

Practice Test - 1

1. "Killing of one's brother" is called...
A. fratricide B. homicide C. patricide D. genocide
2. If you add 2+2, it ... 4.
A. will be B. will become C. becomes D. was
3. Only the blood-stained road was a witness ... his assassination.
A. of B. to C. at D. on
4. Shyam has no control ... his temper.
A. at B. after C. in D. over
5. Mr. John is ... European teacher.
A. an B. a C. the D. no article
6. The man is ... LLB.
A. a B. an C. the D. no article
7. He plays ... football very well.
A. a B. an C. the D. no article
8. Stop that noise, ...?
A. will you B. won't you C. can't you D. don't you
9. The antonym of 'heredity' is
A. environment B. gene C. inheredity D. none
10. The synonym of 'postpone' is
A. defer B. stop C. wait D. none
11. The indirect form of *He said, "Let's leave the case in the station."* is....
A. He suggested leaving the case at the station.
B. He said that they had to leave the case in the station.
C. He said that they left the case in the station.
D. None of the above.
12. The passive form of "People said that he was jealous of her." is....
A. He was jealous of her.
B. He was said to be jealous of her.
C. People said he had been jealous of her.
D. None of the above
13. The horse and carriage ... ready.
A. is B. am C. are D. none
14. Do not copy the answer
A. word by word B. word to word
C. word for word D. none of these
15. He was no ... than a thief.
A. other B. others C. an other D. the other

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Read the following passage and answer the questions given.

The greatest enemy of mankind, as people have discovered, is not science, but war. Science merely reflects the prevailing social forces. It is found that, when there is peace, science is constructive; when there is war, science is perverted to destructive ends. The weapons which science gives us do not necessarily cause war, they make war increasingly terrible. Till now, it has brought us to the doorstep to doom. Our main problem, therefore, is not to curb science, but to stop war to substitute law for force, and international government for anarchy in the relations of one nation with another. That is a job in which everybody must participate, including scientists. But the Bombing of Hiroshima suddenly woke us up to the fact that we have very little time. The hour is late and our work has scarcely begun. Now we are face to face with an urgent question "Can education and tolerance, understand and creative intelligence run fast enough to keep us abreast with our own mounting capacity to destroy?" that is the question which we shall have to answer one way or the other in this generation. Science must help us in arriving at the answers, but the main decision lies within ourselves.

Questions:

16. According to the writer, the real enemy of mankind is not science but war, because
 - A. Science merely invents the weapons with which war is fought
 - B. Science during war become destructive
 - C. The weapons that science invents necessarily lead to war.
 - D. The weapons invented by science do not cause war, though these make it more destructive.
17. According to the writer, the main problem we are faced with is to
 - A. Stop science from reflecting social forces.
 - B. Stop scientific activities everywhere.
 - C. Abolish war.
 - D. Prevent scientists from participating in destructive activities.
18. The expression "bring to the doorstep of doom" means
 - A. Carry close to death and destruction
 - B. Lead to the threshold of new destiny
 - C. Indulge in ruinous activity
 - D. Introduces to an unpredictable destiny
19. Which of the following is opposite in meaning to the word 'anarchy'?
 - A. Law and order
 - B. Political dominance
 - C. Economic prosperity
 - D. Communal harmony
20. Which of the following would be the most suitable title for the passage?
 - A. Science and social forces
 - B. Science and horrors of war
 - C. Science and the new generation
 - D. Science and world peace

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21. In a jar, $\frac{1}{2}$ of the marbles are red, $\frac{1}{4}$ are white, and $\frac{1}{5}$ are blue. What fraction of the marbles are neither red, white nor blue?
A. $\frac{19}{20}$ B. $\frac{1}{20}$ C. $\frac{15}{20}$ D. $\frac{1}{10}$
22. What is 10% of 20% of 30%?
A. 0.006% B. 0.6% C. 6% D. 60%
23. If $x+y=6$, $y+z=7$, and $z+x=9$, what is the arithmetic mean of x , y , and z ?
A. $\frac{11}{3}$ B. $\frac{11}{2}$ C. 11 D. $\frac{22}{3}$
24. A square of area 2 is inscribed in a circle. What is the area of the circle?
A. $\frac{\pi}{4}$ B. $\frac{\pi}{2}$ C. π D. 2π
25. When a digital clock reads 3:47, the sum of the digits is 14. How many minutes after 3:47 will the sum of the digits be 20 for the first time?
A. 42 B. 132 C. 192 D. 251
26. The value of $9^{1/3} \cdot 9^{1/9} \cdot 9^{1/27} \dots \dots \dots \infty$ is
A. 9 B. 1 C. 3 D. None of these
27. If $\tan\alpha = \frac{1}{2}$, $\tan\beta = \frac{1}{3}$, then $\alpha + \beta$ is equal to
A. $\frac{\pi}{2}$ B. $\frac{\pi}{3}$ C. $\frac{\pi}{4}$ D. $\frac{\pi}{6}$
28. The distance between the lines $3x + 4y = 6$ and $6x + 8y = 15$ is
A. $\frac{3}{2}$ B. 6 C. $\frac{3}{10}$ D. $\frac{7}{9}$
29. The acute angle between the lines $3x^2 - 7xy - 3y^2 = 0$ is
A. $\frac{\pi}{2}$ B. $\frac{\pi}{4}$ C. $\frac{\pi}{6}$ D. None of the above
30. Which of the following is the value of P, if one root of $x^2 - Px + 1 = 0$ is square of other
A. -1 B. -2 C. 1, -2 D. 2, -1
31. The point of concurrency of three internal angles bisectors of a triangle is called
A. Orthocenter B. Circumcentre
C. Incentre D. Excentre
32. From a set of number cards numbered from 1 to 20, a card is drawn randomly. Find the probability of getting a card exactly divisible by 3 or 4.
A. $\frac{11}{20}$ B. $\frac{1}{2}$ C. $\frac{9}{20}$ D. $\frac{1}{20}$
33. The median of the data: 8, 12, 35, 40, 15, 10, 11, 14 is
A. 4.5 B. 12 C. 13 D. 14
34. If A is any square matrix, then $A + A^T$ will be
A. A diagonal matrix B. A symmetric matrix
C. A skew-symmetric matrix D. Identity matrix
35. If the equation $x^2 + 2(K+2)x + 9k = 0$ has equal roots, then the value of K is
A. 1 B. 2 C. 3 D. 0
36. If $\vec{a} = \vec{i} + \vec{j} - 2\vec{k}$ and $\vec{b} = 2\vec{i} - \vec{j} - \vec{k}$ are any two vectors, then the angle between \vec{a} and \vec{b} is
A. $\frac{\pi}{6}$ B. $\frac{\pi}{3}$ C. 0 D. $\frac{\pi}{2}$

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37. If $\sin A, \sin B, \sin C$ are in A.P. then a, b, c are in
A. A.P. B. G.P. C. H.P. D. None
38. The length of the perpendicular from origin on the line joining (a, b) and (b, a) is
A. $\frac{a+b}{2}$ B. $\frac{a+b}{\sqrt{2}}$ C. $\frac{a-b}{\sqrt{2}}$ D. $\frac{a-b}{2}$
39. How many integers are solutions of the inequality $3|x| + 2 < 17$?
A. 0 B. 8 C. 9 D. 5
40. 30 men work 10 hours a day to complete a piece of work in 25 days. How many men will be required to complete a piece of work twice as great in 15 days working 8 hours a day?
A. 130 B. 125 C. 12.5 D. 75
41. In a monohybrid cross, the two parental genotypes are AA and aa. The genotype of all F_1 plants is Aa. If the F_1 plants are crossed to get F_2 generation, what percentage of the F_2 generation will have the dominant phenotype?
A. 100% B. 75% C. 50% D. 25%
42. What is the name of the process by which the cytoplasm of a cell divides to form two daughter cells?
A. Cytokinesis B. Interphase C. Prophase D. Karyokinesis
43. In a plain community, the population with greatest biomass would be
A. Foxes B. Hawks C. Grasses D. Beetles
44. The process of loss of water vapour from the aerial parts of plants is called transpiration. The opening and closing of stomata is controlled by
A. Stomatal cells B. Guard cells C. Xylem cells D. Phloem cells
45. Which of the following plants mentioned below is not characterized by the presence of reticulate veins in its leaves?
A. Sunflower B. Tomato C. Maize D. *Cuscuta*
46. What the association between two organisms called if one gets advantage from the other without harming it?
A. Mutualism B. Commensalism
C. Predation D. Parasitism
47. What is the branch of biology dealing with the study of algae called?
A. Phycology B. Mycology C. Ornithology D. Myology
48. Which of the following is human diploid chromosome number?
A. 10 B. 23 C. 46 D. 92
49. Sieve tubes, phloem parenchyma, bast fibers, and are the elements of phloem.
A. Vessels B. Tracheids C. Wood fibers D. Companion cells

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50. A student studied two different groups of cells and made the following observations:

Trait	Cell I	Cell II
Cell wall	Present	Present
Ribosomes	Present	Present
Nucleus	Absent	Present
Ability to photosynthesize	Present	Present
Cell respiration	Present	Present

Which of the following conclusions is best supported by these observations?

- A. Cell I is more complex in its organization than cell II
B. Cell I is a prokaryote
C. Cell II does not have a nucleus
D. The ancestors of cell II appeared earlier in the fossil record than the ancestors of cell II
51. A part of digestive system that is not in contact with food is the
A. Small intestine B. Stomach C. Large intestine D. Liver
52. Although the Duckbilled Platypus lays eggs, it is classified as
A. Amphibia B. Reptilia C. Aves D. Mammal
53. Epithelial cells may have all of the following functions except
A. Protection B. Absorption C. Contraction D. Secretion
54. One of the characteristics of all living things is that they
A. Require oxygen for respiration
B. Originate from pre-existing life
C. Carry on heterotrophic nutrition
D. Carry on autotrophic nutrition
55. All of the following are examples of a reflex except
A. Sneezing B. Blinking C. Thinking D. Knee Jerking
56. Two wastes resulting from the oxidation of food are
A. Oxygen & water B. Carbon dioxide & water
C. Oxygen & Carbon dioxide D. Oxygen & ATP
57. Which of the following is not an attribute of enzyme?
A. They are specific in nature
B. They are proteinous in nature
C. They are used up in the reaction
D. They speed up rate of biochemical reactions
58. Short sightedness of myopic vision is corrected by wearing
A. Convex lens B. Concave lens
C. Concave mirror D. Convex mirror
59. *Hydra* is
A. Asymmetrical B. Radially Symmetrical
C. Spherically Symmetrical D. Bilaterally Symmetrical

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60. If a bird is transferred from 20°C to 10°C . The body temperature will change to
A. 15°C B. 5°C C. 10°C D. No change
61. A mixture of sand, common salt and camphor can be separated by
A. Filtration B. Evaporation
C. Sublimation D. Filtration followed by Sublimation
62. The atomic numbers of two elements A and B are 30 and 15 respectively. What is the possible formula of the compound?
A. A_3B_2 B. A_2B_3 C. AB_2 D. AB
63. Which of the following is natural polymer?
A. Starch B. Plastic C. Protein D. Both A & C
64. Which of the following is covalent solid?
A. copper B. Diamond C. Sodium Chloride D. Methane
65. Divide a piece of chalk into half. Divide it further and keep on dividing it many times. The smallest piece of chalk that can be obtained by this division is
A. An atom B. A molecule C. A particle D. A crystal
66. The compound AgCl is composed of
A. AgCl molecule
B. Atoms of silver and chlorine
C. Polymerized AgCl molecules
D. Ag^+ and Cl^-
67. The compound which gives chlorine like smell is
A. CaOCl_2 B. CHCl_3 C. CaCl_2 D. both b and c
68. Which of the following is characteristic of both mixtures and compounds?
A. Energy is absorbed when they are made
B. Their properties are same as those of their components
C. They contain components in fixed ratios
D. Their mass equals the sum of mass of their components
69. Which of the following is not a solution?
A. Smoke B. Air C. Brass D. A gold ring
70. In the nucleus of ${}^{40}_{20}\text{Ca}$, there are
A. 40 protons and 20 electrons
B. 20 protons and 40 electrons
C. 20 protons and 20 electrons
D. 20 protons and 20 neutrons
71. The reverse process of neutralization is also known as
A. Hydrolysis reaction B. Rearrangement reaction
C. Precipitation reaction D. Red ox reaction
72. The general formula of cycloalkane is
A. $\text{C}_n\text{H}_{2n+2}$ B. C_nH_{2n} C. $\text{C}_n\text{H}_{2n-2}$ D. $\text{C}_n\text{H}_{2n-1}$
73. The absolute mass of one atom of hydrogen is
A. 1.008 amu B. 1.008gm C. 1 amu D. $1.66 \times 10^{-24}\text{gm}$

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74. Which of the following is organic compound?
A. CO_2 B. CO C. Na_2CO_3 D. $\text{CO}(\text{NH}_2)_2$
75. Which of the following pairs of elements are chemically most similar?
A. Hf and Zr B. Na and Al C. Cu and Cl D. B and Be
76. Which of the following have the same unit?
A. Energy and force B. Work done and energy
C. Momentum and velocity D. Acceleration and velocity
77. Which of the following has unit but no dimension?
A. Plane angle B. magnetic field
C. Momentum D. Current
78. Which of the following relation is true?
A. $1\text{N} = 10^{13}$ dynes B. $1\text{ Joule} = 10^5$ ergs
C. $1\text{N} = 10^5$ dynes D. $1\text{ Joule} = 10^6$ ergs
79. A bullet having mass 1Kg and moving with a velocity of 2ms^{-1} penetrates in a wooden block which is at rest. After its penetration, both of them remain at rest. The amount of heat generated in the wooden block is equal to
A. 0J B. 1J C. 4J D. 2J
80. The value of 'g' will be exactly zero at
A. the pole of the earth B. the center of the earth
C. the Equator of the earth D. infinity
81. The mass of A is found to be greater than the mass of B. But the kinetic energy of A is found to be smaller than that of B. Then the velocity of A is -----that of B.
A. smaller than B. greater than
C. equal to D. depends upon the size of the bodies
82. When we touch ice, we feel cool because of-----
A. the gain of heat energy B. the loss of heat energy
C. the gain of momentum D. none of the above
83. Which of the following process takes place faster than the others?
A. Conduction B. Convection
C. Radiation D. Propagation of sound
84. The full form of Emf in electricity is-----
A. Electromotive force B. Electromagnetic force
C. Electro motion force D. Electricity motion force
85. For a normal eye, ciliary muscles will be strained maximum when it views an object at
A. infinity B. anywhere
C. the least distance of distinct vision D. far distance of distinct vision
86. Sound wave can be propagated through
A. gas medium only B. Vacuum only
C. liquid medium only D. Solid, liquid and gas medium

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87. Which of the following statement is false?
A. We can have an isolated charge
B. We can have an isolated magnetic pole
C. We can have an isolated eye lens
D. We can have an isolated electron
88. Sure test of electrification is
A. repulsion between unlike charges B. attraction between unlike charges
C. repulsion between like charges D. attraction between like charges
89. The unit of intensity level of sound is
A. Wbm^{-2} B. dB C. Wb D. Joule
90. There will be a full moon when
A. the moon lies in between the earth and the sun
B. the sun lies in between the earth and the moon
C. the earth lies in between the sun and the moon not in one plane
D. the earth lies in between the sun and the moon
91. The first reasonably valid IQ test in the world was developed by
A. Alfred Binet B. Lewis Terman
C. David Wechsler D. William Stern
92. Who is the Author of 'Around The World In Eighty Days'?
A. Herman Melville B. Jules Verne C. Jonathan Swift D. Graham Greene
93. Which of the following works is not related with Louis Pasteur?
A. Germ theory of diseases B. Anti rabies vaccine
C. Pasteurization D. Discovery of Tuberculosis
94. The largest and smallest districts of Nepal are
A. Dolpa and Lalitpur B. Kailali and Nuwakot
C. Dolpa and Bhaktapur D. Syanja and Pyuthan
95. _____ controls the way in which the computer system functions and provides a means by which users can interact with the computer.
A. The operating system B. The motherboard
C. The platform D. Application software
96. If SYSTEM is written as SYSMET and NEARER is written as AENRER, then FRACTION will be coded as
A. Carfnoit B. Carftion C. Noitfrac D. Fracnoit
97. Choose the correct alternative that will continue the same pattern and fill in the blank spaces. 1, 4, 27, 16, ?, 36, 343
A. 125 B. 50 C. 78 D. 32
98. When a ship enters a sea from a river, its portion under water will
A. Increase B. Decrease
C. Show no change D. Increase and decrease alternatively

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99. Liberty, Equality and Fraternity, this inspiration was derived from
A. American Revolution B. French Revolution
C. Russian Revolution D. None of the above
100. Which country leads in the production of rubber?
A. Australia B. India C. Thailand D. Myanmar

Practice Test - 2

1. Jason, the only intrepid one, struggled barehanded with the beast. It means Jason is _____.
A. frightened B. masculine C. thoughtful D. fearless
2. That is the town _____ we will have to drive to reach the destination.
A. from which B. of which C. at which D. through which
3. What does the word 'aural' correspond to?
A. Hearing B. Speech C. Air D. Heat
4. Find the odd man out in the given set of words
A. eleven B. nine C. thirteen D. eighteen
5. 'Incredible' means what is _____.
A. not excitable B. not true C. trustworthy D. not believable
6. His _____ handwriting resulted from haste and carelessness.
A. careful B. beautiful C. unreadable D. lucid
7. Microscopically thin means:
A. as slender as a microscope
B. so thin that they can be just seen by the naked eye
C. so slender that they have to be seen through a microscope
D. all of these
8. When people suffer from a sense of doom, they think that
A. the world is coming to an end
B. the world is progressing day by day
C. people are getting more and more intelligent
D. the gap between the poor and rich is widening
9. Science has given the nations new occasions for falling out. Falling out means
A. quarrelling B. making friends
C. disintegrating into smaller parts D. becoming poorer and poorer
10. A war of nerves means:
A. an attempt to defeat enemies by putting pressure for losing courage or confidence
B. war fought with nuclear weapons
C. a guerrilla war D. nervous system
11. Expectation of life means
A. their life time achievements B. their average life span
C. the number of years people lived D. the things people hope to achieve

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12. An insomniac is a person who:
A. enjoys sleeping
B. lacks respect for maniacs
C. finds it difficult to sleep
D. Sleeps more than others
13. Hamlet was reluctant to _____ the murder of his father.
A. avenge
B. revenge
C. vengeance
D. none
14. Predictable means
A. we are not at all sure what will happen
B. it is cautious
C. it is safe
D. we can guess what will happen
15. Silver is a good investment. _____, gold is a better one
A. Although
B. However
C. While
D. On the other hand
16. The conditional clause 'If she were rich, _____?' is completed by
A. She would buy that car.
B. She will buy the car.
C. She was going to buy that car.
D. She bought that car.

Read the following passage and answer the questions given:

I believe that both these feelings do equal harm: the feeling of marvel as much as the fear. Because they have this in common that they both want to persuade the layman that there is nothing he can do for himself. Science is the new magic, they whisper; it is out of your hands; for good or ill, your salvation or your doom is the business of others.

17. What makes us think that science is the new magic?
 - A. The harm
 - B. Belief
 - C. The feeling of marvel and fear
 - D. Our stupidity
18. Why does a layman think that he can do nothing for himself?
 - A. Lack of experience
 - B. Lack of education
 - C. Helplessness
 - D. Influence of feeling marvel and fear
19. Why do they have to whisper?
 - A. Because they are cunning.
 - B. Because they do not want others to know it
 - C. The sense of marvel and fear overpower them
 - D. It is a great secret
20. The author seems to suggest that _____.
 - A. our doom is the business of others
 - B. Our salvations is the business of others
 - C. science is the new magic
 - D. our irrational feelings cause the loss of faith in science
21. Grace has 16 jellybeans in her pocket. She has 8 red ones, 4 green ones, and 4 blue ones. What is the minimum number of jellybeans she must take out of her pocket to ensure that she has one of each color?

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- A. 4 B. 8 C. 12 D. 13
22. The function $f(x) = -3x + 12$ on R is
A. increasing B. decreasing C. constant D. none of these
23. The system of the equation $x + 2y = -1$, $-2x - 4y = 2$ has
A. only one solution B. finitely many solutions
C. no solution D. infinitely many solutions
24. The area of the triangle formed by the lines $y - x = 0$, $y + x = 0$ and $x = c$ is
A. c sq. units B. c^2 sq. units C. $\frac{1}{2}c$ sq. units D. $\frac{1}{2}c^2$ sq. units
25. If A is an $m \times n$ matrix and B is a matrix given in such a way that AB and BA are both defined, then the size of the B matrix is
A. $m \times n$ B. $n \times n$ C. $m \times m$ D. $n \times m$
26. Let \vec{a} and \vec{b} be two given vectors such that $|\vec{a}| = \sqrt{3}$, $|\vec{b}| = 2$ and $\vec{a} \cdot \vec{b} = \sqrt{6}$, then the angle between \vec{a} and \vec{b} is
A. $\frac{\pi}{3}$ B. $\frac{\pi}{4}$ C. $\frac{\pi}{2}$ D. 0
27. The value of p for which the vectors $\vec{a} = p\vec{i} + \vec{j} - 2\vec{k}$ and $\vec{b} = \vec{i} + \vec{j} - 3\vec{k}$ are perpendicular to each other is
A. 9 B. -9 C. 7 D. -7
28. A can solve 90% of the problems given in a book and B can solve 70%. What is the probability that at least one of them will solve a problem selected at random from the book?
A. 0.63 B. 0.16 C. 0.97 D. 1.60
29. The number of non-empty proper subsets of order 6 is
A. 64 B. 63 C. 62 D. 60
30. If common difference is 5, then the total number of arithmetic means between 10 and 50 is
A. 8 B. 9 C. 5 D. 7
31. The area of triangle formed by the line $2x + 3y = 12$ with the co-ordinate axes is
A. 24 B. 12 C. 6 D. 3
32. In a race of 1 km. A beats B by 100m. B beats C by 50 m. C beats D by 40 m then A beats D by
A. 190 m B. 820.8 m C. 179.2 m D. none
33. If m times of m^{th} term and n times of n^{th} term of an AP are equal then $(m + n)^{\text{th}}$ term is
A. mn B. $\frac{1}{mn}$ C. 1 D. 0
34. If the AM and GM of the roots of a quadratic equation be 8 and 5 respectively then the equation is
A. $x^2 + 6x + 25 = 0$ B. $x^2 - 16x + 25 = 0$
C. $x^2 - 16x - 25 = 0$ D. $x^2 - 13x + 40 = 0$

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35. The value of $\frac{\cos 11^\circ + \sin 11^\circ}{\cos 11^\circ - \sin 11^\circ}$ is equal to the value of
A. $\tan 56^\circ$ B. $\sin 56^\circ$ C. $\cot 56^\circ$ D. $\tan 79^\circ$
36. Two cyclists start biking from a trail's start 3 hours apart. The second cyclist travels at 10 miles per hour and starts 3 hours after the first cyclist who is traveling at 6 miles per hour. How much time will pass before the second cyclist catches up with the first from the time the second cyclist started biking?
A. 2 hours B. $4\frac{1}{2}$ hours C. $5\frac{3}{4}$ hours D. 6 hours
37. By how much the area of sphere is changes when its radius is doubled?
A. 100% B. 200% C. 300% D. 800%
38. The sum of the first n terms of the series: $\frac{n-1}{n}, \frac{n-2}{n}, \frac{n-3}{n}, \dots$ is
A. $\frac{n-1}{2n}$ B. $\frac{n-1}{2}$ C. $\frac{n(n+1)}{2}$ D. $\frac{n}{2}$
39. If $(a+b+c)(a-b+c) = 3ac$, then angle B is equal to
A. $\frac{\pi}{9}$ B. $\frac{\pi}{2}$ C. $\frac{\pi}{3}$ D. $\frac{\pi}{4}$
40. The circles $x^2 + y^2 + 2ax + c = 0$ and $x^2 + y^2 + 2by + c = 0$ will touch each other if
A. $\frac{1}{a^2} - \frac{1}{b^2} = \frac{1}{c^2}$ B. $\frac{1}{a^2} + \frac{1}{b^2} + \frac{1}{c^2} = 0$ C. $\frac{1}{a^2} + \frac{1}{b^2} = \frac{1}{c^2}$ D. $\frac{1}{a} + \frac{1}{b} = \frac{1}{c}$
41. At a height of 9m from ground if a body of mass 2 kg has gravitational potential energy 36J, what will be its final velocity with which it strikes the ground if it is dropped from there?
A. 4m/sec B. 6 m/sec C. 2m/sec D. 8 m/sec
42. Which of the following is a vector quality?
A. Time B. Speed C. Mass D. Plane area
43. A body has K E of 10 J. How much work has to be done on it to stop it?
A. 5 J B. 1 J C. 10 J D. 100 J
44. When a force is applied on 2 kg and 4 kg masses one after another, the acceleration produced on them are 2 m/s^2 and 1 m/s^2 respectively. What is the magnitude of that force?
A. 4 N B. 1 N C. 3 N D. 2 N
45. Which of the following statement is false?
A. A magnet can not have two opposite poles
B. A magnet can have an isolated pole
C. A magnet cannot have an isolated pole D. None of above
46. A convex lens can _____ the light.
A. only converge B. only diverge
C. neither converge nor diverge D. converge as well as diverge

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47. Sound wave is _____
A. a longitudinal wave. B. a transverse wave.
C. an electromagnetic wave. D. not a wave.
48. The work done on bringing a unit positive test charge from one end of a resistor to another is called ____
A. resistance B. potential difference C. emf D. power
49. Conductivity depends upon
A. resistivity B. temperature
C. nature of the material D. all of the above
50. For a normal eye, the far distance of distinct vision is
A. 25 cm B. infinity C. 50 cm D. 75 cm
51. The lower limit of auditory for human beings is
A. 10 Hz B. 100 Hz C. 20 Hz D. 20 KHz
52. To cool a hot body, we use liquid having
A. low specific heat capacity B. low thermal heat capacity
C. high thermal heat capacity D. high specific heat capacity
53. Volume of water will be minimum at
A. 0°C B. 4°C C. 1°C D. 2°C
54. The time period of spin of the earth about its own axis is
A. 1 year B. 366 days C. 29 days D. 24 hours
55. When a body is negatively charged, its____
A. no. of electrons increases B. no. of electrons decreases
C. mass increases D. both a and c
56. Which of the following is false in case of an electron?
A. It is a particle B. It has wave property
C. It emits energy while moving in orbits
D. Its motion is affected by magnetic field
57. Which of the following forms a colloidal solution in water?
A. Glucose B. Starch C. Sodium Chloride D. Urea
58. A compound was found to contain nitrogen and oxygen in the ratio 28 : 64. The formula of the compound is
A. NO B. N_2O_3 C. N_2O_4 D. N_2O_5
59. Chemical formula of a particular compounds reflects
A. shape of its molecule
B. size of its molecule
C. total number of atoms in a molecule
D. number of different types of atoms in a molecule
60. Electronic configuration of M^{2+} ion is 2, 8, 14 and its atomic weight is 56 amu. The number of neutrons in its nucleus are
A. 30 B. 32 C. 34 D. 42

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61. Atoms combine in a small whole number ratio, this concept was proposed by
A. Dalton B. Avogadro C. Gay Lussac D. Berzelius
62. Two substance P and Q combine to give a third substance R. The process is exothermic and R has properties different from those of P and Q. Is the substance R
A. an element B. a mixture C. a compound D. an atom
63. Which of the following is called Sylvine?
A. KCl B. NaCl C. CaCl_2 D. MgCl_2
64. Liquid metal is
A. Ag B. Mg C. Hg D. none
65. The general formula of Paraffin is
A. $\text{C}_n\text{H}_{2n+1} \cdot \text{X}$ B. C_nH_{2n} C. $\text{C}_n\text{H}_{2n-2}$ D. $\text{C}_n\text{H}_{2n+2}$
66. In IUPAC system of nomenclature, But in hydrocarbon indicates
A. prefix B. word root C. primary suffix D. secondary suffix
67. Which of the following reaction is acid-base reaction?
A. $\text{BaCl}_2 + \text{H}_2\text{SO}_4 \rightarrow \text{BaSO}_4 + 2\text{HCl}$ B. $\text{NaCl} + \text{AgNO}_3 \rightarrow \text{AgCl} + \text{NaNO}_3$
C. $\text{HCl} + \text{NaOH} \rightarrow \text{NaCl} + \text{H}_2\text{O}$ D. $\text{FeCl}_3 + \text{NaOH} \rightarrow \text{NaCl} + \text{Fe}(\text{OH})_3$
68. You are given a mixture of sand and common salt. Which process should apply to get pure common salt?
A. Dissolution and Evaporation B. Evaporation and Crystallization
C. Evaporation and Sublimation D. Sublimation and Crystallization
69. Two isotonic elements X and Y have atomic masses 54 and 56 respectively. If atomic number of X is 26, the atomic number of Y will be
A. 26 B. 27 C. 28 D. 30
70. German silver is an alloy of
A. Fe, Cr, Ni B. Cu, Zn, Ag C. Cu, Zn, Ni D. Cu, Sn, Al
71. A gymnosperm is a plant which
A. Bears flowers B. Produces seeds in cones
C. Does not produce seeds D. Exhibits no vascular tissues
72. Centromere is the part of a chromosome which helps in
A. Division of the centrosomes B. formation of spindle fibres
C. Movement of chromosomes D. Reappearance of nuclear membrane
73. When peacock eats snakes which eat insects thriving on green plants the peacock is
A. A primary consumer B. A primary decomposer
C. Final decomposer D. The apex of the food pyramid
74. A pure tall pea plant can be distinguished from a hybrid tall pea plant by
A. Selfing and noting that all progeny are dwarf
B. Gibberellins treatment
C. Selfing and noting that all progeny are tall
D. Measuring its height
75. Germinations of seed within fruit is
A. Ovipary B. Vivipary C. Hypogeal D. Epigeal

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76. Double fertilization and triple fusion is characteristic of
A. All Plants B. Angiosperms C. Gymnosperms D. Pteridophytes
77. Which one of the following is not found in DNA?
A. Cytosine B. Guanine C. Adenine D. Uracil
78. Lysosomes are the
A. Digestive centres B. Respiratory centres
C. Excretory centres D. Energy centres
79. Regarding mitosis and cytokinesis, one difference between higher plants and animals is that in plants
A. Sister chromatids are identical, whereas in animals they differ from one another
B. A cell plate begins to form at telophase, whereas in animals a cleavage furrow is initiated at that stage
C. Chromosomes become attached to the spindle at prophase, whereas in animals chromosomes do not become attached until anaphase
D. Spindle poles contain centrioles, whereas spindle poles in animals do not
80. An antiviral substance produced in cell in response to viral infection to prevent the replication of new virus is
A. antibody B. interferon C. vitamin c D. antigen
81. One of the characteristics of all living beings is that they
A. Require oxygen for respiration B. Originate from pre-existing life
C. Carry on heterotrophic nutrition D. Carry on autotrophic nutrition
82. Clotting of blood inside the blood vessels is prevented by
A. Fibrinogen B. Platelets C. Heparin D. Prothrombin
83. Evolution is best defined as
A. Inheritance of acquired characters B. Descent with modifications
C. Spontaneous generation D. Struggle for existence
84. When an organism is benefitted without affecting the other, the phenomenon is known as
A. Parasitism B. Commensalism C. Symbiosis D. Predation
85. You are riding a bicycle and take a sudden turn around a sharp corner. The organs involved in the maintenance of balance is
A. Medulla oblongata B. Semicircular canals
C. Cerebrum D. Optic chiasma
86. Metabolic processes in the body are catalyzed by
A. Enzymes B. Hormones C. Proteins D. Lipids
87. The intestine of man is very long because
A. It provides larger area for food storage
B. The digestive juices are secreted all through its length
C. The bacteria contained in the food may gradually be killed
D. Its length enables greater scope for food absorption

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88. All of the following are examples of reflex except
A. Sneezing B. Blinking C. Thinking D. Knee jerking
89. Scientific evidence indicates that an element needed to prevent tooth decay is
A. Chlorine B. Iodine C. Bromine D. Fluorine
90. All of the following are mammals except
A. Porpoise B. Walrus C. Seal D. Shark
91. Jack is taller than Peter, and Bill is shorter than Jack. Which of the following statements would be most accurate?
A. Bill is taller than Peter
B. Bill is shorter than Peter
C. Bill is as tall as Peter
D. It is not possible to tell whether Bill or Peter is taller
92. Which of the following is the capital of a SAARC country?
A. Tokyo B. Sanghai C. Thimpu D. Bangkok
93. S.L.C. examination was for the first time started in the year.....B.S.
A. 2007 B. 1990 C. 2017 D. 2046
94. Amsterdam is the capital of
A. Denmark B. the Netherlands
C. Myanmar D. Belgium
95. The largest river of Nepal is
A. Gandaki B. Koshi C. Karnali D. Mechi
96. Which is the uppermost part of the atmosphere?
A. Troposphere B. Exposphere C. Stratosphere D. Mesosphere
97. A person who travels to work and back by car, bus or train.
A. Commuter B. Computer C. Carrier D. Pedestrian
98. Name the organization which was the forerunner of the U.N.O.
A. The League of Nations B. Benelux Union
C. Amnesty International D. The Commonwealth
99. Pointing towards a person, a man said to a woman, "His mother is the only daughter of your father." How is the woman related to that person?
A. Sister B. Daughter C. Mother D. Wife
100. Which of the following gases is used for refrigeration ?
A. Phosphine B. Chlorine
C. Sulphur dioxide D. Ammonia

Practice Test - 3

1. I gave him _____.
A. one and a half rupees B. one and a half rupee
C. one and half rupee D. one and half rupees
2. When I entered the bed room I saw a snake _____.
A. on the ground B. on the floor
C. on ground D. on floor
3. My brother and _____.
A. myself will go B. myself will be go
C. I will go D. I will be gone
4. You must see him after _____.
A. dinner B. the dinner C. a dinner D. an dinner
5. One must learn to distinguish _____.
A. good from bad B. good to bad
C. the good from the bad D. good from worse
6. He walks as if _____.
A. the world belongs to him B. the world is belonging to him
C. the world had belonged to him D. the world belonged to him
7. I went there _____.
A. with a view to buy a book B. with view to buy a book
C. with a view to buying a book D. with a view to book
8. You _____.
A. better revise this essay B. had better revised this essay
C. had better revise this essay D. revise this essay better
9. I did nothing but _____.
A. cried B. cry C. crying D. did cry
10. The thief _____.
A. escaped before the police came B. escaped before the police had came
C. had escaped before the police came D. had escaped before the police had came
11. He asked her _____.
A. what was the matter B. what the matter was
C. what the matter D. about what was the matter
12. I _____ last night.
A. had finished my letter B. have finished my letter
C. finished my letter D. was finishing my letter
13. They will write _____.
A. as soon as they will arrive home B. as soon as they arrive home
C. as soon as they have arrived home D. as soon as they arrived home

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14. I _____ in Nepal.
A. was born
B. am born
C. have been born
D. had been born
15. I _____ before I do anything.
A. often think twice
B. am often thinking twice
C. often will think twice
D. have often thought twice
16. The chief _____ there.
A. with his flowers, were present
B. with his flowers, was present
C. with his flowers, be present
D. with his flowers, have present

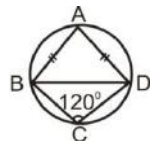
Read the following passage and answer the questions given (87- 90):

We live in a curious age. We are offered glimpses of a genuine world civilization slowly emerging – the U.N. special agencies, organizations like Oxfam, and here and there, as I have seen for myself, remote enterprises, dedicated to healing or education, with international staff of selfless enthusiasts. And such glimpses warm the heart and brighten hope. But along with these are sight and sounds that suggest that the whole fabric of civilization, the work of centuries, is rapidly being torn apart.

17. Such glimpses warm the heart and brighten the hope. It means
 - A. people can't help being optimistic and hopeful.
 - B. such glimpses are good for heart patient.
 - C. such glimpses are want of warmth and hope.
 - D. such glimpses are lacking hope.
18. The writer thinks that we live in a curious age,
 - A. because we have a lot of curiosity about the age.
 - B. because we find great things everywhere.
 - C. Because we are better than our forefathers.
 - D. Because this age offers both the glimpses of construction and destruction.
19. We are offered glimpses of a genuine world civilization slowly emerging,
 - A. because there are many civilized people in the world who work for the welfare of the mankind.
 - B. because we want to have such glimpses.
 - C. because the world is highly civilized.
 - D. because we pay for such glimpses.
20. The author seems to suggest that
 - A. it is an age of progress.
 - B. the civilization is at end.
 - C. it is an age of crisis .
 - D. it is an age of contradiction in values.
21. Which of the following are equations of straight line with slope $-\frac{3}{4}$ and forming a triangle of area 24 sq. units with coordinate axes?
 - A. $y = \frac{3x}{4} \pm 6$
 - B. $y + \frac{3x}{4} = \pm 6$
 - C. $y = x \pm 6$
 - D. None

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22. Which of the following is the angle between the lines $x \sec \theta + y \cos \theta = a$ and $x \cos \theta - y \sin \theta = a \cos 2\theta$?
 A. 30° B. 60° C. 90° D. 120°
23. If the fourth term of G.P is 54 and 6th term is 24, which term of the following is $7\frac{1}{9}$?
 A. 7 B. 8 C. 9 D. 10
24. The probability that a boy will get a scholarship is 0.75 and that a girl will get is 0.80. What is the probability that at least one of them will get the scholarship?
 A. 0.20 B. 0.05 C. 0.95 D. 0.25
25. If $f(x) = 3x - 4$ and $g(x) = 3 - 2x$. Which of the following is the value of $\text{fog}(2)$?
 A. 7 B. -7 C. 9 D. 8
26. In a right angle $\triangle ABC$, $\angle B = 30^\circ$, $BC = 12\text{cm}$ and area of $\triangle ABC = 27\text{sq. cm}$. What is the measurement of AB ?
 A. 9 B. 7 C. 10 D. 18
27. If $\tan \theta = \frac{5}{6}$ and $\tan \beta = \frac{1}{11}$, which of the following is the value of $\theta + \beta$?
 A. $\frac{\pi}{6}$ B. $\frac{\pi}{3}$ C. $\frac{\pi}{2}$ D. $\frac{\pi}{4}$
28. Which of the following is the length of each side of equilateral triangle of area $196\sqrt{3}\text{ cm}^2$?
 A. $7\sqrt{3}\text{ cm}$ B. $14\sqrt{3}\text{ cm}$ C. 28 cm D. 7 cm
29. The root of quadratic equation $ax^2 + bx + c = 0$ are in the ratio of 3:4. Then which one is true?
 A. $b^2 = 4ac$ B. $4b^2 = 25ac$ C. $12b^2 = 49ac$ D. None
30. In adjoining figure $AB = AD$ and $\angle BCD = 120^\circ$. Then which one is $\angle ADB$?
 A. 45° B. 30° C. 60° D. 15°
31. Which of the following is the property of Skew Symmetric Matrix A ?
 A. $A = A^T$ B. $A = -A^T$ C. $[a_{ij}] = [a_{ji}]$ D. None
32. If three consecutive vertices of a parallelogram are $(-2, -1)$, $(1, 0)$ and $(4, 3)$ then the fourth vertex is
 A. $(1, 2)$ B. $(5, 3)$ C. $(2, 1)$ D. $(3, -1)$
33. If prices are reduced by 25% and the sales increase by 20%, what is the net effect on gross receipts?
 A. increase by 5% B. decrease by 5%
 C. increase by 10% D. decrease by 10%
34. The equation of the circle whose ends of diameter are $(-2, 3)$ and $(-3, 6)$ is
 A. $x^2 + y^2 + 5x - 9y + 24 = 0$ B. $x^2 + y^2 - 5x + 9y + 24 = 0$
 C. $x^2 + y^2 - 5x - 9y + 24 = 0$ D. $x^2 + y^2 - 5x - 3y + 12 = 0$



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35. A bus travels at an average speed of 50 miles per hour for 2.5 hours and then travels at a speed of 70 miles per hour for 1.5 hours. How far did the train travel in the entire 4 hours?
A. 150 miles B. 130 miles C. 125 miles D. 230 miles
36. A man deposits Rs. 1 on a day, Rs. 2 on the next day, Rs. 3 on the third day and so on for 60 days. Total collection at the end of 60 days will be:
A. Rs. 183 B. Rs. 1830 C. Rs. 3660 D. Rs. 5460
37. A man buys 100 apples at 50 paisa each and 50 oranges at 60 paisa each. 10% of the apples and oranges are spoiled. The man sells the remaining apples at 70 paisa each and oranges at Rs. 1 each. The profit made as percentage of the cost is:
A. 50% B. 35% C. 33.3% D. 26%
38. A circle whose centre at the origin passes through the point (1, 1). What is the area of this circle?
A. π B. 2π C. $\sqrt{2}\pi$ D. 4π
39. If a triangle of base 6 has the same area as a circle of radius 6, what is the attitude of the triangle?
A. 6π B. 8π C. 10π D. 12π
40. For what value of m the pairs $-3\vec{i} + 5\vec{j} + m\vec{k}$ and $4\vec{i} + 6\vec{j} + 3\vec{k}$ are orthogonal.
A. 6 B. -6 C. 1 D. None
41. A body completes its motion in a circular path of radius 2m in 1 second .What is its average velocity?
A. 2π m/sec B. 4π m/sec C. 0 m/sec D. 1m/sec
42. The relationship between velocity ratio (VR), effort distance (ED) and the load distance (LD) is
A. $VR = \frac{ED}{LD}$ B. $VR = \frac{LD}{ED}$ C. $ED = \frac{VR}{LD}$ D. $ED = \frac{VR}{LD}$
43. According to the conservation of energy when a ball falls freely under gravity, its gravitational potential energy is converted into
A. electrical potential energy B. kinetic energy
C. sound energy D. chemical energy
44. When the distance of a person from the source is doubled to its initial value, the intensity of sound is
A. increased to 2 times C. increased to 4 times
B. decreased to $\frac{1}{2}$ times D. decreased to $\frac{1}{4}$ times
45. The real depth of a pond is 3m. If the refractive index of water is 1.33, find its apparent depth.
A. $\frac{3}{1.33}$ B. $\frac{1.33}{3}$ C. 1.33×3 D. $\frac{1}{1.33 \times 3}$

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46. Refraction of light is due to the change in its
A. frequency B. wavelength C. colour D. nature
47. When the current is 1A, the flow of charge in 1 sec is equal to
A. $1.6 \times 10^{19} \text{C}$ B. $3 \times 10^8 \text{C}$ C. 1 C D. $1 \times 10^8 \text{C}$
48. A man standing on a platform feels the weightless when the platform moves with
A. uniform speed in downward direction
B. acceleration equal to 'g' in downward direction
C. acceleration equal to 'g' in upward direction
D. uniform speed in upward direction
49. When a body floats in a liquid,
A. its weight is greater than the upthrust B. its weight is less than the upthrust
C. its weight is equal to the upthrust D. its density is greater than the upthrust
50. A lens always forms a diminished image then it should be a
A. Convex lens B. Plano convex lens
C. Concavo-convex lens D. Concave lens
51. A transformer converts
A. AC to AC B. AC to DC C. DC to AC D. DC to DC
52. When the temperature of water is changed, its density will be maximum at
A. 0°C B. 1°C C. 2°C D. 4°C
53. The heat equation is
A. $Q = ms\Delta\theta$ B. $m_1s_1\Delta\theta_1 = m_2s_2\Delta\theta_2$
C. $Q = \frac{ms}{\Delta\theta}$ D. $Q = \frac{m\Delta\theta}{s}$
54. The magnetic lines of force
A. starts from South Pole of the magnet B. starts from positive charge
C. starts from negative charge D. starts from North Pole of the magnet
55. Which one of the following is not a renewable energy source?
A. biogas B. wind energy
C. nuclear energy D. tidal energy
56. A baking powder can carries the statement, "Ingredients: corn starch, sodium bicarbonate, calcium acid phosphate, and sodium aluminium sulphate." Therefore, this baking powder is
A. a compound B. a molecule
C. a mixture D. a mixture of elements
57. Which of the following is a physical property of sugar?
A. It is a white crystalline solid
B. It can be decomposed with heat
C. Its composition is carbon, hydrogen & oxygen
D. It turns black with concentrated H_2SO_4

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58. An electron-dot notation consists of the symbol representing the element and an arrangement of dots that usually shows
- the atomic number
 - the total number of electrons
 - the atomic mass
 - the valence electrons
59. When hydrogen combines with an element to form a compound, the resulting compound is
- a salt
 - an acid
 - a hydride
 - a reduction
60. A compound that can be decomposed to produce oxygen gas in the lab is
- MnO_2
 - KMnO_4
 - Na_2CO_3
 - KClO_3
61. The reaction of aluminium with dilute H_2SO_4 can be classified as
- synthesis
 - single displacement
 - decomposition
 - double displacement
62. The reaction of an acid like H_2SO_4 and a base like CuO always
- forms a blue precipitate
 - forms a volatile salt and water
 - forms an insoluble salt and water
 - forms a soluble salt and water
63. The correct formula for calcium hydrogen sulphate is
- CaH_2SO_4
 - CaHSO_4
 - $\text{Ca}(\text{HSO}_4)_2$
 - Ca_2HSO_4
64. All of the following involve a chemical change EXCEPT
- the formation of HCl from H_2 & Cl_2
 - the colour change when NO is exposed to air
 - the formation of CO_2 from burning coal
 - the evaporation of water at room temperature
65. Which of the following define(s) an acid according to conventional acid theories?
- It is a good proton donor
 - It is a good electron pair acceptor
 - It gives excess of H_3O^+ in solution
- I only
 - III only
 - I & II only
 - I, II & III
66. The placement of the halogen family in the periodic table explains which of the following statements?
- The most active non-metallic element in the periodic table is fluorine
 - The normal physical state of the halogen goes from a solid to a gaseous state as you go down the family
 - The halogen element becomes ions by filling the outermost d-orbital
- I only
 - II only
 - I & II
 - II & III
67. Ethene is the first member of the
- alkane series
 - alkyne series
 - alkene series
 - alcohol series
68. Complete the following chemical change. $\text{Mg} + \text{CO}_2 \rightarrow \dots\dots\dots + \text{C}$
- MgO_2
 - MgO
 - Mg_2O
 - $(\text{MgO})_2$
69. Which of the following is the correct ground state configuration of chromium?
- $3d^5 4s^1$
 - $3d^6 4s^0$
 - $3d^4 4s^2$
 - $3d^3 4s^3$
70. Which of the following is not a precipitation reaction?
- $\text{AgNO}_3 + \text{NaCl} \rightarrow \text{AgCl} + \text{NaNO}_3$
 - $\text{BaCl}_2 + \text{H}_2\text{SO}_4 \rightarrow \text{BaSO}_4 + \text{HCl}$

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- C. $\text{HgCl}_2 + 2\text{KI} \rightarrow 2\text{KCl} + \text{HgI}_2$ D. $\text{NaOH} + \text{HCl} \rightarrow \text{NaCl} + \text{H}_2\text{O}$
71. All of the following are correct about human red blood cells EXCEPT
A. they are called leucocytes B. they do not have nucleus
C. they are formed in the bone marrow D. they carry oxyhemoglobin
72. Silver fish is
A. a fish B. an insect C. a bone D. none of the above
73. The famous book "Origin of Species" was written by
A. C Darwin B. A R Wallace C. C Linnaeus D. J B D Lamarck
74. In reptiles, heart is
A. mostly 3 chambered B. always 3 chambered
C. 2 chambered D. 4 chambered
75. The part of an eye which acts like a diaphragm of a photographic camera is
A. cornea B. iris C. pupil D. lens
76. The process of respiration is concerned with
A. intake of oxygen B. liberation of oxygen
C. liberation of carbon dioxide D. liberation of energy
77. All of the following are true of vitamin A EXCEPT
A. it prevents night-blindness B. it is formed from carotene
C. it is used in making visual purple D. it is used in making hemoglobin
78. One of the characteristics of all living beings is that they
A. require oxygen for respiration B. originate from pre-existing life
C. carry on heterotrophic nutrition D. carry on autotrophic nutrition
79. In man, cellulose is digested in
A. colon B. appendix C. stomach D. none of the above
80. Of the following terms, which one includes all the others?
A. Species B. Order C. Class D. Phylum
81. The scientific name of mustard is *Brassica campestris* and that of turnip is *Brassica rapa*. This indicates that both mustard and turnip are members of the
A. same genus but different species B. same species but different genera
C. same genus but different classes D. same class but different genera
82. Which one is the smallest organism capable of autonomous growth and reproduction?
A. Bacteria B. Virus C. Mycoplasma D. Blue-green algae
83. At what phase of meiosis are homologous chromosomes separated?
A. Anaphase I B. Anaphase II C. Prophase I D. Prophase II
84. When green tomatoes turn red then
A. new chloroplast are made
B. chromoplast are changed into chloroplasts
C. chloroplasts are disintegrated and get converted into chromoplast
D. none of these

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85. Why do legume plants enrich soil?
A. They remove poisonous heavy metals
B. They encourage the breeding of earthworm
C. Their roots contain symbiotic nitrogen fixing bacteria
D. Their root system penetrate 2 meters below the surface
86. Which of the following would be most likely to occur in an ecosystem?
A. As the number of prey decreases, the number of predators increases.
B. As the number of predators increases, the number of prey increases.
C. As the number of prey increases, the number of predators increases.
D. As the number of prey increases, the number of predators decreases.
87. In the nitrogen cycle, nitrogen compounds are broken down by decomposers to release
A. ammonia B. vinegar C. urea D. nitrate
88. Which of the following is illustrated by an organism that exists in a helpful relationship with another organism?
A. photosynthesis B. autotropism C. saprophytism D. mutualism
89. A vacant lot may have organisms such as grass, dandelions, ants, soil bacteria, earthworms, trees, and mice living in it. Together all of these organisms comprise a
A. population B. biome C. community D. biosphere
90. Most cells lacking a cell wall also lack
A. mitochondria B. a vacuole C. chloroplasts D. a cell membrane
91. Which one of the following makes best comparison? Milk is to glass as letter is to:
A. Stamp B. Pen C. Envelope D. Mail
92. What is the world's largest desert?
A. The Sahara B. The Kalahari C. The Death Valley D. The Thar
93. What is the last letter of Greek alphabet?
A. Pi (π) B. Alpha (α) C. Beta (β) D. Omega (ω)
94. Who is known as 'Yubak Kabi' of Nepal?
A. Bhanubhakta B. Moti Ram Bhatta
C. Shambhu Prasad Dhungel D. Madhav Prasad Ghimire
95. Name the country which contains all the vowels of the English alphabet only once.
A. Australia B. Indonesia C. England D. Mozambique
96. "Bullish Trend" is related to
A. Bull fight B. Stock market C. Economic survey D. Speed of plane
97. Who is considered as the father of medicine?
A. Hippocrates B. Herodotus C. Lincoln D. Rehman
98. The longest river in the world is
A. Ganga B. Nile C. Amazon D. Bagmati
99. Find the odd one out
A. Hostel B. Club C. Inn D. Hotel
100. The first metal used by the man was
A. Iron B. Copper C. Silver D. Gold

Practice Test - 4

1. The word has four syllables.
A. likelihood B. beautiful C. biology D. sociology
2. Although he is educated
A. but he is rude B. however he rude
C. he is rude D. I am educated too.
3. He is senior.....
A. to me B. than me C. of me D. above me
4. It's high time
A. you clean the room B. you cleaned the room
C. you will clean the room D. you need to clean the room.
5. I why you are complaining.
A. am understanding B. will be understanding
C. understand D. understood
6. Had I known about it,
A. I would do something B. I could do something
C. I should have done something D. I would have done something
7. The house has been empty ages.
A. for B. since C. No preposition D. around
8. If I I would have bought a car.
A. were rich B. am rich C. had been rich D. could be rich
9. You can meet me noon.
A. in B. on C. at D. during
10. I haven't read of his poetry.
A. much B. many C. few D. little
11. A car drove the gate.
A. on B. past C. at D. into
12. He is one of in our college.
A. the best students B. best students C. the best student D. best student
13. He is M.A. student from Tribhuvan University.
A. a B. the C. an D. no article
14. He has been working here 10 years.
A. since B. past C. no preposition D. for
15. I am six
A. foot B. feet C. footed D. feeted
16. He is five tall.
A. foot B. feet C. footed D. feeted

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Read the following passage and answer the questions given below (17-20):

Psychologists divide extra-sensory perception (ESP) into four types. The first is telepathy. In telepathy a person is able to communicate with another who may be far away. A soldier on the battle front receives a message from his wife. Another type of ESP is clairvoyance, the ability to see events, persons and things not known to anyone else. The third type of ESP is precognition, the ability to foresee what is going to happen in the future. Finally there is psychokinesis, the power of mind over matter : a person having this ability will be able to move objects without touching them.

17. What does ESP refer to
- A. ESP refers to extra-sensory perception
 - B. ESP refers to science
 - C. ESP refers to the ability to communicate without using senses.
 - D. ESP refers to senses
18. The author seems to suggest that
- A. We should develop ESP
 - B. ESP is better than science
 - C. ESP is the gift of God
 - D. Extra-sensory perception cannot be explained by the law of nature
19. Telepathy means
- A. system of communication by the use of telephone
 - B. ability to communicate
 - C. mechanism of communication during the time of war
 - D. direct communication of thoughts from one person to another without using senses
20. Is there any difference between science and ESP?
- A. Science depends on five senses unlike ESP
 - B. There is no difference at all
 - C. Science depends on experiments and ESP on five senses
 - D. ESP depends on experiments and science on five senses
21. What will be the remainder of $4x^3 + 6x^2 + 3x - 1$, when it is divisible by $x + 2$.
- A. -1
 - B. -15
 - C. 61
 - D. -52
22. For what value of k the equation $3x^2 + 7x + 6 - k = 0$ has one root equals to zero.
- A. 3
 - B. 7
 - C. 6
 - D. -6
23. Value of $\cos 67 \frac{1^0}{2} = \dots\dots$
- A. $-\frac{1+\sqrt{5}}{4}$
 - B. $\frac{\sqrt{2}-1}{4}$
 - C. $-\frac{\sqrt{2}-1}{4}$
 - D. $\sqrt{\frac{\sqrt{2}-1}{2\sqrt{2}}}$
24. Value of $\cos^2 5^0 + \cos^2 10^0 + \dots + \cos^2 90 = \dots\dots$
- A. 1
 - B. 7
 - C. $8\frac{1}{2}$
 - D. $9\frac{\sqrt{3}}{2}$

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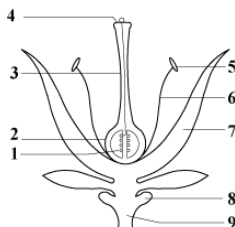
25. The slope of the line $x \cos \alpha + y \sin \alpha = p$ is
- A. $\tan \alpha$ B. $\cot \alpha$ C. $-\tan \alpha$ D. $-\cot \alpha$
26. The perpendicular distance between the lines $2x + 3y = 5$ and $8x + 12y - 7 = 0$ is.....
- A. 2 B. $\frac{\sqrt{13}}{4}$ C. $\frac{13}{4}$ D. none
27. The equation of the line passing through (1, -2) and parallel to y - axis is
- A. $y = 1$ B. $y = 2$ C. $x = -1$ D. $x = 1$
28. If \vec{a} and \vec{b} are two unit vectors such that $\left| \frac{\vec{a} + \vec{b}}{2} \right| = \left| \frac{\vec{a} - \vec{b}}{2} \right|$, then the angle between \vec{a} and \vec{b} is
- A. $\frac{\pi}{2}$ B. $\frac{\pi}{3}$ C. $\frac{\pi}{4}$ D. $\frac{\pi}{6}$
29. The area of triangle $\Delta ABC = 12\sqrt{3}$, side $a = 6$, and side $b = 8$ then side $c =$
- A. 10 or 12 B. 10 C. $2\sqrt{37}$ or $2\sqrt{13}$ D. $2\sqrt{37}$
30. Three coins are tossed together. Find the probability of getting at least two heads?
- A. $\frac{1}{8}$ B. $\frac{3}{8}$ C. $\frac{1}{2}$ D. $\frac{1}{4}$
31. If 13, p, q, r, 29 are in A.P. Find the value of r.
- A. 25 B. 17 C. 21 D. 24
32. Find the value of $\sqrt{20 + \sqrt{20 + \sqrt{20 + \dots \infty}}}$
- A. ∞ B. 20 C. 5 D. 4
33. The surface area of a cube is 150 square feet. Calculate volume of the cube.
- A. 30 cft B. 50 cft C. 100 cft D. 125 cft
34. If $x^a = y^b = z^c$ and $y^2 = xz$, then the value of b is
- A. $\frac{a+c}{2}$ B. ac C. \sqrt{ac} D. $\frac{2ac}{a+c}$
35. Choose the pair numbers which come next to 75, 65, 85, 55, 45, 85, 35,
- A. 25, 15 B. 25, 85 C. 35, 25 D. 35, 85
36. What single discount is equivalent to two successive discounts of 10% and 15%?
- A. 25% B. 24% C. 24.5% D. 23.5%
37. If price is reduced by 25% and sales increase by 20%, what is the net effect on gross receipts?
- A. increase by 25% B. decrease by 5%
C. increase by 10% D. decrease by 10%
38. A shopkeeper sales 25 item and receive the C.P. after selling 20 items. Then what will be his profit %?
- A. 25% B. 4.5% C. 5% D. 15%

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39. A pipe can fill a cistern in 45 minutes and the waste pipe empties it in 1 hour. If both the pipes are opened at the same time, in how many hours will the cistern be filled?
A. 3 hours B. 4 hours C. 6 hours D. 2 hours
40. If two diagonals of a rhombus are 14 cm and 12 cm then its area is.... $\frac{1}{2}(d_1 \times d_2)$
A. 36 cm² B. 84 cm² C. 28 cm² D. 7 cm²
41. All of the following are mammals EXCEPT
A. Shark B. Seal C. Porpoise D. Bat
42. Bats and birds are good fliers but the bat differs from bird in having
A. Diaphragm B. Four-chambered heart
C. Wings D. Warm bloodedness
43. By the statement 'survival of the fittest', Darwin meant that
A. The strongest of all species survives
B. The most intelligent of the species survives
C. The cleverest of the species survives
D. The most adaptable of the species to changes survives
44. Most of the endangered species are the victims of
A. Habitat destruction B. Over-hunting
C. Acid rain D. Competition with introduced species
45. During heart attack, a doctor may inject
A. Thyroid B. Prolactin C. Insulin D. Adrenaline
46. The autonomic nervous system controls all of the following EXCEPT
A. Secretion of digestive juice B. Sweating
C. Thought D. Peristalsis
47. Which one of the following human cells do not contain mitochondria?
A. Nerve cell B. Red blood cell
C. Liver cell D. White blood cell
48. Which of the following is NOT correctly matched?
A. *Sycon* – Canal system B. Star fish – Radial symmetry
C. Round worm – Pseudosegmentation D. Insect – Metameric segmentation
49. A balanced diet does NOT include
A. Carbohydrates and fats B. Nucleic acids and enzymes
C. Proteins and vitamins D. Minerals and salts
50. Which one of the following is NOT the period of Mesozoic era?
A. Triassic B. Permian C. Jurassic D. Cretaceous
51. If a new plant were to be discovered with parallel-veined leaves, and brightly colored flowers each with 6 stamens, the plant would most precisely be classified as
A. Gymnosperm B. Angiosperm C. Monocotyledon D. Dicotyledon

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52. Fruits are not formed in gymnosperms because
A. they have no ovary
B. they are not pollinated
C. they are seedless plants
D. process of fertilization doesn't take place
53. A nitrogenous base that occurs in DNA in equal quantities with guanine is
A. adenine
B. cytosine
C. uracil
D. thymine
54. Organisms that convert nitrogen containing organic molecules into nitrates are
A. decomposers (e.g., bacteria)
B. producers (e.g., grasses)
C. primary consumers (e.g., mice)
D. tertiary consumers (e.g., hawk)
55. Which of the following statement is NOT true for viruses?
A. have protoplasm
B. obligate parasites
C. have nucleic acid
D. can respond to stimuli
56. The branch of biology deals with the study of mushrooms is
A. Phycology
B. Mycology
C. Ornithology
D. Myology
57. Pollination involves a transfer of pollen from



- A. 1 to 2
B. 3 to 5
C. 4 to 5
D. 5 to 4
58. Which of the following is human haploid chromosome number?
A. 10
B. 23
C. 46
D. 92
59. Daughter chromosomes start to move towards the opposite poles of a dividing cell during
A. prophase
B. metaphase
C. anaphase
D. telophase
60. Organisms that comprise the greatest mass of living substance (biomass) in terrestrial food chain are
A. decomposers (e.g., bacteria)
B. producers (e.g., grasses)
C. primary consumers (e.g., mice)
D. tertiary consumers (e.g., hawk)
61. The constant related to the gravitational force has unit in SI system of units
A. m sec^{-2}
B. kg m sec^{-1}
C. $\text{N m}^2 \text{kg}^{-2}$
D. J m sec^{-1}
62. The physical quantity related to the height of liquid is
A. pressure
B. mass
C. weight
D. density
63. A body of volume 1 m^3 is wholly immersed in a liquid of density 13600 kg / m^3 at the sea level. The loss in weight of the body in liquid is equal to
A. 1360 N
B. 13.6 N
C. $\left(\frac{1}{13600}\right) \text{ N}$
D. 136000 N

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64. An atom has 11 protons and 12 neutrons. Then the number of electrons in this atom is
A. 12 B. 11 C. 23 D. 1
65. 100 J of mechanical energy is supplied to 1kg water which raises its temperature through
A. 100 K B. 4200 K C. $\left(\frac{1}{4200}\right)$ K D. $\left(\frac{1}{42}\right)$ K
66. A person suffering from myopia has to use
A. biconvex lens B. planoconvex lens
C. biconcave lens D. concavoconvex lens
67. An object is placed at a distance of 20 cm from a convex lens of focal length 10 cm. The image formed by the lens will be
A. at 20 cm from the lens, inverted and real
B. at 20 cm from the lens, inverted and virtual
C. at 20 cm from the lens, erect and real
D. at 20 cm from the lens, erect and virtual
68. To find the direction of induced current in an electromagnetic induction,
A. Maxwell's cork screw rule is used B. Right hand thumb rule is used
C. Fleming's right hand rule is used D. Fleming's left hand rule is used
69. If an electric heater of voltage 220 V draws 5 A current, what is its electric power?
A. 44 watt B. 880 watt C. 1100 watt D. $\left(\frac{1}{44}\right)$ watt
70. In uniform velocity,
A. both magnitude and direction of velocity remain constant
B. only magnitude remains constant
C. only direction remains constant
D. neither magnitude nor direction remains constant
71. Which one of the followings is a vector quantity?
A. work B. power C. speed D. moment of force
72. The unit of intensity of sound is
A. Cd B. dB C. Joule D. Watt m⁻²
73. _____ is used to detect the flow of electric current in an electric circuit.
A. Voltmeter B. Ammeter C. Galvanometer D. Ohmmeter
74. The angle between the magnetic meridian and the geographical meridian at a place is known as
A. angle of declination B. angle of dip
C. angle of inclination D. angle of friction
75. When a ray of light enters from one medium to another medium, it increases its angle with the normal to the surface at the point of entrance, then the second medium must be than first medium .
A. rarer B. denser C. not other D. none of above

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76. Which solution will change red litmus to blue?
A. HCl (aq.) B. NaCl (aq.) C. CH₃OH (aq.) D. NaOH (aq.)
77. Given the equation: $H^+ + OH^- = H_2O$, which type of the reaction does the equation represent?
A. Esterification B. Decomposition
C. Hydrolysis D. Neutralization
78. Which of the following element is essential in all organic compounds?
A. Nitrogen B. Hydrogen C. Oxygen D. Carbon
79. Naturally occurring polymers are
A. starch and nylon B. starch and cellulose
C. protein and nylon D. protein and plastic
80. Which of the following compound is represented by the general formula C_nH_{2n+2} ?
A. Butane B. Butene C. Butyne D. Benzene
81. Compare to the charge and mass of a proton, an electron has
A. the same charge and a smaller mass
B. the same charge and the same mass
C. an opposite charge and a smaller mass
D. an opposite charge and the same mass
82. Which of the following atom consists of exactly fifteen protons?
A. P-32 B. S-32 C. O-15 D. N-15
83. Which of the following three groups represent, the most elements classified as metalloids in the periodic table?
A. 1, 2 & 3 B. 2, 13 & 14 C. 14, 15 & 16 D. 16, 17 & 18
84. When a metallic atom combines with a non-metallic atom, the non-metallic atom will
A. lose electrons and its size will decrease
B. lose electrons and its size will increase
C. gain electrons and its size will decrease
D. gain electrons and its size will increase
85. Which of the following is a binary compound?
A. Hydrogen sulphide B. Hydrogen sulphite
C. Ammonium sulphide D. Ammonium sulphate
86. Some students are asked to describe differences between gases and liquids. Three of their suggestions are:
I) Gas molecules are further apart
II) Gas molecules are smaller
III) Liquid molecules vibrate around fixed positions
Which suggestions are correct?
A. I only B. II only C. III only D. All of the above
87. Which method can be used to obtain crystals of sodium chloride from aqueous sodium chloride solution?
A. Neutralization B. Crystallization C. Evaporation D. Electrolysis

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88. An element S has the proton number 18. The next element in the periodic table is an element T. Which statement is correct?
- A. Element T has one more electron in its outermost shell than element S.
B. Element T has one more electron shell than element S.
C. Element T is in the same group of the periodic table as element S.
D. Element T is in the same period of the periodic table as element S.
89. Substance 'E' when reacts separately with zinc, sodium hydroxide and marble pieces, the respective products formed are hydrogen, sodium chloride and carbon dioxide. Identify the substance 'E'.
- A. An alkali B. An acid C. An element D. A salt
90. A yellow colored energy drink consists of a dissolved mixture of red and orange coloring agents. Suggest a suitable mean to separate these coloring agents.
- A. Distillation B. Evaporation
C. Filtration D. Chromatography
91. What is the minimum age requirement of a person in Nepal to be eligible to vote in the national election?
- A. 16 years B. 18 years C. 19 years D. 21 years
92. The headquarter of World Trade Organization is located at
- A. Washington D.C. B. New York B. Geneva C. London
93. The World Environment Day is celebrated on
- A. June 5 B. December 10 C. April 23 D. January 1
94. What do we know Rontgen rays as?
- A. α - rays B. β -rays C. γ -rays D. X-rays
95. Which is the Largest Ethnic group in Nepal?
- A. Brahmin B. Tharu C. Tamang D. Chhettri
96. Which Hindu God is considered to be the 'God of Good fortune,' the one who removes obstacles?
- A. Lord Rama B. Lord Ganesha C. Lord Krishna D. Lord Kartikeya
97. Which branch of science is related to the study of blood, the blood-forming organs and blood diseases?
- A. Hematology B. Nephrology C. Rheumatology D. Pulmonology
98. In which language did Buddha preach his teachings?
- A. Nepali B. Aramaic C. Pali D. Sanskrit
99. AUTHOR : MANUSCRIPT ::
- A. optician : spectacles B. engineer : bridge
C. architect: blueprint D. doctor : stethoscope
100. The first Asian Games were held at
- A. New Delhi in 1950 B. Bangkok in 1952
C. Singapore in 1952 D. Kuala Lumpur in 1952

Practice Test - 5

1. Although she is not rich, she always wears.....clothes.
A. respective B. respected C. respectable D. respectful
2. The clients were served.....at the party last night.
A. in a courteous manner B. courteous mannerly
C. with courteous in their manner D. courteously
3.so many people been out of work as today.
A. More than ever before B. Never before have
C. In the past, there never was D. Formerly, they were never
4. I will talk to him if.....
A. he comes B. he would come C. he has come D. he will come
5. His company is greatly sought.....
A. at B. after C. for D. out
6. I wish I.....you.
A. am B. was C. had been D. were
7. Prices have.....so rapidly in the last few months.
A. raised B. rise C. raising D. risen
8. I'd rather stay here,.....?
A. hadn't I B. don't I C. wouldn't I D. didn't I
9. They aren't happy and.....
A. so am I B. I am too C. neither is I D. I am not either
10. They.....to the USA by December.
A. will fly B. will be flying C. will have flown D. may fly
11. Which word is incorrectly spelt?
A. preferable B. nupital C. nuisance D. hygiene
12. He works hard in order to **keep the pot boiling**. The meaning of the phrase in bold type is:
A. To keep the machine working
B. to boil the pot
C. to earn enough money to buy one's food.
D. to lead a comfortable life
13. It is time you.....home.
A. go B. went C. have gone D. are going
14. One who hates women is:
A. misogynist B. misogynist C. masochist D. misanthrope
15. The passive of "She pleased me." is:
A. I was pleased by her sincerity. B. I was pleased at her sincerity.
C. I was pleased with her sincerity. D. I was pleased to her sincerity.

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16. The indirect speech of: The teacher said, "Be quiet boys."
A. The teacher said that the boys should be quiet.
B. The teacher called the boys and told them to be quiet.
C. The teacher urged the boys to be quiet.
D. The teacher ordered the boys to be quiet.

Read the following passage and answer the questions that follow:

I know that only one person in a thousand knows the trick of really living in the present. Most of spend 59 minutes an hour living in the past, with regret for lost joys, or shame for the things badly done-or in a future which we either long for or dread. Yet the past is gone beyond repair, and every minute you spend in the vain effort to anticipate the future is a moment lost. There is only one world, the world pressing against you at this minute. There is only one minute in which you are alive, this miracle- here and now. The only way to live is by accepting every minute as an unrepeatable miracle. Which is exactly what it is- a miracle and unrepeatable.

17. People live either in the past or in the future because:
A. They are in the habit of chewing the curd
B. They are prey to imaginary fears
C. They are chained to memory and desire
D. None of these
18. What is an unrepeatable miracle?
A. Every moment that we live and spend
B. To repair the past
C. To crave for what is not
D. None of these
19. The attitude of the author is:
A. Romantic
B. classical
C. political
D. pragmatic
20. The most suitable title for the passage will be:
A. Past is dynamic
B. the art of living
C. Importance of the present
D. Importance of the past
21. A train went 300 miles from city X to city Y at an average speed of 80 mph. At what speed did it travel on the way back if its' average speed for the whole trip was 100 mph?
A. 120 mph
B. 125 mph
C. $133 \frac{1}{3}$ mph
D. $137 \frac{1}{3}$ mph
22. If a wheel travels 1 km in 1 min at the rate of 600 revolutions per min., then diameter of the wheel is
A. $\frac{2}{3\pi}$
B. $\frac{3}{5\pi}$
C. $\frac{5}{3\pi}$
D. $\frac{6}{5\pi}$
23. The co-ordinates of a triangle are (0, 2), (2, 4) and (1, 6). Then the area of triangle in sq. unit is
A. 2
B. 3
C. 4
D. 5

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34. If $f(x) = x+2$ then $f(x-1)$ is
A. x^2 B. x C. $x-1$ D. $x+1$
35. A and B are any two sets then $A \cap (B - A)$ is equal to
A. A B. B C. $B - A$ D. ϕ
36. The angle between the vectors $\vec{a} = \hat{i} + 2\hat{j}$ and $\vec{b} = 6\hat{i} - 3\hat{j}$.
A. 0 B. $\pi/3$ C. $\pi/4$ D. $\pi/2$
37. Two cards are drawn one after another from a regular deck of 52 cards with replacement. What is the probability that the cards will be an ace and a 10?
A. $\frac{1}{39}$ B. $\frac{2}{13}$ C. $\frac{8}{13}$ D. $\frac{5}{26}$
38. In a class of 20 students in MATH examination 2 students scored 100 marks each, 3 students got zero each, and the average score of rest of the students was 40. What is the average score of the whole class?
A. 10 B. 20 C. 30 D. 40
39. A shopkeeper fixed the price of his articles 30% above the cost price. If he sold an article allowing 10% discount, then his profit percentage will be
A. 20% B. 17% C. 23% D. 40%
40. If m and p are positive integers and $(m+p) \times m$ is even, which of the following must be true.
A. If m is odd, then p is odd B. If m is even, then p is even
C. If m is odd, then p is even D. If m is even, then p is odd
41. In the past, fungi were often grouped with plants because of alleged similarities between the two groups. Which of the following are characteristics of the fungi that are **NOT** seen in plants?
A. Food reserve consists of glycogen
B. Cell wall contains chitin
C. Organism is eukaryotic
D. Absorptive heterotrophy is chief mode of nutrition
42. Tube like cells that carry food from leaves to other parts of a plant are
A. Xylem cells B. Chloroplasts C. Phloem cells D. Bast fibres
43. Which of this organelle is visible only to an electron microscope?
A. Nucleus B. Mitochondria C. Ribosome D. Chloroplast
44. The process that best separates plants from animals is
A. Respiration B. Reproduction C. Photosynthesis D. Osmosis
45. One of the salient features of hydrophytes is a very weak root system. Which of the given plants has no roots?
A. Water fern B. *Wolffia* C. *Hydrilla* D. Lotus
46. Which of the following character is not a true attribute of a fern?
A. Circinate vernation B. Ramenta
C. Reproduction by seed D. Rhizome

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47. Natural vegetative propagation by root is a common method of asexual reproduction in
A. Sugarcane B. Rose C. Potato D. *Dahlia*
48. Thermotropism is a response shown by plants to heat stimulus. Which of the following plants is characterized by this response?
A. Rose B. *Mimosa pudica*
C. Tulip D. *Chlamydomonas*
49. The shape of a DNA molecule is
A. Straight B. Circular C. Flat D. Spiral
50. Which of the following is not a good source of carbon?
A. Coal B. Petroleum fuel
C. Ammonia D. Dead body of organisms
51. Blood cells from the blood are eliminated and the liquid left is
A. Serum B. Plasma
C. Almost water D. Only RBC and Hemoglobin
52. The larva silkworm is
A. Butterfly B. Scorpion C. Moth D. Grasshoppers
53. Autotrophic component of ecosystem is
A. Sunlight B. Green plants C. Herbivores D. Fungi
54. Which of the following is a matching set in animal taxonomy?
A. Silver fish, Cuttle fish, Devil fish B. Flatworm, Round worm, Earthworm
C. Butterfly, Mosquito, Cockroach D. Shark, Whale, Dolphin
55. Rods and cones are located in
A. Cochlea of ear B. Choroid of eye C. Retina of eye D. Taste buds of tongue
56. Ascorbic acid is a/an
A. Lipid B. Protein C. Vitamin D. Carbohydrate
57. All of the following organic compounds are carbohydrates EXCEPT
A. Glycogen B. Maltose C. Glycerol D. Starch
58. Special structures for absorption in small intestine are called
A. Alveoli B. Villi C. Epiglottis D. Muscles
59. Of the following terms, which one includes all the others?
A. Species B. Class C. Phylum D. Kingdom
60. Which pair of animal groups, has oxygenated and deoxygenated blood in the heart separately?
A. Amphibians & Reptiles B. Birds & Mammals
C. Reptiles & Birds D. Reptiles & Mammals
61. The king of chemical is :
A. HCl B. H_2SO_4 C. HNO_3 D. H_2CO_3
62. In alkaline medium, the phenolphthalein indicator turns into
A. Colorless B. Yellow C. Red D. Pink

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63. Which one of the following salts gives alkaline solution when dissolved in water?
A. Na_2CO_3 B. CuSO_4 C. NH_4Cl D. NaCl
64. The salts of which one of the following metals are colored?
A. Na B. Ca C. Al D. Cr
65. The aquaregia is a mixture of conc. HCl and conc. HNO_3 in the ratio of
A. 2:6 B. 6:2 C. 3:2 D. 2:3
66. The general formula of alkyne is
A. C_nH_{2n} B. $\text{C}_n\text{H}_{2n+2}$ C. $\text{C}_n\text{H}_{2n-2}$ D. $\text{C}_n\text{H}_{2n+1}\text{OH}$
67. The functional group of ether is
A. $-\text{OH}$ B. $-\text{CHO}$ C. $-\text{CO}-$ D. $-\text{O}-$
68. The oxide used to impart the green color into glass is
A. CoO B. NiO C. Cr_2O_3 D. Fe_2O_3
69. The chemical fertilizer "UREA" is the major source of
A. Phosphorus B. Potassium C. Nitrogen D. Sodium
70. BHC is a/an
A. Germicide B. Insecticide C. Pesticide D. Fungicide
71. Which of the following is not ore of iron?
A. Hematite B. Magnetite C. Limonite D. Bauxite
72. The electronic configuration of an element is $1s^2 2s^2 2p^6 3s^2 3p^6 4s^1 3d^5$. The element belongs to which group of the periodic table?
A. s- block B. p- block C. d-block D. f- block
73. Which two elements will display the most similar chemical properties?
A. Iron and Phosphorus B. Chlorine and Oxygen
C. Carbon and Boron D. Potassium and Sodium
74. The dry ice is
A. Solid water B. Solid carbondioxide
C. Solid camphor D. Solid ammonia
75. Which one of the followings is decomposition reaction?
A. $\text{C} + \text{O}_2 \rightarrow \text{CO}_2$ B. $2\text{C} + \text{H}_2 \rightarrow \text{C}_2\text{H}_2$
C. $\text{C} + 2\text{S} \rightarrow \text{CS}_2$ D. $2\text{KClO}_3 \rightarrow 2\text{KCl} + 3\text{O}_2$
76. The ratio of the gravitational force of attraction between masses of two bodies when their masses are doubled and distance between them is halved, before and after the change will be
A. 2:1 B. 1:2 C. 1:16 D. 4:1
77. The unit of pressure is
A. Pa B. Pam^{-2} C. Pam^{-1} D. Pam
78. Which one of the followings is the source of renewable energy?
A. Solar energy B. Coal C. Oil D. Natural gas
79. The specific heat capacity of a substance depends on
A. Quantity of matter B. Temperature of matter
C. Nature of matter D. Shape of matter

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80. Which type of lens is used in camera?
A. Plano-concave B. Convex C. Biconcave D. Convexo-concave
81. When a man suffers from long sightedness, his eyelens makes the image of a distant object
A. Before his retina B. Beyond his retina
C. At his retina D. Nowhere
82. What will be the total cost of electricity to be paid in a month when three bulbs each of 40 Watt are used for 4 hours in a day at the rate of Rs 7 per unit?
A. Rs. 14.4 B. Rs. 100.8 C. Rs.0.48 D. Rs. 144
83. According to Fleming's right hand rule, the fore finger shows the direction of
A. Motion B. Magnetic field
C. Electric current D. None of above
84. If a body is moving with constant linear positive acceleration,
A. It moves with constant velocity B. It remains at rest
C. It decreases its velocity at constant rate D. It increases its velocity at constant rate
85. Transformation of energy is based on the principle of conservation of
A. Linear momentum B. Angular momentum
C. Energy D. Charge
86. A ray of light enters normally from air medium to water medium. Its speed
A. Increases B. Remains the same
C. Decreases D. Either increases or decreases
87. If the frequency of sound wave is 100Hz and wavelength 3.3m, what will be its speed?
A. 330m/sec B. 660m/sec C. 165m/sec D. 3300m/sec
88. Which is not the unit of potential difference?
A. Volt B. Joule/coulomb C. Nm/coulomb D. Kgm/coulomb
89. At neutral point, the magnitude of resultant magnetic field will be
A. Maximum
B. Equal to the algebraic sum of the magnitude of individual magnetic fields
C. Zero D. Neglected
90. Alloy is a mixture of
A. Conductors B. Insulators
C. Semiconductors D. Conductor and insulator
91. One tola of gold is equivalent to
A. 10 grams B. 10.54 grams C. 12.353 grams D. 11.664 grams
92. Cartography is
A. Science of vehicles B. Art of beautiful handwriting
C. Science of palmistry D. Art of making maps
93. Who gave the famous quotations "The child is father of the man".
A. Alexander Pope B. Julius Caesar C. Wordsworth D. Roseau

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94. Which country is known as land of Kangaroos?
A. India B. Japan C. Australia D. New Zealand
95. Which of the following book was not written by Diamond Shumsher Rana?
A. Basanti B. Seto Bagh C. Anita D. Mayur Times
96. In cricket the length of pitch between the two wickets is
A. 24 yards B. 23 yards C. 22 yards D. 21 yards
97. Nick name of New York city is
A. Big Apple B. Black sugar C. Small Apple D. Nippon
98. Which famous painter's middle names were Diego Jose Fransico de Paula Juana Neponuceno Madrid de Los Remedios Cipriano de Santisima Trinidad Ruoz?
A. Pablo Picasso B. Van Gogh
C. Henri Rousseau D. Leonardo da Vinci
99. Which is the odd man out ?
A. POKI B. MIEA C. SOKG D. YUQM
100. Which one of the following is a fast growing tree ?
A. Teak B. Eucalyptus C. Banyan D. Coconut

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Answer Key: Practice Test 1

1. A	18. A	35. A	52. D	69. D	86. D
2. C	19. B	36. B	53. C	70. D	87. B
3. A	20. A	37. A	54. B	71. A	88. C
4. D	21. B	38. B	55. C	72. B	89. B
5. B	22. B	39. C	56. B	73. A	90. C
6. D	23. A	40. B	57. C	74. D	91. D
7. A	24. C	41. B	58. B	75. A	92. B
8. A	25. C	42. A	59. B	76. B	93. D
9. A	26. C	43. C	60. D	77. A	94. A
10. D	27. C	44. B	61. D	78. C	95. A
11. A	28. C	45. C	62. A	79. D	96. A
12. A	29. D	46. B	63. D	80. B	97. A
13. D	30. A	47. A	64. B	81. A	98. B
14. B	31. C	48. C	65. B	82. B	99. B
15. B	32. B	49. D	66. D	83. C	100. C
16. B	33. C	50. B	67. A	84. A	
17. C	34. B	51. D	68. D	85. C	

Answers Key: Practice Test 2

1. D	18. D	35. A	52. D	69. C	86. A
2. D	19. C	36. B	53. A	70. C	87. D
3. A	20. D	37. C	54. D	71. B	88. C
4. D	21. D	38. B	55. D	72. C	89. D
5. D	22. B	39. C	56. C	73. D	90. D
6. C	23. B	40. C	57. B	74. B	91. D
7. C	24. B	41. B	58. C	75. A	92. C
8. A	25. D	42. D	59. D	76. B	93. B
9. A	26. B	43. C	60. A	77. D	94. B
10. A	27. D	44. A	61. A	78. A	95. B
11. D	28. C	45. B	62. C	79. C	96. B
12. C	29. C	46. D	63. A	80. A	97. A
13. A	30. D	47. A	64. C	81. B	98. A
14. D	31. B	48. B	65. D	82. C	99. C
15. B	32. C	49. D	66. B	83. B	100. D
16. A	33. D	50. B	67. C	84. B	
17. B	34. B	51. C	68. A	85. B	

Entrance Materials Collection by Nepal Caesar

Answers Key: Practice Test 3

1. C	18. D	35. D	52. D	69. A	86. C
2. B	19. A	36. B	53. A	70. D	87. A
3. C	20. D	37. b	54. D	71.	88. D
4. A	21. B	38. B	55. A	72. B	89. C
5. A	22. C	39. D	56. C	73. A	90. C
6. D	23. C	40. B	57. A	74. A	91. C
7. C	24. C	41. C	58. D	75. B	92. A
8. C	25. B	42. A	59. C	76. D	93. D
9. A	26. A	43. B	60. D	77. D	94. B
10. C	27. D	44. D	61. B	78. B	95. D
11. B	28. C	45. A	62. D	79. D	96. B
12. C	29. C	46. B	63. C	80. D	97. A
13. B	30. D	47. C	64. D	81. A	98. B
14. A	31. B	48. B	65. A	82. C	99. B
15. A	32. A	49. C	66. A	83. A	100. B
16. B	33. D	50. D	67. C	84. C	
17. A	34. A	51. A	68. B	85. C	

Answers Key: Practice Test 4

1. C	18. D	35. B	52. A	69. C	86. A
2. C	19. D	36. D	53. B	70. A	87. C
3. A	20. A	37. D	54. A	71. D	88. D
4. B	21. B	38. A	55. A	72. D	89. B
5. C	22. C	39. A	56. A	73. C	90. D
6. D	23. D	40. B	57. D	74. A	91. B
7. A	24. C	41. A	58. B	75. A	92. C
8. C	25. D	42. A	59. C	76. D	93. A
9. C	26. B	43. D	60. B	77. D	94. D
10. A	27. D	44. A	61. C	78. D	95. D
11. B	28. A	45. D	62. A	79. B	96. B
12. A	29. C	46. C	63. A	80. A	97. A
13. C	30. C	47. B	64. B	81. C	98. C
14. D	31. A	48. C	65. C	82. A	99. C
15. C	32. C	49. B	66. C	83. C	100. A
16. B	33. D	50. B	67. A	84. D	
17. A	34. D	51. C	68. C	85. A	

Entrance Materials Collection by Nepal Caesar

Answers Key: Practice Test 5

1. C	18. A	35. D	52. C	69. C	86. C
2. D	19. D	36. D	53. B	70. B	87. A
3. B	20. B	37. A	54. C	71. D	88. D
4. A	21. C	38. D	55. C	72. C	89. C
5. B	22. C	39. B	56. C	73. D	90. A
6. D	23. A	40. A	57. C	74. B	91. D
7. D	24. A	41. D	58. B	75. D	92. D
8. C	25. A	42. C	59. D	76. C	93. C
9. D	26. D	43. C	60. B	77. A	94. C
10. C	27. C	44. C	61. B	78. A	95. D
11. B	28. B	45. B	62. D	79. C	96. C
12. D	29. C	46. C	63. A	80. B	97. A
13. B	30. A	47. D	64. D	81. A	98. A
14. B	31. C	48. B	65. B	82. B	99. A
15. C	32. B	49. D	66. C	83. B	100. B
16. D	33. A	50. C	67. D	84. D	
17. C	34. D	51. B	68. C	85. C	