

Sinamangal, Kathmandu

*Phone: 01-4480069, 01-4481590*

*General instruction*

*There are 100 questions on this paper. Answer all questions. For each questions there are four possible answers a, b, c and d. Circle the one you consider correct in separate answer sheet. No negative markings for wrong answer.*

**Model Question for Entrance Exam**

**+2 Science Stream**

1. The bus …………………at 7 pm.

 a. Arrive b. have arrive c. are arriving d. arrives

1. When she came, Ram…………….away.

a. goes b. went c. was went d. had gone

1. It is five days since I ……………. Ram.

a. See b. have seen c. saw d. will see

1. Honesty is ……………….best Policy.

a. an b. a c. the d. none

1. Twelve inches make …………………foot.

a. The b. a c. an d. no article

1. He is ………………one eyed man.

a. an b. the c. a d. none

1. He Lost his book,………….?

a. dose he b. don’t he c. did he d. didn't he

1. Let's have tea , ……………………?

a. Will you b. shall we c. can we d. should we

1. Be a good student,…………?

a. Shall we b. will you c. don’t you d. do they

1. What is Passive voice of “someone stole my book"?

a. My Book was stolen

b. My book is stolen

c. My book was stolen by some one

d. My book has been stolen by some one

1. Which is in active voice?

a. He was made to do the chore b. I was frightened

c. I accused him of cheating d. The work will be finished

1. Several new Proposals…………………. by the committee.

a. was passed b. were passed. c. is passed d. being passed.

1. The film made all the audience ……………… into tears.

a. burst b. to burst c. bursts d. bursting

1. Have me ……….. something please.

a. say b. to say c. said d. saying

1. I have received no invitation……………

a. either from A nor from B b. either from A or from B

c. neither from A nor from B d. either from A nor from B

1. If you ………….. so much ,You would get fat .

a. eat b. ate c. eating d. had eaten .

1. One of the boys………. Just……………..

a. have/come b. is/coming c. are/coming d. has/come

18. He does not …… hard.

a. studies b. study c. studied d. studying

1. The dimensional formula for surface tension is.

a. [ MLT2] b.[ ML2T2] c. [ MT2] d. [ ML\_1 T\_1]

1. Lux is related to.

a. Sound b. Light c. Magnetism d. Heat

1. Which of the following is a scalar quantity?

a. Displacement b. work c. acceleration d. electric field

1. The maximum Value of magnitude of $→→$

a. A+B b. A-B c. $\sqrt{A^{2 }-B^{2}}$ d. $\sqrt{A^{2 }+B^{2}}$

1. If a stone is thrown vertically upward with a velocity 10 ms1 what is the maximum heigh reached by the stone?

a. 5m b. 10m c. 15m d. 20m

1. A body at rest may have.

a. Speed b. energy c. velocity d. acceleration

1. A pendulum clock giving correct time at earth is taken to moon, then it.

a. Becomes fast b. Becomes slow c. remains unaffected d. stops

1. Three miscible liquids are of density D, 2D and mixed. The resulting density is

a. D b. 2D c. 3D d. 6D

1. How much heat is required to raise the temperature of 10kg water from 600c to 800c?

a. 4200 J b. 42000 J c. 420000 J d. None

1. Which sound has high pitch?

a. The sound produced from thin wire

b. The sound produced from tick wire

c. The sound of low frequency

d. The sound with low were length

29. The S I unit of Gravitational Field Intensity is

a. Newton b. Watt c. N/kg d. M/g2

30. Newton's first law of motion measures

a. inertia b. force c. momentum d. energy

31. The value of acceleration due to gravity at the center of earth is

a. 9.8 ms-2 b.981 ms-2 c. 0 ms-2 d. infinity

32. ………………has two values of specific heat capacities.

a. solid b. liquid c. gas d. all

33. On the surface of moon, the speed of sound is

a. 332 m/s b. 331 m/s c. 0 m/s d. infinity

34. Intensity level for threshold of hearing is……

a. 0 dB b. 10 dB c. 20 dB d. none of above

35. Velocity of sound doesn’t depend on

a. tempetaure b.pressure c. humidity d. density

36. During the reflection of light the glancing angle is……. times

a. 2 b.1/2 c. 3 d. 1/3

1. The liquid left after crystallization is .

a. Distillate b. mother liquor c. residue d. sublimate .

1. The number of electrons in a mole of hydrogen molecule is .

a. 6.023 x1023 b.12.46 x 1023 c.3.115 x1023 d. none of the above

1. The liquids form small droplets due to

a. Osmosis b. Viscosity c. surface tension d. evaporation

1. The half-filled and completely - filled Orbital's

a. Unstable b. Less stable c. more stable d. excited

1. A covalent bond is formed as a result of

a. Transfer of electrons from one to another.

b. Electrostatic attraction between two atoms.

c. Sharing of electrons contributed by only one atom.

d. Sharing of electrons contributed by both atoms.

1. An element of atomic number 29 belong to

a. S- block b. P- block c. d-block d. f- block

1. Dry Ice is
2. Solid ice without any water b. Solid SO2

c. Solid benzene d. Solid CO2

1. The cause of formation of so many organic compounds is
2. Tetra covalency of Carbon b. Isotopes of Carbon

c. Catenation d. Natural sources of Carbon

1. Hydrolysis of calcium carbide producers

a. Methane b. ethane c. acetylene d. ethylene

46. Which one of the following is the most reactive element?

a. Ca b. Mg c. Al d. F

47. HCl is the........ Compound.

a. ionic b. Covalent

c. Coordinate covalent d. None of the above

48. The molecular weight of sodium carbonate is

a. 96 b. 104 c. 106 d. None of the above

49. When organic compounds are treated with oxygen they evolve.

a. SO2 & water b. CO2 & water

c. P2O5 & water d. None of the above

50. How many electrons are there in O2- ion?

a. 6 b. 10 c. 18 d. 16

51. Bauxite is an ore of

a. Al b. Cu c. Ag d. Fe

52. Amalgam is

a. an alloy b. a slag c. a flux d. an element

53. Centigrade is the unit of

a. Pressure b. heat c .force d. temperature

54. The ratio of Hydrochloric acid and Nitric acid in Aqua-regia is…..

a.2:2 b.1:3 c.3:1 d.4:5

55. The function of mitochondria is to produce

a.ATP b. ADP c. RUBP d.FAD

56. Capsulated bacteria are considered as

a. Harmful b. Harmless c. Symbiotic d. Autotrophic

57. Diffusion is movement of

a. Solute b. Solvent c. Ion d. All

58. Primary source of energy in ecosystem is

a. Sun b. Starch c. Minerals d. Heat

59. Which causes skin cancer?

a. Water pollution b. Air Pollution

c. Ozone depletion d. None

60. Nephrology deals with study of

a. Liver b. Kidney c. Eye d.Skin

61. Genetic draft is an account of

a. Population loss b. Variation

c. Population gain d. None

62. The science of animal behavior is

 a. Ecology b. Entomology c. Ethology d. None

63. Which one is bio-degradable pollutant?

a. Sewage b. DDT c. Aluminum d. Lead

64. Longitudinal Migration is usually seen in

a. Ducks b. Sparrow c. Woodcock d. Starling bird

65. Which blood cell is commonly called Erythrocyte?

a. Red Blood Cell b. White Blood Cell

c. Platelets d. None

66. Bryophytes are called amphibian plant because

 a. They live on land and in water b. They are aquatic plants

 c. They need water for fertilization d. All of the above

67. Cephalothorax is found in

 a. Rohu b. Earthworm c. Tapeworm d.Prawn

1. The full form of LED is

a. Light emission device. b. Laser emitting device.

c. Light emitting diode. d. Laser emitting diode.

1. What does CPU stands for?

a. Computer Peripheral Unit b. Central Processing Unit

c. Central Processor Unit d. Computer Processor Unit

1. Which of the following command is used to bold the character in MS-Word?

a. ctrl+b b. ctrl+s c. ctrl+d d. ctrl+a

1. One Gigabytes (GB) is equals to …………………..

a. 1024KB b. 1024MB c. 1024TB d. 1024bytes

1. Which of the following is not an Operating System?

a. Windows 8 b. Redhat Linux c. Mac d. Google Chrome

73. If x-$ \frac{1}{ x}$ = 2, the value of $x^{2}$ + $\frac{1}{x^{2}}$ is

a. 4 b. 6 c. 2 d. 0

74. What is the slope of the line $\frac{x}{α}$ +$\frac{Y}{β}$ = 1?

a. $\frac{α}{β}$ b.$ \frac{β}{α}$ c. -$\frac{α}{β}$ d. -$\frac{β}{α}$

75. What is the probability of sure event?

a. 1 b. 0 c. 1/2 d. 1/5

76. If 7 is the mean of 3, 6, a, 9, and 11, find a

a. 6 b. 5 c. 8 d. 7

77. If $\sin(θ)$= $\sqrt{3/2}$, $θ$ is an obtuse angle, then $\tan(θ)$ is equal to

a. -$\sqrt{3}$ b.+$\sqrt{3}$ c.-$\frac{1}{\sqrt{3}}$ d.+$\frac{1}{\sqrt{3}}$

78. If x+y=10 and x-y=11, what is the value of x2-y2?

a. 100 b. 110 c. 121 d. 21

79. If 3y+5=7x, then 21y-49x =

a. -40 b. -35 c. -10 d. 0

80. The value of tan2 450 + Cos2 450 is

a. 0 b. 1 c.  d. 2

81. Given that 176 dollars = £100 and £ 1=Rs 119. Find the dollars for Rs. 8925.

a. 112 b. 122 c. 132 d. 142

82. If the sum of five consecutive odd integers is 735, what is the largest of these integers?

 a. 155 b. 151 c. 145 d. 143

83. A man mixes 90 liters of milk containing 10% of water with 60 liters of milk containing 20% of water, and then the percentage of water in the mixture is

 a. 12% b. 13% c. 14% d. 15%

84. If the amount of a sum of money is  of the principal in 2.5 years, then the rate of interest is

 a. 5% b. 10% c. 15% d. 25%

85. The string of a kite is inclined to the horizon at an angle of 300. The length of the string is 150 m, then the height of the kite is.

 a. 15 m b. 20 m c. 25 m d. 75 m

86. Every Sunday Greg jogs 3 miles. For the rest of the week each day he jogs 1 mile more than the previous day. How many miles does Greg jog in 2 weeks?

a. 24 b. 63 c. 84 d. 98

87. What is the circumference of a circle whose area is 100π?

a. 10 b. 20 c. 20 π d. 10 π

88. If a speed of 1 meter per second is equal to a speed of *k* kilometer per hour, what is the value of *k*?

(1 kilometer= 1000 meters)

a. 0.036 b. 0.06 c. 0.36 d. 3.6

89. If  then x equals

 a. 0 b. 1 c. 2 d. 3

90. If , then the value of  is

 a. 28:15 b. 56:30 c. 56:45 d. 84:30

1. National Bird of Bhutan is

a. Partridge b. Corvus Corax c. Jungle fowl d. Lophophorus

1. Which country is Know as land of cakes ?
2. Ireland b. Scotland c. Maldives d. Finland
3. Who invented thermometer?
4. Sir Isaac Newton b. Luis Pasteur c. Galileo Galilee d. Blaisepascal

94. What is the Currencies of Malaysia?

a. Ringgit b. bhatta c. Taka d. Real

95. Tallest Buiding of the world is

a. shanghai tower b. lotte world tower c. wills tower d. Burzkhalifa

96. Introducing a man to her husband, a woman said, “his brother’s father is the only son of my grandfather.” How is the woman related to this man?

a. mother b. aunt c. sister d. daughter

97. The product of three numbers in GP is 729 and the sum of the squares is 819. The numbers are:

a. 9,3,27 b. 27,3,9 c. 3,9,27 d. all of above

98.The arithmetic mean of x and y is 10 and their geometric mean is 8. What is the value of x and y?

a. 16,4 b. 15,5 c. 14,6 d. 12,8

1. The only true education comes through the stimulation of the child’s powers by the demands of the social situations in which he finds himself. Through these demands he is stimulated to act as a member of a unity, to emerge from his original narrowness of action and feeling, and to conceive him from the standpoint of the welfare of the group to which it belongs.

The passage best supports the statement that real education-

1. will take place if the children imbibe action and feeling.
2. will take place if the children are physically strong.
3. is not provided in our schools today.
4. comes through the interaction with social situations.
5. To forgive an injury is often considered to be a sign of weakness; it is really a sign of strength. It is easy to allow oneself to be carried away by resentment and hate into an act of vengeance; but it takes a strong character to restrain those natural passions. The man who forgives an injury proves himself to be the superior of the who wronged himself and puts the wrong-doer to shame.

The passage best supports the statement that-

1. the sufferer alone knows the intensity of his sufferings.
2. people tend to forgive the things happened in the past.
3. natural passions are difficult to suppress.
4. mercy is the noblest form of revenge.

**Answer Key**

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

English: 18

Mathematics: 18

Physics: 18

Chemistry: 18

Biology: 13

Computer Science: 05

General Knowledge and logical reasoning: 10