

SNUSAT Sample Paper

Section : Logical Ability

QUESTION.1 If \times means $+$, \div means \times , $-$ means \div , and $+$ means $-$, then what will be the value of the following expression? $32 \times 6 + 10 - 4 \div 8 = ?$

1. 18
2. 20
3. 22
4. 24

QUESTION.2 Three statements are given followed by four conclusions numbered 1, 2, 3, and 4. Assuming the statements to be true, even if they seem to be at variance with commonly known facts, decide which of the conclusions logically does NOT follow(s) from the statements.

Statements:

Some Nights are Great

No Great is a Van.

All Vans are Chips.

Conclusions:

- 1) Some Greats are not Vans.
- 2) No Van is a Light.
- 3) Some Chips are not Great.
- 4) Some Great are Chips.

1. Only conclusion 4 does not follow.
2. Only conclusion 2 does not follow.
3. Only conclusion 1 does not follow.
4. Only conclusion 3 does not follow.

QUESTION.3 If A denotes '+', B denotes ' \times ', C denotes ' $-$ ', and D denotes ' \div ', then what will be the value of the following expression?

$25 C 21 D 7 B 3 A 4$

1. 20
2. 21
3. 24

4. 43

QUESTION.4 Sneha went from her home for 51 m towards the south and then turns left and walks 44 m. Now she turns left again and walks 83 m. How far is she from a pole that is exactly 32 m north from her home now?

1. 14 m
2. 44 m
3. 7 m
4. 39 m

QUESTION.5 If 31 December 2013 was a Wednesday, then what was the day of the week on 7 March 2015?

- Ans 1. Tuesday
2. Sunday
 3. Saturday
 4. Monday

QUESTION.6 Select the word-pair that best represents a similar relationship to the one expressed in pair of words given below. (The words must be considered as meaningful English words)

Lend : Borrow

- Ans 1. Happy : Joyous
2. Stern : Strict
 3. Exciting : Boring
 4. Sharp : Edged

QUESTION.7 Select the option that is related to the third term in the same way as the second term is related to the first term and sixth term is related to fifth term.

6 : 32 :: 10 : ? :: 11 : 117

- Ans 1. 99
2. 110
 3. 88
 4. 96

QUESTION.8 If A denotes '+', B denotes 'x', C denotes '-', and D denotes '÷', then what will come in place of '?' in the following equation?

27 B 5 C 38 A 16 D 4 A 42 C 8 B 4 = ?

1. 130
2. 120

3. 111

4. 109

QUESTION.9 In a certain code language, 'ANYWAY' is written as 'YNAYAW' and 'BATTLE' is written as 'TABELT'. How will 'COSTLY' be written in that language?

1. SOCYLT

2. SCTOLY

3. OCTSLY

4. YLTSOC

QUESTION.10 Select the correct combination of mathematical signs to sequentially replace the * signs and balance the given equation.

$$234 * 345 * 456 * 567 * 678 * 12$$

1. -, +, +, -, =

2. ÷, -, +, -, =

3. +, ×, +, -, =

4. +, -, +, -, =

QUESTION.11 In a code language, 'SPACE' is written as '5-91' and 'ROTTEN' is written as '6-70'. How will 'MEAN' be written in that language?

1. 4-75

2. 4-74

3. 4-73

4. 4-76

QUESTION.12 Which option represents the correct order of the given words as they would appear in the English dictionary?

1 Method

2 Methanol

3 Metrics

4 Metro

5 Melody

1. 5,2,1,3,4

2. 5,3,1,2,4

3. 5,2,1,4,3

4. 5,1,2,4,3

QUESTION.13 Select the set in which the numbers are related in the same way as are the numbers of the following sets. (NOTE : Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and 3 is not allowed.)

(17, 12, 612)

(6, 14, 252)

1. (3, 6, 108)
2. (11, 4, 144)
3. (13, 7, 273)
4. (2, 3, 12)

QUESTION.14 If \times means $+$, \div means $-$, $+$ means \times , $-$ means \div , what will come in place of the question mark (?) in the given expression?

$$182 - 13 \times 5 + 16 \div 44 = ?$$

1. 50
2. 62
3. 86
4. 48

QUESTION.15 Select the combination of letters that when sequentially placed in the blanks of the given series, will complete the series.

_ SSRS _ _ SS _ S _

1. RRRSR
2. RSRRS
3. SRRSR
4. RSSRR

QUESTION.16 If $W \# Q @ T \& Y @ M \% S$, then how is S related to T?

A # B means 'A is the mother of B'

A @ B means 'A is the sister of B'

A & B means 'A is the father of B'

A % B means 'A is the wife of B'

1. Wife's brother
2. Son
3. Daughter's husband
4. Brother

QUESTION.17 Seven people, P, Q, R, S, T, U and V, are sitting in a straight row, facing the north. Only two people sit to the right of U. Only two people sit to the left of R. Only two people sit between U and **QUESTION**. Only three people sit between R and V. T is not an immediate neighbour of U. S sits to the right of U. Who sits to the immediate right of U?

1. P
2. S
3. R
4. T

QUESTION.18 Which of the following numbers will replace the question mark (?) in the given series?

822, 817, 807, 787, ?

1. 755
2. 754
3. 750
4. 752

QUESTION.19 In a code language, 'WINNER' is written as 'XJOOFS' and 'RALLY' is written as 'SBMMZ'. How will 'CARTOON' be written in that language?

1. DBSOPPU
2. CAPTOON
3. DBSUPPO
4. CAPNOOT

QUESTION.20 Three of the following four letter-clusters are alike in a certain way and one is different. Pick the odd one out.

1. EIO
2. YCI
3. PTY
4. DHN

Quantitative Reasoning

QUESTION.1 A seller uses faulty weight in place of a 20 kg weight and earns a 25% profit. He claims that he is selling on the cost price in front of the customers but uses a faulty weight. How much error is there in the 20 kg weight to gain 25%?

1. 2500 g
2. 4000 g
3. 5000 g

4. 3000 g

QUESTION.2 Two trains - A and B- having the lengths 195 m and 165 m, respectively, are running in the same direction on parallel lines. If the speed of A and B be 77 km/h and 85 km/h, respectively, what will be the time (in seconds) taken by them to cross each other?

1. 162
2. 164
3. 160
4. 166

QUESTION.3 The angles of a triangle are in the ratio 1 : 1 : 2. What percentage of the total internal angle is the greatest angle?

1. 50%
2. 65%
3. 45%
4. 40%

QUESTION.4 $\triangle ABC$ and $\triangle DEF$ are two triangles such that $\triangle ABC \cong \triangle FDE$. If $AB = 5$ cm, $\angle B = 40^\circ$ and $\angle A = 80^\circ$, then which of the following options is true?

1. $DF = 5$ cm, $\angle E = 60^\circ$
2. $DE = 5$ cm, $\angle F = 60^\circ$
3. $DE = 5$ cm, $\angle D = 60^\circ$
4. $DE = 5$ cm, $\angle E = 60^\circ$

QUESTION.5 To do a certain task X would take 3 times as long as Y and Z together; and Z would takes 4 times as long as Y and X together. Three of them together can complete the task in 10 days. How much time is taken by X and Z to complete the task?

1. $18\frac{2}{9}$
2. $20\frac{1}{9}$
3. $21\frac{1}{9}$
4. $22\frac{2}{9}$

QUESTION.6 There are three papers in an examination. Marks obtained by four students have been tabulated below: Who are the students who got the highest marks in P1, P2 and P3 respectively?

Student	P1	P2	P3
Mukesh	79	78	77
Shivam	73	87	80
Vishal	82	74	83

Rakesh	77	89	86
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1. Rakesh, Vishal, Mukesh
2. Vishal, Rakesh, Rakesh
3. Shivam, Rakesh, Vishal
4. Mukesh, Rakesh, Vishal

QUESTION.7 If $a : b = 4 : 5$, $b : c = 3 : 4$ and $c : d = 2 : 5$, then $a : d$ is:

1. $2 : 5$
2. $6 : 25$
3. $5 : 2$
4. $25 : 6$

QUESTION.8 Find the perimeter of major sector of a circle of radius 12 metres, whose minor sector subtends an angle of 75° at the centre.

1. $24 + 5\pi$ metres
2. $24 + 19\pi$ metres
3. $24 - 5\pi$ metres
4. $24 - 19\pi$ metres

The value of $\frac{\sqrt[3]{-2744} \times \sqrt[3]{-216}}{\sqrt[3]{\frac{64}{729}}}$ is: **QUESTION.9**

1. 164
2. 152
3. 189
4. 156

QUESTION. 10 If $x = \frac{2\sin\theta}{1 + \cos\theta + \sin\theta}$, then the value of $\frac{1 - \cos\theta + \sin\theta}{1 + \sin\theta}$ is:

1. $x / (1 + x)$
2. x
3. $1 / x$
4. $(1 + x) / x$

QUESTION.11 Simplify the following:

$$81^{3/4} + [(20 \div 5 \text{ of } 3 \times 6) + \{(8 \div 24 \text{ of } 3) \times 4\} - 10 \div 5] - (1/32)^{-1/2}$$

1. $24 \frac{1}{4}$
2. $21 \frac{1}{9}$
3. $27 \frac{4}{5}$
4. $29 \frac{4}{9}$

QUESTION.12 Find the total surface area of a hemisphere closed at bottom. Radius of the hemisphere is given as $5/\sqrt{\pi}$ in square unit

1. 75
2. 70
3. 60
4. 50

QUESTION.13 A tradesman marks his goods at 26% above the cost price. He allows his customer a discount of 12% on the marked price. His profit per cent is:

1. 10.88%
2. 11.08%
3. 10.50%
4. 10%

QUESTION.14: If $x^4 + x^{-4} = 47, x > 0$, then find the value of $x^1 + x^{-1} - 2 =$

1. 1
2. 0
3. 5
4. 3

QUESTION.15 $\left\{ \frac{\sec \theta - 1}{\sec \theta + 1} \right\}^n = \operatorname{cosec} \theta - \cot \theta$, then $n = ?$

1. 1
2. 0.5
3. -1
4. -0.5

QUESTION.16 $10 \sec^2 A - 10 \tan^2 A = ?$

1. 9
2. 10
3. 16
4. 1

QUESTION.17 The cost of two varieties of tea is ₹300 and ₹375 respectively. If both the varieties of tea are mixed together in the ratio 3 : 2, then what should be the price of mixed variety of tea per kg?

1. 340
2. 330
3. 350
4. 360

QUESTION.18 find the value of $(2 \cos^2 A - 1) \left[\frac{1 + \tan \theta}{1 - \tan \theta} + \frac{1 - \tan \theta}{1 + \tan \theta} \right] = ?$

1. 2
2. 0
3. $\sqrt{3}/2$
4. 1

QUESTION.19 In $\triangle ABC$, $DE \parallel BC$ in such a way that $A-D-B$ and $A-E-C$. If $m \angle ACB = 40^\circ$, then $m \angle DAE + m \angle ADE = ?$

1. 240°
2. 120°
3. 140°
4. 230°

QUESTION.20 The ratio between the height and radius of the base of a cylinder is 7 : 5. If its volume is 14836.5 cm^3 , then find its total surface area (take $\pi = 3.14$).

1. 3391.2 cm^2
2. 5391.2 cm^2
3. 4391.2 cm^2
4. 5591.2 cm^2

ANSWER KEY

QUESTION. Number- Answer	Logical Ability	Quantitative Reasoning
1	1. 18	2.4000
2	1. Only 4 does not follow.	1.162
3	1. 20	1. 50%
4	2. 44m	1. $DF = 5 \text{ cm}$, $\angle E = 60^\circ$
5	3. Saturday	4. $22(2/9)$
6	3. Exciting : Boring	2. Vishal, Rakesh, Rakesh
7	4.96	2. 6 : 25
8	3.111	2. $24 + 19\pi$ metres
9	1. SOCYLT	3.189
10	4. +, -, +, -, =	2. X
11	4-75	4. $29 \frac{4}{9}$
12	1. 5,2,1,3,4	1. 75
13	3. (13, 7, 273)	3. 10.50%
14	1. 50	1. 1
15	2. RSRRS	2. 0.5
16	3. Daughter's husband	2. 10
17	2. S	2.330
18	4. 752	1. 2
19	3. DBSUPPO	3. 140
20	3. PTY	1. 3391.2 cm^2



SNUSAT Sample Paper

Section : Logical Ability

Q.1 In the following question, select the related letters from the given alternatives.

BKPG : DNRJ :: CMOG : ?

1. DOQI
2. EPQJ
3. EQPJ
4. EQJP

Q.2 Select the related number from the given alternatives.

256 : 290 :: 961 : ?

1. 1011
2. 1017
3. 1025
4. 1023

Q.3 What is the related number from the given alternatives. 14 : 194 :: 19 : ?

1. 359
2. 256
3. 358
4. 360

Q.4 Find the odd word pair from the given alternatives.

1. Mumbai : President's House
2. Delhi : Parliament
3. Nagpur : Centre Point
4. Hyderabad : Charminar

Q.5 Arrange the given words in the sequence in which they occur in the dictionary.

1. Clone 2. Climate 3. Clutter 4. Create 5. Clapped
1. 52143
2. 51234

3. 52134

4. 53124

Q.6 A series is given with one term missing. Select the correct alternative from the given ones that will complete the series.

AAA, BCD, CEG, ?

1. DGI

2. DFI

3. DGJ

4. DJG

Q.7 Find missing number from the given series.

2, 22, 198, 1386, ?

1. 2770

2. 3990

3. 6930

4. 9702

Q.8 If 'A + B' means 'A is father of B', 'A - B' means 'A is mother of B', 'A * B' means 'A is brother of B' and 'A % B' means 'A is sister of B', then how is Q related to S in 'P + Q * R - S'?

1. Husband

2. Uncle

3. Brother

4. Father

Q.9 Select the word which cannot be formed using the letters of the given word.

QUALIFICATION

1. LIAR

2. FIAT

3. LION

4. FICTION

Q.10 In a certain code language, "HAUNTED" is written as "4013592" and "RINGED" is written as "763892". How is "HINGE" written in that code language?

1. 36589

2. 57864

3. 40359

4. 46389

Q.11 In the following question, correct the equation by interchanging two numbers.

$$9 \times 3 - 8 \div 2 + 7 = 26$$

1. 3 and 7

2. 9 and 2

3. 7 and 9

4. 3 and 8

3. 7 and 9

Q.12 Find the number that can be placed at the sign of question mark (?) from the given alternatives.

7	8	2
2	3	3
4	1	7
5	6	?

1. 1

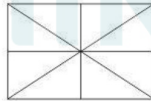
2. 2

3. 4

4. 6

4. 6

Q.13 Find the number of quadrilaterals in the given figure.



1. 13

2. 15

3. 17

4. 19

3. 17

Q.14 - In each of the following question below are given some statements followed by some conclusions. Decide which of the given conclusion logically follows.

Statements:

I. All pens are cups.

II. All glasses are cups.

Conclusions:

I. Some pens are glass.

II. Some glasses are cups.

III. Some glasses are pens.

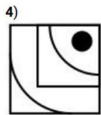
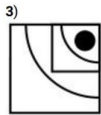
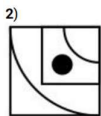
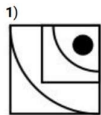
1. Only conclusion (I. and (III. follow

2. Only conclusion (I. follows

3. Only conclusion (II. follows

4. No conclusion follows

Q.15 Which figure will complete the question figure



Q.16 - In each of the following question below are given some statements followed by some conclusions. Read all the conclusions and then decide which of the given conclusion logically follows the given statements.

Statements:

I. No pens are pencils.

II. No eraser is cup.

III. All pencils are erasers.

Conclusions:

I. Some pens are not erasers.

II. Some erasers are not pens.

III. No pencil is cup.

IV. Some erasers are cups.

1. Only conclusion (I. and (IV. follow

2. Only conclusion (I. and (III. follow
3. Only conclusion (II. and (III. follow
4. Only conclusion (II. and (IV. follow

Q.17- If $9 \theta 11 \alpha 2 = 40$ and $13 \theta 12 \alpha 3 = 75$, then $40 \theta 41 \alpha 5 = ?$

1. 340
2. 365
3. 320
4. 405

Q.18 In a certain code language, "RANGE" is written as "FIQEW" and "ARAGE" is written as "FIDVF". How is "PRANK" written in that code language?

1. MQEWV
2. LPDVU
3. UVDPL
4. VWEQM

Q.19 Which word cannot be formed using the letters of the given word?

POSSESSION

1. SESSION
2. POSE
3. POISE
4. OBSESS

Q.20 In the following question, select the related word from the given alternatives.

Chicken : Hen :: ? : ?

1. Horse : Mare
2. Rabbit : Goose
3. Bull : Doe
4. Boar : Foal

Quantitative Reasoning

Q.1 - A boy added all natural numbers from 1 to 20, however he missed one number due to which the sum becomes 190. What is the number which the boy missed?

1. 5

2. 10

3. 15

4. 20

Q.2 - $\frac{3}{4}$ part of a bushel is filled with oil. After taking out 6 litres of oil the tank is $\frac{2}{3}$ part full. What is the capacity (in litres. of the bushel)?

1. 24

2. 36

3. 60

Q.3 - Two inlet pipes can fill a cistern in 5 and 6 hours respectively and an outlet pipe can empty 24 gallons of water per hour. All three pipes working together can fill the empty cistern in 10 hours. What is the capacity of the tank?

1. 90

2. 180

3. 60

4. 120

Q.4- The ratio of the speed of A, B and C is 2 : 3 : 6 respectively. What is the ratio of the time taken by A, B and C respectively to cover the same distance?

1. 2 : 3 : 6

2. 6 : 3 : 2

3. 3 : 2 : 1

4. 1 : 2 : 3

Q.5 - If $a - b : b - c : c - d = 2 : 3 : 5$, then what is the value of $c : (a + d)$?

1. 1 : 2

2. 2 : 1

3. 1 : 3

4. 1 : 4

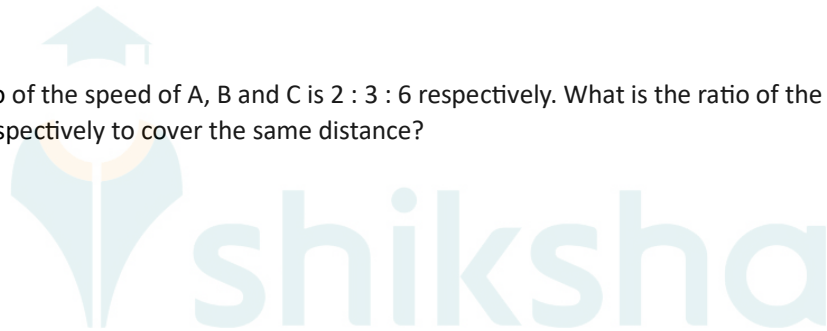
Q.6 - Eleven friends spent Rs 19 each on a tour and the twelfth friend spent Rs 11 less than the average expenditure of all twelve of them. What is the total money (in Rs. spent by them)?

1. 216

2. 227

3. 236

4. 247



Q.7- A trader gets 25% profit by selling an article. If he buys at half the rate and sells at the same selling price as before, then what will be his percentage profit?

1. 50
2. 100
3. 125
4. 150

Q.8 - A certain sum becomes 4 times in 7 years, at simple interest, then in how many years it will become 16 times?

1. 16
2. 21
3. 28
4. 35

Q.9: What is the curved surface area (in cm^2 . of a cylinder having radius of base as $2\frac{1}{2}$ cm and height as 15 cm?

1. 935
2. 938
3. 946
4. 990

Q.10 - A cylindrical well of height 80 metres and radius 7 metres is dug in a field 28 metres long and 22 metres wide. The earth taken out is spread evenly on the field. What is the increase (in metres. in the level of the field?

1. 13.33
2. 26.66
3. 18.17
4. 28.17

Q.11- If $x + y = 11$, then what is the value of $x^3 + y^3 + 33xy = ?$

1. 343
2. 1331
3. 294
4. 1221

Q.12 ABC is an isosceles triangle with such that $AB = AC = 30$ cm and $BC = 48$ cm. AS is a perpendicular bisector of the base BC. What is the length (in cm. of AS?

1. 18

2. 6

3. 12

4. 9

Q.13- A box contains 5 red, 4 blue, and 3 green balls. Two balls are drawn without replacement. What is the probability that both are of the same color?

1. $\frac{23}{66}$

2. $\frac{31}{66}$

3. $\frac{19}{66}$

4. $\frac{17}{66}$

Q.14- A fair die is rolled twice. What is the probability that the sum is greater than 9?

1. $\frac{1}{6}$

2. $\frac{5}{36}$

3. $\frac{10}{36}$

4. $\frac{7}{36}$

Q.15- A committee of 3 is formed from 4 boys and 3 girls. What is the probability it has at least 2 girls?

1. $\frac{3}{7}$

2. $\frac{4}{7}$

3. $\frac{5}{7}$

4. $\frac{6}{7}$

Q.16- How many 3-digit numbers can be formed using digits 1,2,3,4,5 without repetition, if the number must be even?

1. 12

2. 20

3. 24

4. 60

4. 60

Q.16- A password is 4 digits long (0–9., but the first digit cannot be zero. How many passwords are possible?

1. 9000

2. 8000

3. 7000

4. 6000

Q.17- A quantity increases by 20% and then decreases by 25%. What is the overall percentage change?

1. 0%

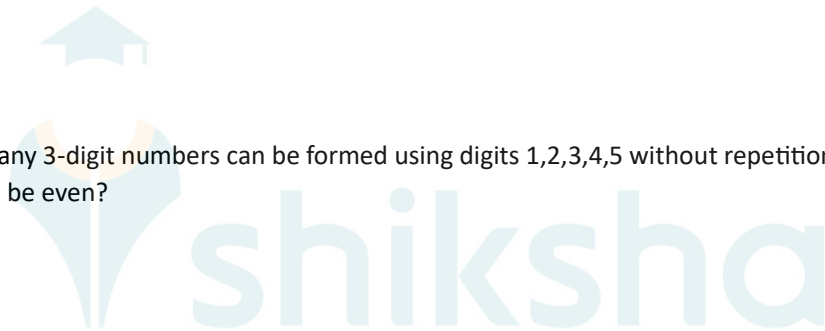
2. -10%

3. -5%

4. -15%

Q.18- The ratio of boys to girls is 7:5. If 12 more girls join, the ratio becomes 7:7. How many boys are there?

1. 42



2. 49
3. 35
4. 56

Q.19- A shopkeeper marks an item 40% above cost and gives 10% discount. What is the profit percentage?

1. 26%
2. 30%
3. 28%
4. 24%

Q.20- A cylinder of radius 7 cm and height 10 cm is filled to 60% of capacity. What is the volume of water?

1. 308π
2. 420π
3. 294π
4. 264π



ANSWER KEY

Q. Number- Answer	Logical Reasoning	Quantitative Reasoning
1	4.EPQJ	4. 20
2	3. 1025	4. 72
3	1. 359	1. 90
4	1. Mumbai : President's House	3. 3 : 2 : 1
5	4. 52134	1. 1 : 2
6	3. DGJ	1. 216
7	3. 6930	4. 150
8	2. Uncle	4. 35
9	1. LIAR	4. 990
10	4. 46389	2. 26.66
11	3. 7 and 9	2. 1331
12	4. 6	1. 18
13	3. 17	1. 23/66
14	1. Only conclusion I and III follow	3. 10/36
15	2. option 2 figure	1. 3/7
16	3. Only conclusion I and III follow	1.9000
17	4. 405	1. 0%
18	2. LPDVU	1. 42
19	4. OBSESS	1. 26
20	1. Horse : Mare	3. 294π

SNUSAT Sample Paper

Section : Logical Reasoning

QUESTION.1- In a certain code, GOAL = HPBM. How is RISK coded?

- A. SJTL
- B. SHRJ
- C. TJSM
- D. SITL

QUESTION.2- Select the word-pair in which the two words are related in the same way as are the two words in the following word-pair.

Army : General

- A. Hospital : Patient
- B. Company : Director
- C. College : Student
- D. Worker : Factory

QUESTION.3- Find the missing term in the given series: 3, 8, 15, 24, 35, ?

- A. 46
- B. 48
- C. 50
- D. 52

QUESTION.4- Which number in the given series is incorrect?

3, 7, 7, 11, 9, 13, 13, 17, 15, 23

- A. 17
- B. 9
- C. 23
- D. 13

QUESTION.5- A man walks 10 m East, then 5 m South, then 10 m West. How far is he from the starting point?

- A. 5 m
- B. 10 m
- C. 15 m

D. 20 m

QUESTION.6- If '÷' means '+', × means '÷', + means '-' and '-' means '×', then what is the value of the following expression?

$$16 - 4 + 12 \times 3 \div 5 = ?$$

A. 59

B. 53

C. 65

D. 67

QUESTION.7-A, B, C, D, E sit in a line. B is between A and C. D is to the right of C. Who sits at the extreme left?

A. A

B. B

C. C

D. D

QUESTION.8- 'Lethargy' is related to 'Alertness' in the same way as 'Hostility' is related to:

A. Violence

B. Cordiality

C. Pride

D. Antagonism

QUESTION.9- Find the missing term in the given series: A 1 C 2 E 3 G 4 I 5 ?

A. K

B. J

C. L

D. H

QUESTION.10- Select the correct alternative to indicate the arrangement of the following words in a logical and meaningful order.

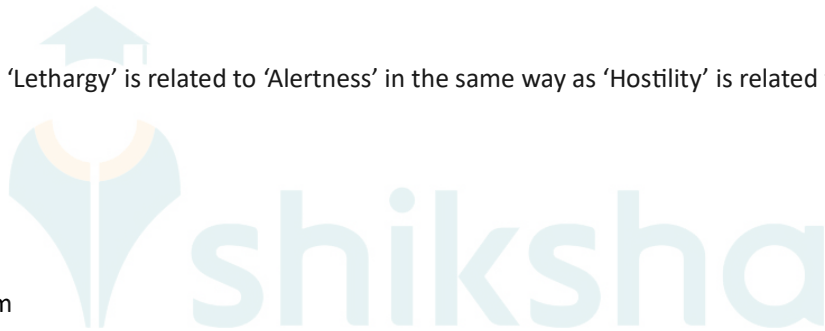
1. Karnataka 2. Bengaluru 3. Asia 4. India 5. World

A. 1, 5, 4, 3, 2

B. 2, 3, 4, 1, 5

C. 3, 4, 2, 1, 5

D. 2, 1, 4, 3, 5



QUESTION.11- Consider the following statements to be true even if they seem to be at variance from commonly known facts and decide which of the conclusions logically follows from the statements.

Statements:

All cats are animals.

Some animals are wild.

Conclusions:

I. Some cats are wild.

II. All animals are cats.

A. Only I follows

B. Only II follows

C. Both follow

D. Neither follows

QUESTION.12- Three of the following four numbers are alike in a certain way and one is different. Find the odd one out.

A. 594

B. 693

C. 462

D. 573

QUESTION.13- A is the sister of B. C is the mother of A. D is the brother of C. What is D to B?

A. Uncle

B. Brother

C. Father

D. Grandfather

QUESTION.14- Three of the following four pairs of numbers are alike in a certain way and one is different. Find the odd one out.

A. 63 - 72

B. 104 - 117

C. 136 - 153

D. 152 - 171

QUESTION.15- Find the wrong term in the number series: 23, 29, 31, 37, 39

A. 23

B. 29

C. 39

D. 31

QUESTION. 16 Select the number that will satisfy the analogy to the given number ?.

5 (25) 3

7 (49) 5

9 (?) 4

A. 81

B. 36

C. 45

D. 95

QUESTION.17- Find the next in the Symbol Series

▲ ▼ ▼▲▲ ▼▼▼▲ ?

A. ▲

B. ▼▼

C. ▼▲

D. ▲▲

QUESTION.18 . Which letter-cluster will replace the question mark (?) in the following series?

DEY, FFW, IGT, KHR, NIO, ?

A. QJM

B. PJM

C. PJN

D. QJN

QUESTION.19- Tina is 75 m South-East of VeenA. Reena is 75 m South-West of VeenA. Tina is to the _____ of ReenA.

A. South

B. East

C. West

D. North

QUESTION. 20-Three of the following four words are alike in a certain way and one is different.

Find the odd one out.

A. Triumph

- B. Setback
- C. Victory
- D. Success

Quantitative Aptitude

QUESTION.1- The number 30744 is divisible by which of the single digit numbers:

- A. All numbers except 5 and 7
- B. Only by 2, 3, 6 and 9
- C. Only by 2, 3 and 6
- D. All numbers except 5

QUESTION.2- If $a + b + c = 0$, then what is the value of $a^3 + b^3 + c - 3abc = ?$

- A. -1
- B. 1
- C. 0
- D. 2

QUESTION.3: The radius of a wheel is 7 cm. How much distance will be travelled by the wheel in 10 revolutions?

- A. 440 cm
- B. 480 cm
- C. 400 cm
- D. 420 cm

QUESTION.4: If $\sec \theta - \tan \theta = 5$. then what is the value of $\sec \theta + \tan \theta$?

- A. $1/5$
- B. $1/3$
- C. $1/6$
- D. $1/2$

QUESTION.5: Angle subtended by a chord xy on the centre of a circle is 180 degree, If length of this chord is 48 cm, then what will be the radius of this circle?

- A. 24 cm
- B. 18 cm

C. 27 cm

D. 21 cm

QUESTION.6- What is the value of $\left(\frac{1+\sec^2 A}{1+\cos^2 A}\right) \left(\frac{1+\sin^2 A}{1+\operatorname{cosec}^2 A}\right)$?

A. $\cos^2 A$

B. $\operatorname{cosec}^2 A$

C. $\sec^2 A$

D. $\tan^2 A$

QUESTION.7- Find the area of a triangle whose length of each side is 13 inches, 15 inches and 14 inches.

A. 84 square inches

B. 81.2 square inches

C. 42.1 square inches

D. 84.2 square inches

QUESTION.8: If 25 percent of P is added to 50 percent of Q, then the resultant comes a 100 percent of **QUESTION.** P is what percentage of Q?

A. 125 percent

B. 200 percent

C. 225 percent

D. 150 percent

QUESTION.9- $\frac{2}{5}$ of marked price is equal to $\frac{5}{8}$ of selling price. What is the discount percent?

A. 40 percent

B. 42 percent

C. 36 percent

D. 50 percent

QUESTION.10- Length of a chord is 16 cm in a circle whose radius is 17 cm. What will be the distance of this chord from the centre?

A. 12 cm

B. 9 cm

C. 15 cm

D. 8 cm

QUESTION.11- T alone can do a piece of work in 12 days and M alone can do the same work in 15 days, If T and M undertook to do this work for Rs. 18,000, then how much amount will M get, if they work together?

- A. Rs. 10,000
- B. Rs. 6,000
- C. Rs. 12,000
- D. Rs. 8,000

QUESTION.12- Radii of two circles are 12 cm and 5 cm. The distance between their centres is 25 cm. What is the length of the direct common tangent?

- A. 21 cm
- B. 24 cm
- C. 22 cm
- D. 23 cm

QUESTION.13- The average age of 30 students is 15 years. It was observed that while calculating the average age, the age of a student was taken as 45 years instead of 15 years. What will be the correct average age?

- A. 14.2 years
- B. 16.4 years
- C. 15.6 years
- D. 14 years

QUESTION.14- A car travels a distance of 120 km at uniform speed, If the speed of car is increased by 8 km/hr, then it takes 4 hours less to cover the same distance. What is the original speed of the car?

- A. 12 km/hr
- B. 16 km/hr
- C. 10 km/hr
- D. 15 km/hr

QUESTION.15- A person sells wheat at a profit of 25 percent. If he reduces its selling price by Rs. 30, then he suffers a loss of 25 percent. What was the initial selling price of the wheat?

- A. Rs. 80
- B. Rs. 120
- C. Rs. 60
- D. Rs. 100

QUESTION.16- What is the value of $44 \times 12 - (25 + 13 \times 10)$?

- A. 613
- B. 633
- C. 573

D. 373

QUESTION.17- If $p/q = r/s = t/u = 2/5$, then what is the value of $(4p + 3r + 7t) : (4q + 3s + 7u)$?

A. 4 : 11

B. 3 : 7

C. 2 : 5

D. 5 : 9

QUESTION.18- The average of 22, 24, 28, 21, 26 and x is 25. What will be the value of x?

A. 31

B. 29

C. 27

D. 28

QUESTION.19- What will be the compound interest on Rs. 14,000 for 2 years at the rate of 10% per annum compounded annually?

A. Rs. 1,490

B. Rs. 6,940

C. Rs. 3,490

D. Rs. 2,940

QUESTION.20- The ratio of the ages of A and B is 5:7. After 6 years, the ratio becomes 3:4. What is A's present age?

a) 15

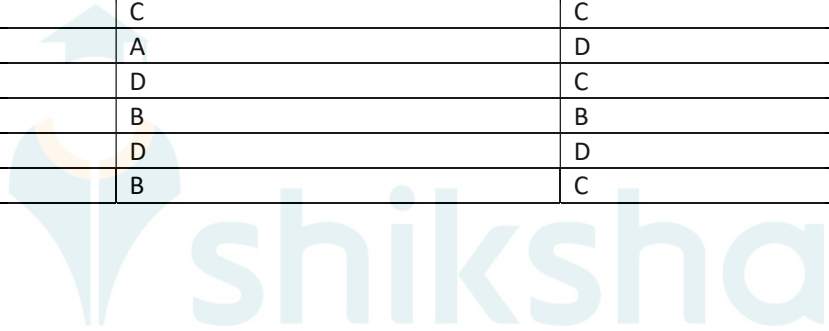
b) 18

c) 30

d) 24

ANSWER KEY

QUESTION. Number- Answer	Logical Reasoning	Quantitative Aptitude
1	C	B
2	B	C
3	B	A
4	D	A
5	A	A
6	A	D
7	A	A
8	B	B
9	A	C
10	D	C
11	D	D
12	D	B
13	A	D
14	A	A
15	C	C
16	A	D
17	D	C
18	B	B
19	D	D
20	B	C



SNUSAT Sample Paper

Section : Logical Reasoning

QUESTION.1- Select the correct alternative to indicate the arrangement of the following words in a logical and meaningful order.

1. State 2. Street 3. House number 4. City 5. Country

A. 3, 2, 4, 1, 5

B. 3, 4, 2, 1, 5

C. 2, 3, 4, 5, 1

D. 1, 5, 4, 3, 2

QUESTION.2- If MANGO = 52, APPLE = 50, then GRAPE = ?

A. 48

B. 47

C. 49

D. 45

QUESTION.3- If A = 4 and C = 6, then how will you code POWER?

A. 191826821

B. 191825821

C. 181726821

D. 181725720

QUESTION.4- Find the missing term: 18, 9, 9, 13.5, 27, ?

A. 40.5

B. 54

C. 20.5

D. 13.5

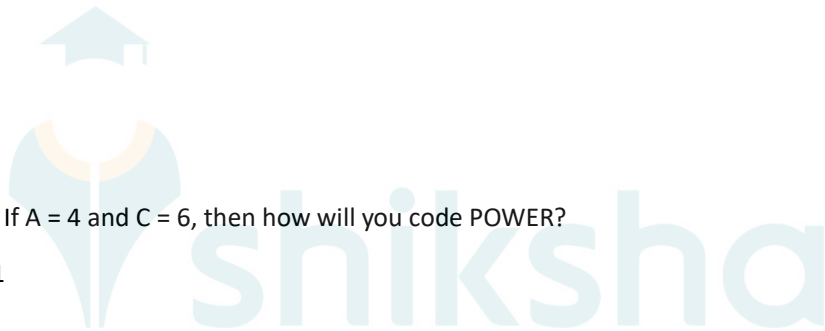
QUESTION.5- A train of length 240 m crosses a platform in 24 sec at 54 km/h. Find the length of the platform.

A. 180 m

B. 200 m

C. 120 m

D. 260 m



QUESTION.6- Consider the following statements to be true and decide which of the conclusions logically follows from the statements.

Statements:

- A. Some flocks are Instruments.
- B. Some Instruments are bands.

Conclusions:

- I. Some bands are flocks.
 - II. No band is a flock.
- A. Only conclusion I follows
 - B. Neither conclusion I nor II follows
 - C. Only conclusion II follows
 - D. Either conclusion I or II follows

QUESTION.7- A person faces North. He turns right, then left, then right. What direction is he facing now?

- A. East
- B. South
- C. West
- D. North

QUESTION.8- "Mass" is related to 'Kilogram' in the same way as 'Force' is related to:

- A. Second
- B. Newton
- C. Pascal
- D. Joule

QUESTION.9- 6 people sit around a circle. P is between Q and R. S is opposite P. Who is opposite Q?

- A. R
- B. S
- C. T
- D. U

QUESTION.10- Three of the following four letter-clusters are alike in a certain way and one is different. Find the odd one out.

- A. HKNQT
- B. TWYBC

C. BEHKN

D. QTWZC

QUESTION.11- What should be in the place of ? 2B, 4D, 8F, 16H, ?

A. 18J

B. 20J

C. 32J

D. 32I

QUESTION.12- Select the option that is most like the given set.

(23, 136, 45)

A. (29, 78, 11)

B. (31, 126, 37)

C. (17, 50, 33)

D. (19, 96, 29)

QUESTION.13- Consider the following statements to be true and decide which of the conclusions logically follows from the statements.

Statements:

All roses are flowers.

No flower is green.

Conclusion:

1.No rose is green.

2.All rose are green

A. Only 1 Follows

B. Only 2 Follow

C. Both 1 & 2 Follow

D. None Follow

QUESTION.14- Select the option in which the numbers are related in the same way as are the numbers in the given set.

(3, 15, 123)

A. (2, 26, 125)

B. (5, 36, 341)

C. (4, 24, 214)

D. (8, 63, 998)

QUESTION.15- Which of the following follows the same analogy?

FJ : HK :: LO : ?

- A. NP
- B. MN
- C. MQ
- D. NR

QUESTION.16- If a certain language, EXAMPLE is coded as DWZLOKD, how will ELECTION be coded in that language?

- A. DKDBSJHM
- B. DKEBSHNM
- C. EKDBSHNM
- D. DKDBSHNM

QUESTION.17- In a class of 50, Rani is 15th from top. What is her rank from bottom?

- A. 34
- B. 35
- C. 36
- D. 37

QUESTION.17- If in a certain code, EARTH is written as FZSSI, which word would as XZUDS?

- A. WAVER
- B. YXVET
- C. WATER
- D. WAVES

QUESTION.18- A person walks 4 km north, 3 km east, 4 km south. How far from starting point?

- A. 1 km
- B. 3 km
- C. 5 km
- D. 7 km

QUESTION.19- Which number will come next in the following series?

1, 2, 5, _____, 677

- A. 11
- B. 26

C. 95

D. 25

QUESTION.20- Arrange the following logically: 1.Seed, 2. Plant, 3.Fruit,4. Flower

A. 1-2-4-3

B. 1-4-2-3

C. 2-1-4-3

D. 1-3-4-2

Quantitative Reasoning

$\frac{3}{5} \times 4 [7 - \{\frac{2}{5} \times (13 + 2)\}]$ QUESTION.1- Find the value?

A. $2 \frac{2}{5}$

B. $\frac{1}{5}$

C. 1

D. 0

QUESTION.2- There are 50 paisa, 25 paisa and Rs. 1 coins in a bag in the ratio 5 : 8 : 1. If the total value of all the coins is Rs. 55, how many 25 paisa coins are there in the bag?

A. 10

B. 80

C. 50

D. 25

QUESTION.3- If $(x+3)(x-5) = 48$, what is x?

A. 9

B. -12

C. 7

D. -7

QUESTION.4- A sum becomes ₹12,544 after 2 years at 8% compound interest. Find the principal.

A. 10,000

B. 10,500

C. 11,000

D. 12,000

QUESTION.5- A girl walks to school from her house at 5 km/h speed for 24 minutes and cycles back the same distance at 8 km/h. The time taken to cycle back is:

- A. 8 minutes
- B. 10 minutes
- C. 21 minutes
- D. 15 minutes

QUESTION.6- The top of a broken pole touches the ground at an angle of 60° and at a distance of 45 m from the base of the pole. The total height of the tree is (Use $\sqrt{3} = 1.73$ and $\sqrt{2} = 1.41$)

- A. 141.3 m
- B. 153.45 m
- C. 167.85 m
- D. 137.24 m

QUESTION.7- Which of the following solids has the highest number of vertices?

- A. Cuboid
- B. Hexagonal pyramid
- C. Triangular Prism
- D. Tetrahedron

QUESTION.8- A and B start walking together from a point. Their steps measure 120 cm and 80 cm respectively. What is the minimum distance they should walk so that each takes exact number of steps?

- A. 2.7 m
- B. 3.54 m
- C. 2.4 m
- D. 5.04 m

QUESTION.9- if $a^3 - b^3 = 416$ and $a - b = 8$, then $(a + b)^2 - ab$ is equal to:

- A. 38
- B. 52
- C. 42
- D. 32

QUESTION.10- Abhinav spends 24% on household expenses, 16% on entertainment, 12% on education and saves the rest. If savings are Rs 3,288, the monthly income of Abhinav is:

- A. Rs. 6,323

B. Rs. 6, 480

C. Rs. 6850

D. Rs. 6,654

QUESTION.11- $7 - \{4 \times 3 - (-10) \times 8 \div (-4)\}$ is equal to:

A. -1

B. 53

C. 0

D. 15

QUESTION.12- Rs. 792 is divided among A, B, C and D in the proportion of 2 : 3 : 4 : 3. The share of C is:

A. Rs 260

B. Rs 254

C. Rs 234

D. Rs. 224

QUESTION.13- Find the value of $(1 + \cot^2\theta) \cdot (1 - \cos^2\theta)$

A. 0

B. 1/2

C. 1

D. Not defined

QUESTION.14- The speed of a boat in still water is 6 km/h. If it takes four times as much time as going upstream as going same distance downstream, the speed of the stream is:

A. 5 km/h

B. 4.2 km/h

C. 3.6 km/h

D. 2.5 km/h

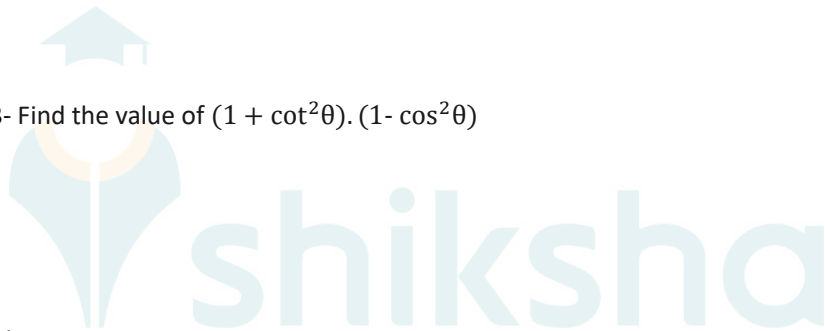
QUESTION.15- What percentage is 3 mm in 12 m?

A. 0.25

B. 0.025

C. 2.5

D. 0.0025



QUESTION.16: A ladder leaning against a wall makes an angle of 60° with the horizontal. If the foot of the ladder is 10 m away from the wall, what is the length of the ladder?

- A. 34.6 m
- B. 17.3 m
- C. 20 m
- D. 40 m

QUESTION.17: If $5 \tan \theta = 3$, then find the value of $(5 \sin \theta + 3 \cos \theta) / (5 \sin \theta - 2 \cos \theta) = ?$

- A. $1/3$
- B. 9
- C. 6
- D. $1/9$

QUESTION.18- A sells 12 bicycles at a profit of Rs 516 per bicycle and sells 3 bicycles at a loss of Rs 129 per bicycle. If the total profit percentage on all the bicycles sold is 15% the cost price per bicycle is:

- A. Rs. 2960
- B. Rs. 3870
- C. Rs. 4440
- D. Rs. 2580

QUESTION.19- In the triangle given below, D and E are mid points of AF and AG respectively, F and G are mid points of AB and AC respectively. If $DE = 2.4$ cm, then BC is equal to:

- A. 9.6 cm
- B. 7.2 cm
- C. 4.8 cm
- D. 3.6 cm

QUESTION.20: Nidhi scores 62 marks in Mathematics, 70 in English, 74 in Science. What should be her score in social Sciences so That she gets an overall 68%?

- A. 67
- B. 66
- C. 65
- D. 68

ANSWER KEY

QUESTION. Number- Answer	Logical Reasoning	Quantitative Aptitude
1	A	A
2	C	B
3	A	A
4	B	B
5	C	D
6	D	B
7	B	A
8	B	C
9	D	B
10	B	C
11	C	D
12	A	C
13	A	C
14	C	C
15	A	D
16	D	C
17	B	C
18	B	D
19	B	A
20	A	B

