iQuest Scholarship Cum Admission Test

## FOR CLASS $7^{\text {th }}$ MOVING TO CLASS 8 ${ }^{\text {th }}$ (INSIGHT) SAMPLE TEST

Time: $\mathbf{1 . 5 ~ H r}$
Max Marks : 280

| The Test Consists of Two Sections : (TOTAL 70 QUESTIONS) |  |  |
| :--- | :---: | :---: |
| Section | Type | No. of Questions |
| Section A : | Reasoning | 15 Q. |
| Section B : | Scholastic Aptitude | 55 Q. |

## INSTRUCTIONS TO CANDIDATE

$>\quad$ Each subject in this paper consists of multiple choice questions with only one correct answer. +4 marks will be awarded for correct answer and there is no negative marking.
$>\quad$ Please read the instructions given for each question carefully and fill the correct answer against the question numbers on the answer sheet in the respective subject.
$>\quad$ Use blue or black ball point pen to darken the appropriate circle \& mark should completely fill the circle.
$>\quad$ The Question paper contains blank spaces for your rough work. No additional sheet will be provided for rough work.
$>$ Blank papers, Clipboards, Log Tables, Slide rule, Calculators, Cellular phones, Pagers and Electronic gadgets in any form are not allowed.
$>\quad$ Write your Name, Student ID in the block at the top of the Answer Sheet. Also write your Name \& Student ID in the space provided on this cover page of question paper.
$>\quad$ This is a Sample Test Paper. The actual Paper Pattern may vary in terms of duration and sections. However the syllabus will be same.

Name: $\qquad$ Student ID $\qquad$

## SECTION - A

## REASONING

1. 'Doctor' is related to 'Stethoscope' in the same way as 'Painter' is related to
(A) Painting
(B) Brush
(C) Exhibition
(D) Art
2. Find the odd one that does not belong to the group .
(A) Topple
(B) Tumble
(C) Slip
(D) Skip
3. In a code language if TRAINS is coded as RTIASN, how PISTOL will be coded in the same language?
(A) SITLOP
(B) IPSTLO
(C) SIPTLO
(D) IPTSLO
4. Lakshman went 15 km to the West from my house, then turned left and walked 20 km . He then turned East and walked 25 km and finally turning left covered 20 km . How far is he now from my house?
(A) 15 km
(B) 20 km
(C) 25 km
(D) 10 km

Directions: (Q5-6)Study figure given below and answer the questions that follow.

5. Find out the number of families which have VCR and TV both .
(A) 84
(B) 24
(C) 104
(D) None
6. Find out the number of families which have only one thing, i.e., either VCR or TV or scooter or maruti.
(A) 160
(B) 184
(C) 225
(D) 254

Directions : (Q7-9)Read the following information carefully and then answer the questions that follow.
Six girls A, B, K, D, E and P are standing in a row. B is between D and P. A does not stand next to either $P$ or D. K does not stand next to D. E stands between A and K .
7. P stands between
(A) B and K
(B) E and A
(C) D and B
(D) A and K
8. Who occupy the extreme ends of the row?
(A) D and E
(B) D and A
(C) A and P
(D) B and E
9. K stands between
(A) $P$ and $B$
(B) P and D
(C) P and E
(D) E and A
10. Which letter willbe 10 th to the left of the 15 th letter from the left end of the following sequence?
ABCDEFGHIJKLMNOPQRSTUVWXYZ
(A) E
(B) F
(C) G
(D) H

Directions : (Q11)The question below consist of a question followed by two statements labelled as I and II. You have to decide if these statements are sufficient to conclusively answer the question. Give your answer as:
(A) if statement I alone is sufficient to answer the question;
(B) if statement II alone is sufficient to answer the question;
(C) if statement I and II together are needed to answer the question;
(D) if statement I or II alone are sufficient to answer the question;
11. Who is older - Ritu or Situ?
I. Situ was born in the year 1980 and is 5 years younger than Ritu's brother.
II. Ritu is twice as older as her brother.
12. Find the missing number

(A) 35
(B) 37
(C) 45
(D) 47

Directions: (Q13)In the following question, one number is missing in the series. You have to understand the pattern of the series and then insert the missing number.
13. $2,6,12,20, \ldots ., 42,56,72,90$
(A) 20
(B) 21
(C) 30
(D) 12
14. Count the number of triangles in the figure given below.

(A) 17
(B) 13
(C) 14
(D) 16

Directions : (Q15)In the following question, some positions of the same dice have been shown. You have to see these figures and select the number opposite to the number as asked in each of the question.
15.

(i)

(ii)

(iii)

(iv)

Which number is on the opposite surface of number 3 ?
(A) 4
(B) 6
(C) 5
(D) 1

## SECTION - B <br> SCHOLASTIC APTITUDE

16. A body dropped from the top of a tower reaches the ground in 4 s . Height of the tower is:
(A) 39.2 m
(B) 44.1 m
(C) 58.8 m
(D) 78.4 m
17. Two bodies of different masses say 1 kg and 5 kg are dropped simultaneously from a tower. They will reach the ground
(A) simultaneously
(B) the heavier one arriving earlier
(C) the lighter one arriving earlier
(D) cannot say, the information is insufficient.
18. Why does an astronaut experience weightlessness in outer space?
(A) No gravitational force acts on him
(B) No frictional force acts on him
(C) There is no air resistance in outer space
(D) There is a vacuum in outer space
19. Mass differs from weight in that:
(A) weight is a force where as mass is not a force
(B) the mass of an object is always more than its weight
(C) mass can be expressed only in the metric system
(D) there is no difference
20. Force of friction is directly proportional to
(A) size
(B) area
(C) weight
(D) all these factors of the moving bod
21. A coin ficked across a table will stop, because:
(A) it is heavy
(B) no force is acting on it
(C) earth attracts the coin
(D) table exerts a frictional force
22. The pressure increases with
(A) Decreasing depth
(B) Increasing depth
(C) Depth has no effect on pressure
(D) None of these
23. One pascal is the pressure generated by :
(A) force of 1 N on $1 \mathrm{~m}^{2}$
(B) force of 1 kg on $1 \mathrm{~m}^{2}$
(C) force of on 1 N an $1000 \mathrm{~cm}^{2}$
(D) force of 1 N on $1 \mathrm{~cm}^{2}$
24. Fluid pressure is always directed
(A) up
(B) sideways
(C) down
(D) in all directions
25. A shrill sound has a $\qquad$ pitch and a dull sound has a
$\qquad$ pitch.
(A) high,low
(B) low, high
(C) low, low
(D) high,high
26. Vibrating bodies produce $\qquad$
(A) sound
(B) heat
(C) light
(D) none of these
27. Which of the following is not a source of electrical energy?
(A) A cell
(B) A battery
(C) An electric motor
(D) A generator
28. When current is passed through molten sodium chloride:
(A) sodium is deposited at the positive electrode and chlorine gas is formed at the negative electrode
(B) sodium is evaporated and chloride ions are formed at the negative electrode
(C) sodium is deposited at the positive electrode and chlorine is deposited at the negative electrode
(D) sodium is deposited at the negative electrode and the chlorine gas is formed at the positive electrode
29. A ray of light is incident on a plane mirror and the angle of reflection is $50^{\circ}$. Calculate the angle between the incident ray and the reflected ray.
(A) $50^{\circ}$
(B) $25^{\circ}$
(C) $90^{\circ}$
(D) $100^{\circ}$
30. At which part of eye does the image forms?
(A) Blind spot
(B) Retina
(C) Cornea
(D) Pupil
31. A marble tile would feel cold as compared to a wooden tile on a winter morning, because the marble tile
(A) is a better conductor of heat than the wooden tile.
(B) is polished while wooden tile is not polished.
(C) reflects more heat than wooden tile.
(D) is a poor conductor of heat than the wooden tile.
32. The correct way of making a solution of acid in water is to
(A) add water to acid.
(B) add acid to water.
(C) mix acid and water simultaneously.
(D) add water to acid in a shallow container.
33. Which of the following is a physical change?
(A) Rusting of iron
(B) Combustion of magnesium ribbon
(C) Burning of candle
(D) Melting of wax
34. The maximum and minimum temperature displayed daily in the weather bulletin refer to the
(A) highest day temperature and lowest night temperature of the day.
(B) highest day temperature and highest night temperature of the month.
(C) temperature recorded at 12 noon and at mid night ( 00.00 hrs ).
(D) average highest temperature of day and average lowest temperature of night.
35. A fire alarm usually detects smoke in case of fire. Where should such an alarm be placed in a room?
(A) Near the door
(B) On the floor
(C) On any wall
(D) On the ceiling
36. Separation of a mixture of the solids by fractional crystallisation depends on the difference in their
(A) Densities
(B) Solubilities
(C) Shape of crystals
(D) Size of crystals
37. The mass number of an atom having 25 nucleons and 13 electrons is
(A) 12
(B) 13
(C) 25
(D) none of these
38. What type of Ions do metals give -
(A) Positive ions
(B) Negative ions
(C) Both (A) \& (B)
(D) Do not give ions
39. The force of attraction acting between cation and anion of an ionic compound is
(A) electrostatic force of attraction
(B) metallic bond
(C) hydrogen bond
(D) None of these
40. Natural gas mainly contains :
(A) Propane
(B) Butane
(C) Methane
(D) Ethane
41. Which of the following gases is supplied in LPG (Liquefied Petroleum Gas) cylinders for domestic use?
(A) Methane and Propane
(B) Methane and Ethane
(C) Ethane and Butane
(D) Propane and Butane
42. The property of an atom to form a bond with itself is known as
(A) isomerism
(B) catenation
(C) allotropy
(D) none of these
43. Solubility of sugar in water
(A) decrease with increase in temperature
(B) increase with increase in temperature
(C) is not affected by temperature
(D) None of these
44. Water is used as coolant in engines because
(A) it makes us feel cold
(B) it freezes easily
(C) it has a high specific heat
(D) None of these
45. When magnesium burns with oxygen to form?
(A) $\mathrm{Mg}(\mathrm{OH})_{2}$
(B) $\mathrm{MgCO}_{3}$
(C) MgO
(D) All of the above
46. Organisms which prepare food for themselves using simple naturally available raw materials are referred to as
(A) heterotrophs
(B) autotrophs
(C) parasites
(D) saprophytes
47. In the absence of which of the following will photosynthesis not occur in leaves?
(A) Guard cells
(B) Chlorophyll
(C) Vacuole
(D) Space between cells
48. Given below from (i) to (iv) are some food items.
(i) Boiled and mashed potato
(ii) Glucose solution
(iii) A slice of bread
(iv) Mustard oil

Which of the above will give blue-black colour when tested with iodine?
(A) (i) and (ii)
(B) (i) and (iii)
(C) (ii) and (iii)
(D) (iii) and (iv)
49. Which of the following pair of teeth differ in structure but are similar in function?
(A) canines and incisors. (B) molars and premolars.
(C) incisors and molars.
(D) premolars and canines.
50. The rearing of silkworms for obtaining silk is called
(A) cocoon
(B) silk
(C) sericulture
(D) silviculture
51. Which of the following is not a type of silk?
(A) Mulberry silk
(B) Tassar silk
(C) Mooga silk
(D) Moth silk
52. Sometimes when we do heavy exercise, anaerobic respiration takes place in our muscle cells. What is produced during this process?
(A) alcohol and lactic acid
(B) alcohol and $\mathrm{CO}_{2}$
(C) lactic acid and $\mathrm{CO}_{2}$
(D) lactic acid only
53. The muscular tube through which stored urine is passed out of the body is called
(A) kidney
(B) ureter
(C) urethra
(D) urinary bladder
54. Which of the following parts of a plant take part in sexual reproduction?
(i) Flower
(ii) Seed
(iii) Fruit
(iv) Branch

Choose the correct answer from below.
(A) (i) and (ii)
(B) (i), (ii) and (iii)
(C) (iii) and (iv)
(D) (ii), (iii) and (iv)
55. The microorganisms present in the soil require moisture(water) and nutrients for growth and survival. Choose from the options below the habitat(place) where the soil has plenty of water and nutrients.
(A) Desert
(B) Forest
(C) Open field
(D) Cricket ground
56. The different elements of the weather are $\qquad$
(A) Rainfall
(B) Humidity
(C) Wind speed
(D) All of these
57. The given figure shows a specific muscle fibre. Identify it.

(A) Cardiac muscle fibre (B) Striated muscle fibre
(C) Smooth muscle fibre (D) Sartorius muscle fibre
58. Which of the following statements is correct?
(A) During inhalation ribs move down while diaphragm moves up
(B) During exhalation, ribs move up while diaphragm moves down
(C) During inhalation, the size of chest cavity decreases
(D) During exhalation, the size of chest cavity decreases
59. The given figure shows girdling experiments in plants. In this experiment which portion of the stem is removed to cause the swelling?
(A) Xylem tissue
(B) Phloem tissue
(C) Root hair
(D) Vascular bundles

60. How does this transportation of water take place?
(A) Through xylem
(B) Through phloem
(C) Through movement from one cell to another
(D) Both (A) and (B)
61. The ratio of the area of a square to that of the square drawn on its diagonal is :
(A) $1: 1$
(B) $1: 2$
(C) $2: 3$
(D) $1: 3$
62. Rano runs 1000 metres while Rupa runs 800 metres, Rupa runs 300 metres while Astha runs 400 metres. How many metres can Astharun while Rano runs 600 metres :
(A) 640 m
(B) 680 m
(C) 720 m
(D) 730 m
63. A certain sum lent out at simple interest amount to Rs. 575 in 3 years and to Rs. 625 in 5 years. Then the rate of interest is :
(A) $3 \%$
(B) $5 \%$
(C) $4 \%$
(D) $7 \%$
64. If 25 men can reap a field in 60 days, then in how many days will 10 men reap the field ?
(A) 125 days
(B) 92 days
(C) 100 days
(D) 150 days
65. If $\sqrt{2^{n}}=16$, then the value of $n$ is:
(A) 4
(B) 8
(C) 2
(D) 3
66. 1 litre of water weighs 1 kg . How many cubic millimetres of water will weigh 0.1 g ?
(A) 100
(B) 1
(C) 10
(D) 0.1
67. The cost of levelling a rectangular ground at Rs. 1.25 per $\mathrm{m}^{2}$ is Rs. 900 . If the length of the ground is 30 metres, then the width is :
(A) 6 m
(B) 18 m
(C) 24 m
(D) 36 m
68. A chord of length 14 cm is at a distance of 6 cm from the centre of a circle. The length of another chord at a distance of 2 cm from the centre of the circle is
(A) 12 cm
(B) 14 cm
(C) 16 cm
(D) 18 cm
69. The average weight of 55 students is 55 kg and the average weight of another 45 students is 45 kg . Find the average weight of all the students
(A) 48 kg
(B) 50 kg
(C) 50.5 kg
(D) 52.25 kg
70. A die is thrown once, a number is noted, then the probability that it is a prime number is
(A) $\frac{4}{6}$
(B) $\frac{5}{6}$
(C) $\frac{1}{2}$
(D) $\frac{2}{6}$

## ANSWER KEY

SECTION - A
REASONING

| 1. | (B) | 2. | (D) | 3. | (D) | 4. | (D) | 5. | (D) | 6. | (C) |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 7. | (A) | 8. | (B) | 9. | (C) | 10. | (A) | 11. | (C) | 12. | (B) |
| 13. | (C) | 14. | (D) | 15. | (A) |  |  |  |  |  |  |

## SECTION - B <br> SCHOLASTIC APTITUDE

| 16. | (D) | 17. | (A) | 18. | (A) | 19. | (A) | 20. | (D) | 21. | (D) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 22. | (B) | 23. | (A) | 24. | (D) | 25. | (A) | 26. | (A) | 27. | (C) |
| 28. | (D) | 29. | (D) | 30. | (B) | 31. | (A) | 32. | (B) | 33. | (D) |
| 34. | (A) | 35. | (D) | 36. | (B) | 37. | (C) | 38. | (A) | 39. | (A) |
| 40. | (C) | 41. | (D) | 42. | (B) | 43. | (B) | 44. | (C) | 45. | (C) |
| 46. | (B) | 47. | (B) | 48. | (B) | 49. | (B) | 50. | (C) | 51. | (D) |
| 52. | (D) | 53. | (C) | 54. | (B) | 55. | (B) | 56. | (D) | 57. | (A) |
| 58. | (D) | 59. | (B) | 60. | (C) | 61. | (B) | 62. | (A) | 63. | (B) |
| 64. | (D) | 65. | (B) | 66. | (A) | 67. | (C) | 68. | (D) | 69. | (C) |

70. (C)
