil. Calculate the input voltage if 220 V is generated by the secondary coil.  
 a) 110 V                      b) 220 V                      c) 330 V                      d) 440 V
64. The valence shell electronic configuration of an element is  $ns^2np^6$ . The element belongs to the group of  
 a) Inert gases                      b) Alkali metals                      c) Alkaline earth metals                      d) Halogens
65. She did not want to sing a song. I asked her she had to. I made her \_\_\_\_\_.  
 a) sing                      b) to sing                      c) sang                      d) sung
66. If length of square is increased by 20%, by what percent its area increases?  
 a) 20%                      b) 100%                      c) 21%                      d) 44%
67. How much high a man can jump on moon in comparison to earth?  
 a) 3 times                      b) 6 times                      c) 9 times                      d) 12 times
68. This amongst the following is a wrong match

Option		
A	Mast cell	Bone
B	Endocrine part of Pancreas	Islets of Langerhans
C	Pairs of Patches	Illeum
D	Vermis	brain

69. Some important properties of aluminum are listed below:

1. It is good conductor of heat
2. It is a reactive metal
3. It has low density
4. It has an oxide layer that prevents corrosion

Which set of properties help to explain the use of aluminum for cooking and storing food?

- a) 1, 2 and 3                      b) 1, 2 and 4                      c) 1, 3 and 4                      d) 2, 3 and 4

70. My teacher forbade me \_\_\_\_\_ idle.

- a) to sit                              b) sitting                              c) to not sit                              d) not to sit

71. Glucagon is associated with

- a) Alpha cell                      b) Beta cell                      c) Gamma cell                      d) Oxyntic cell

72. A ladder makes an angle of  $60^\circ$  with the ground, when placed along a wall. If the foot of ladder is 8m away from the wall, the length of ladder is

- a) 8m                              b) 16m                              c)  $8\sqrt{3}$ m                              d)  $16\sqrt{3}$ m

73. The critical angle for water with respect to air is

- a)  $24^\circ$                               b)  $42^\circ$                               c)  $44^\circ$                               d)  $49^\circ$

74. The pH of two aqueous solutions X and Y is 4 and 10 respectively. Phenolphthalein is added to each solution. Which row in the following table shows the colour of each solution after the indicator phenolphthalein is added?

	X	Y
A	Red	Yellow
B	Yellow	Red
C	Colourless	Pink
D	Pink	Colourless

- a) row A                              b) row D                              c) row B                              d) row C

75. 'To smell rat' means \_\_\_\_\_.

- a) to get bad smell of the dead rat                              c) to be in bad mood  
b) to suspect foul dealings                              d) to listen eagerly

76. Which branch of biology study about fossils?

- a) Fossology                      b) Histology                      c) Palaentology                      d) Evolution

77. For what value of x are the numbers  $-\frac{2}{7}$ , x,  $-\frac{7}{2}$  are in GP?

- a) 1                              b) -1                              c) Both a and b                              d) None of these



