

Entrance Model Question - 2081

Faculty of Science

Full Marks: 100

Time: 2 Hrs

Tick the best alternative:

- Unless you grease his palm, he will not listen to you means....
 - flatter him
 - abuse him
 - bribe him
 - beat him
- It is very dangerous to intrude the enemy's camp.
 - in
 - into
 - on
 - through
- No sooner had we reached South Western College.....it started raining.
 - then
 - and
 - therefore
 - than
- The synonym of the word 'insolvent' means....
 - which can't be solved
 - hard to convince
 - unable to pay debt
 - residual
- The word 'crown' has the same initial consonant sound as in the word.
 - quiet
 - knight
 - cite
 - choose
- What is the correct form of the reply to "How do you do"?
 - thank you
 - i'm doing well
 - fine, thanks
 - how do you do
- I am used toin South Western State College.
 - studies
 - study
 - studying
 - studied
- My sister swims fast. Identify whether given verb is:
 - transitive
 - intransitive
 - linking
 - modal verb
- The life history of a person written by another person is.....
 - biography
 - autobiography
 - memoir
 - autography
- Nobody is coming here,?
 - is it
 - isn't it
 - are they
 - aren't they
- She said," long live the queen."
 - she said that the queen lives long
 - she prayed the queen live long

- c. both a and b
 - d. none of the above
12. Nabina arrived half an hour late, she attempted all the questions.
- a. however
 - b. although
 - c. in spite of
 - d. so that
13. He bought ten and sold only one
- a. deer, deers
 - b. deers, deer
 - c. deers, deers
 - d. deer, deer
14. One of my friends to ring me up after I had called him.
- a. had forgotten
 - b. has forgotten
 - c. forgets
 - d. forgot
15. There is no rose without thorn has affirmative....
- a. some rose has a thorn
 - b. no rose has not a thorn
 - c. there is some rose with a thorn
 - d. every rose has a thorn
16. I mustyou on your great achievements.
- a. complement
 - b. compliment
 - c. supplement
 - d. reprimand
17. Which one is correct?
- a. he insisted that he was paid at once.
 - b. he insisted on being paid once.
 - c. he insisted that he was being paid.
 - d. he insisted that he must be paid.
18. We usually let our friends..... church on Saturday
- a. attended
 - b. to attend
 - c. attend
 - d. attending
19. What a fuddy-duddy dress are you wearing? Here fuddy-duddy means...
- a. remote
 - b. rural
 - c. old-fashioned
 - d. dirty
20. The word 'automatically' has syllable.
- a. 3
 - b. 4
 - c. 5
 - d. 6
21. Which of the following is not unit of energy?
- a. Watt sec
 - b. Kgm/s
 - c. N.m
 - d. Joule
22. Vector quantities must have
- a. both magnitude and direction.

- b. only magnitude.
 c. only direction.
 d. no magnitude and no direction.
23. A particle is in motion. For its motion in certain time, displacement covered is
- a. always equal to distance covered.
 b. always less than distance covered.
 c. greater than distance covered.
 d. less than or equal to distance covered.
24. "To every action there is equal and opposite reaction" Which law is this?
- a. Newton's 1st law of motion.
 b. Newton's 2nd law of motion.
 c. Newton's 3rd law of motion.
 d. Newton's 4th law of motion.
25. If a ball just drops from a top of tower of height 500m, then it will reach to the ground in time
- a. 10 sec b. 100 sec
 c. 200 sec d. 400 sec
26. The gravitational force between two identical steel balls each of radius r touching their surfaces is F . Then, gravitational force between two identical steels balls each of radius $2r$ touching their surfaces will be
- a. $F/4$ b. $4F$
 c. $16F$ d. $F/2$
27. Electric charge is measured in
- a. ampere b. coulomb
 c. volt d. hm
28. What is the SI unit of temperature?
- a. Kelvin scale b. Celsius scale
 c. Fahrenheit scale d. Raumer scale
29. If there is no loss of energy in a machine, what is the efficiency of the machine?
- a. 0 percent b. 50 percent
 c. 25 percent d. 100 percent
30. How much heat energy is required to raise the temperature of copper with mass 3kg from 30°C to 40°C . (specific heat capacity for copper is 400 J/kgk)
- a. 3800J b. 7600 J
 c. 6000 J d. 12000 J

31. The value of acceleration due to gravity is
- maximum at the poles of the earth
 - minimum at the poles of the earth
 - maximum at the equator of the earth
 - maximum at the centre of the earth.
32. To make a body float
- the density of the body should be greater than that of liquid.
 - the density of the body should be smaller than that of liquid.
 - the density of the body should be equal that of liquid.
 - both b and c
33. In what unit is the power of lens is measured?
- watt
 - meter
 - diopetre
 - hertz
34. An object moves towards a stationary mirror at a speed of 4m/s. With what speed will his image move towards and relative to object?
- 2m/s
 - 4m/s
 - 8m/s
 - Image will remain stationary.
35. The value of velocity of sound has maximum value in
- solid
 - liquid
 - gas
 - water
36. The branch of science which deals with matter and its reaction is
- Physics
 - Chemistry
 - Biology
 - Mathematics.
37. Alkali and alkaline earth metals belong to
- s-block element
 - d-block element
 - p-block element
 - f- block element.
38. 3.Covalency of an element is the number of electrons
- lost
 - gained
 - shared
 - all of the above
39. 4. The process of electrolysis needs
- cathode
 - anode
 - electrolyte
 - all of the above
40. Temperature at which vapor pressure is equal to atmospheric pressure is
- melting point
 - boiling point
 - both a and b
 - none of the above
41. The substances having same chemical composition but different physical properties are called
- isotopes
 - allotropes
 - isotones
 - none of the above

42. The impurities present in metal ores before reduction are called
- minerals
 - gangue
 - refractory impurities
 - none of the above
43. Sulphuric acid is also called.
- queen of chemicals.
 - king of chemicals
 - friend of chemicals
 - none of the above
44. Nitrous oxide is also called.
- laughing gas
 - water gas.
 - producer gas
 - poisonous gas
45. Crushing and grinding, concentration, oxidation, reduction and purification are the steps involved in the
- extraction of metals from their Ores
 - manufacture of ammonia
 - manufacture of sulphuric acid
 - None of the above.
46. The general formula for alkene is
- $C_n H_{2n+2}$
 - $C_n H_{2n}$
 - $C_n H_{2n-1}$
 - None of the above.
47. The elements like N, S, halogens etc. present in organic compounds are called
- passive elements
 - functional group
 - foreign elements
 - none of the above
48. Ethanol is the..... member of alcohol homologous series
- first.
 - Second
 - Third
 - Fourth
49. The functional group of Ketone is
- CHO
 - COOH
 - OH
 - C=O
50. The property of carbon atom which describes its ability to bond with other carbon atoms is called
- oxidation
 - catenation.
 - hydration
 - hybridization
51. Who is father of Genetics?
- Carl Linnaeus
 - E. P. Odum
 - Gregor Johann Mendel
 - Charles Darwin
52. Which cell organelles is also known as "Kitchen of Plant Cell"?
- chloroplast
 - nucleus
 - golgi complex
 - mitochondria

53. According to five kingdom system of classifications, Mushroom belongs to kingdom ...
- a. Monera
 - b. Plantae
 - c. Protista
 - d. Mycota
54. Which of the following cell division is also known as “reductional cell division”?
- a. amitosis
 - b. mitosis
 - c. meiosis
 - d. fission
55. is the good example of monocot plants.
- a. mustard
 - b. mango
 - c. guava
 - d. banana
56. Which of the following belongs to biotic factor of aquatic ecosystem?
- a. water
 - b. temperature
 - c. green algae
 - d. moist soil
57. The branch of biology which deals with the study of fruits and its cultivation is called.....
- a. Pomology & Horticulture
 - b. Ecology & Floriculture
 - c. Mycology & Horticulture
 - d. Parthenocarpy & Morphology
58. Which one of the followings is a primary cause of acid rain?
- a. air pollution
 - b. noise pollution
 - c. global warming
 - d. invasive alien species
59. Which of the following is the best practice of Ex-situ conservation of Biodiversity?
- a. national parks
 - b. botanical gardens
 - c. wildlife reserves
 - d. conservation area
60. There is need of external agents to facilitate the cross pollination. So, the pollination facilitate by small insects is called.....
- a. Ornithophily
 - b. Malacophily
 - c. Hydrophily
 - d. Entomophily
61. If y is 25% less than x, then, x is what percent more than y?
- a. 25%
 - b. 33.33%
 - c. 16.5%
 - d. 22.22%
62. The smallest number which when subtracted from the difference of the square of 29 and 22 that gives a perfect square is :
- a. 9
 - b. 33
 - c. 13
 - d. 21
63. If a train travels 600 km in 4 hours, what is the distance travelled in 10 minutes?
- a. 25km
 - b. 30km
 - c. 35km
 - d. 40km

64. The side of the two square is X:Y, the ratio of their perimeter is :
- $X/4:Y/2$
 - $4X:Y$
 - $X:Y$
 - $X^2:Y^2$
65. The set of intelligent students in a class is
- null set
 - a singleton set
 - a finite set
 - none of these
66. The average of 11 result is 50. If the average of first sixth result is 49 and the last six result is 52. The sixth result is:
- 45
 - 50
 - 55
 - 56
67. If the credit price of 5 copies of a book is equal to cash price of 6 copies of a same book. What is the rate of discount?
- 20%
 - 25%
 - 164%
 - $\frac{100}{6}\%$
68. What single discount is equivalent to two successive discounts 10% and 15% ?
- 25%
 - 24%
 - 24.5%
 - 23.5%
69. One boy at southwestern High School, $\frac{1}{2}$ of the students were absent, and $\frac{1}{5}$ of those present went in school that day was 704. How many students are enrolled at southwestern school?
- 800
 - 840
 - 960
 - 900
70. In a test a student answered 92% of the question correctly. If he answered 23 questions correctly, how many questions did he answer incorrectly?
- 15
 - 4
 - 3
 - 2
71. If 7 times the 7th term of an A.P. is equal to 11 times its 11th Term, what will be the value of 18th term of an A.P.?
- 0
 - 1
 - 18
 - 11
72. The gradient of a line parallel to x – axis is:
- 1
 - 0
 - ∞
 - none of these
73. The third term of G. P. is 4. The product of first five terms is
- 4^3
 - 4^5
 - 5^4
 - none of these

74. The graph of function $f(x) = ax^2 + bx + c$, $a > 0$ is
- circle
 - parabola
 - asymptote
 - none of this.
75. In a mixture of 60 litres, the ratio of milk and water is 2:1. If this ratio is to be 1:2, then the quantity of water to be further added is:
- 20 litres
 - 40 litres
 - 60 litres
 - 100 litres
76. If $2A = 3B = 4C$, Then A:B:C in
- 2:3:4
 - 4:3:2
 - 6:4:3
 - 3:4:2
77. The probability of not getting a sum of 7 in a single throw with a pair of dice is;
- $\frac{1}{6}$
 - $\frac{5}{6}$
 - $\frac{1}{3}$
 - $\frac{2}{3}$
78. If the roots of the equation $ax^2 + bx + c = 0$ are equal in magnitude but opposite in sign, then;
- $a = 0$
 - $b = 0$
 - $c = 0$
 - none of these
79. If the angles of a triangle are in the ratio 1:2:3, then the ratio of its sides are;
- $1:\sqrt{2}:3$
 - $1:3:\sqrt{2}$
 - $1:\sqrt{3}:\sqrt{2}$
 - $1:\sqrt{3}:2$
80. In an upper triangular matrix, $A = (a_{ij})$ the elements $a_{ij} = 0$ for;
- $i < j$
 - $i > j$
 - $i = j$
 - $i \leq j$
81. Which of the following is fruit ripening gaseous phyto-hormone?
- Auxin
 - Gibberellins
 - Cytokinin
 - Ethylene
82. Movement of plant or its parts towards the source of light is called
- Photosynthesis
 - Phototropism
 - Photolysis
 - Photorespiration
83. Guttation occurs through
- Stomata
 - Cuticle
 - Hydathodes
 - Lenticels
84. 'Potometer' is the instrument used to measure the
- Transpiration
 - Photosynthesis
 - Respiration
 - Photorespiration

85. Which of the following are considered as good indicators of air pollution?
- a. Algae and Virus
 - b. Fungi and Bacteria
 - c. Bryophyta
 - d. Lichens
86. GJ Mendel made a cross between pure tall and dwarf *Pisum stivum* plant, what would be the phenotypic ratio in the second generation?
- a. 9:3:3:1
 - b. 1:2:1
 - c. 1:2:2:4:1:2:1:2:1
 - d. 3:1
87. RNA is the site for
- a. Respiration
 - b. Protein synthesis
 - c. Photosynthesis
 - d. Transpiration
88. The ecological pyramid of energy in pond ecosystem is
- a. Upright
 - b. Inverted
 - c. Linear
 - d. Circular
89. Bacteriophages are
- a. Bacteria
 - b. Bacteria and Fungi
 - c. Virus
 - d. Blue Green Algae, Nostoc
90. Which of the following biologists discovered the double helical structure of DNA?
- a. Watson and Crick (1953)
 - b. Banthem and Hooker (1862-1883)
 - c. Singer and Nicolson (1972)
 - d. T.H. Morgan and Hugo de Vries (1901)
91. Who founded the theory of natural selection?
- a. Charles Darwin
 - b. Lamarck
 - c. Von Helmont
 - d. Mendelism
92. Those animals which are adapted for climbing are called:
- a. Arboreal
 - b. Cursorial
 - c. Aerial
 - d. Fossorial
93. How many chromosomes are there in an unfertilized egg of the honey bee?
- a. 16 pairs
 - b. 32
 - c. 16
 - d. 8
94. The simple method of sexual reproduction is:
- a. Fertilization
 - b. Pollination
 - c. Conjugation
 - d. Sporulation
95. The process of intake of air is called
- a. Exhalation
 - b. Inhalation
 - c. Respiration
 - d. Breathing

96. Who coined the term mutation?
- a. Mendel
 - b. Mendeleef
 - c. Dalton
 - d. De Vries
97. The tail vertebrae and muscles to move ears in humans are examples of
- a. Homologous organs
 - b. Analogous organs
 - c. Vestigial organs
 - d. None of these
98. Which of the following is an example of the aquatic ecosystem?
- a. Rice field ecosystem
 - b. A tree ecosystem
 - c. Lawn ecosystem
 - d. Desert ecosystem
99. How much honey can a single honey bee make in its life time?
- a. About 1/2 of a tea spoon
 - b. About a table spoon
 - c. About an eighth of a table spoon
 - d. About 500 gm
100. The compound which is responsible for ozone layer depletion is
- a. Methyl chloroform
 - b. Carbon tetrachloride
 - c. Methyl bromide
 - d. Chlorofluorocarbons

Best of Luck !

ANSWER KEY

Q.N	Ans.
1	c
2	b
3	d
4	a
5	a
6	d
7	c
8	b
9	a
10	c
11	d
12	a
13	b
14	d
15	d
16	a
17	d
18	c
19	c
20	d
21	b
22	a
23	b
24	c
25	a

Q.N	Ans.
26	c
27	b
28	a
29	d
30	d
31	a
32	d
33	c
34	d
35	a
36	b
37	a
38	d
39	d
40	b
41	b
42	b
43	b
44	a
45	a
46	b
47	c
48	b
49	d
50	b

Q.N	Ans.
51	c
52	a
53	d
54	c
55	d
56	c
57	a
58	a
59	b
60	d
61	b
62	b
63	a
64	c
65	b
66	d
67	d
68	d
69	c
70	d
71	a
72	b
73	b
74	b
75	c

Q.N	Ans.
76	c
77	b
78	b
79	d
80	b
81	d
82	b
83	c
84	a
85	d
86	d
87	b
88	a
89	c
90	a
91	a
92	a
93	c
94	c
95	b
96	d
97	c
98	a
99	a
100	d

