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**Test Code:VII-A** 

## **TNTSE**

# Takshila's National Talent Scholarship Examination

### For Students of Class VII

#### This booklet contains 4 Pages

SCIENCE : 20 QUESTIONS

**MATHEMATICS : 20 QUESTIONS** 

REASONING : 10 QUESTIONS

General Instructions:

#### Please do not write anything on question paper.

- 1. The candidates will use their own ball point pens, HB pencils, erasers etc.
- 2. Candidates will find out the right answer of the question and will darken the appropriate circle completely with Blue or Black Pen Only.
- 3. Total No. of Question = 50
- 4. All questions carry equal marks. Science, Mathematics & Reasoning are compulsory.
- 5. For each correct Answer = 4 marks, there is no negative marking.
- 6. Please bring separate sheet for Rough work.
- 7. Total Time: 1 Hour
- 8. Maximum Marks: 200

	SCIENCE			In liquids heat is transferred		
0.1	N		1	(a) only by convection		
Q.1	Name the gas which is used by white blood cells to			(b) only by radiation		
	kill the invading bacteria.			(c) mainly by conduc	ction and convection	
	(a) Oxygen	(b) Carbon dioxide		(d) none of these		
	(c) Nitrogen	(d) Chlorine				
0.0	What is the percentage of oxygen in the inhaled air?		Q.11	Formic acid is found in		
Q.2	-			(a) Curd	(b) Spinach	
	(a) 21%	(b) 16.4%		(c) Ant's sting	(d) Ascorbic acid	
	(c) 18%	(d) 20%				
$\Omega^2$	What is the percentage of CO <sub>2</sub> in the exhaled air?		Q.12	Citric acid is found in		
Q.3	-			(a) Curd	(b) Citrus fruits	
	(a) 23%	(b) 4.4%		(c) Ascorbic acid	(d) Lime water	
	(c) 6%	(d) 0.04%				
Q.4	Normal range of breathing rate per minute in an adult person at rest is		Q.13	Lactic acid is found in	n	
Q. I				(a) Curd	(b) Citrus fruits	
	(a) 10 - 12	(b) 15 - 18		(c) Gooseberry	(d) Lime	
	(a) 10 - 12 (c) 21 - 24	(d) $30 - 33$				
	(C) 21 - 24	(d) 30 – 33	Q.14	Oxalic acid is found i	n	
Q.5	Muscle cramps occi	urs due to accumulation of		(a) Spinach	(b) Curd	
Q.5	(a) Lactic acid	(b) Acetic acid		(c) Oranges	(d) Mangoes	
	(c) Alcohol	(d) Malic acid				
	(c) Monor (d) Mane acid		Q.15	Ascorbic acid is found in		
Q.6	Handles of cooking utensils should be made of material that			(a) Tamarind		
				(b) Curd		
	(a) conducts heat well			(c) Oranges & lemon	1	
	(b) does not conduct heat			(d) Unripe mangoes		
	(c) radiate heat well					
	(d) does not radiate heat		Q.16	Tartaric acid is found in		
	(a) does not radiate	. Heat		(a) Grapes	(b) Banana	
Q.7	Sea breeze and land	hreeze		(c) Mangoes	(d) All of the above	
<b>V</b> .7	(a) are caused by currents set up in air due to			.,	. ,	
	conduction		Q.17	Name the element with atomic no.11		
	(b) are caused by	currents set up in air due to		(a) Sodium	(b) Carbon	
	convection	•		(c) Neon	(d) Nitrogen	
	(c) are caused by	currents set up in air due to	Q.18	Calcium hydroxide is	found in	
	radiation		Q.10	(a) Calcium carbonat		
	(d) have no relation to conduction, convection and			(b) Calcium chloride		
	radiation			(c) Calcium		
				(d) Lime water		
Q.8	Which of the following is the best heat insulator			(u) Linie water		
	(a) air	(b) steel	Q.19	Ammonium hydroxid	le is found	
	(c) copper	(d) iron		(a) Window cleaner	(b) Limewater	
				(c) Soap	(d) Milk of magnesia	
Q.9	Heat from the sun re	eaches us by the process of		-	-	
	(a) conduction	(b) convection	Q.20	Sodium hydroxide is	found in	
	(c) radiation	(d) all the above		(a) Soap	(b) Window cleaner	
				(c) Calcium hydroxid	, ,	
			1	•		

#### MATHEMATICS

Q.21 Identify the property used in the following:

 $2 \times 13 + 8 \times 13 = (2 + 8) \times 13$ 

- (a) Commutative
- (b) Closure
- (c) Associate
- (d) Distributive
- Q.22 Which number is multiplicative identity for the whole numbers
  - (a) 0

(b) 1

(c) 2

- (d) 3
- Q.23 What will be multiplicative inverse of -8
  - (a) 8

- (b)  $\frac{1}{8}$
- (c)  $-\frac{1}{6}$
- (d) 0
- O.24 Which property is reflected in the following:

 $7 \times 5 = 5 \times 7$ 

- (a) Closure
- (b) Commutative
- (c) Associative
- (d) Distributive
- What is the value of  $\frac{2}{3} + \frac{1}{3} + \frac{7}{3}$ Q.25
- (c)  $\frac{30}{3}$  (d)  $\frac{10}{27}$
- The product of  $\frac{2}{5} \times 5\frac{1}{4}$ Q.26
- (b)  $\frac{21}{10}$

- The reciprocal of  $1\frac{2}{3}$  is Q.27

- O.28 The value of  $0.78 \div 100$  is
  - (a) 7800
- (b) 0.0078
- (c) 0.78
- (d) 7.8

- Q.29 The value of  $26.3 \div 1000$  is
  - (a) 0.0263
- (b) 0.2630
- (c) 26300
- (d) 26.300
- Q.30 The mode of the data 2, 2, 2, 3, 3, 4, 5, 5, 5, 6, 6, 8 is
  - (a) 2

(b) 5

(c) 8

- (d) 2 & 5 both
- Q.31  $0.01 \times 0.01$ 
  - (a) 0.0001
- (b) 0.001

(c) 1

- (d) 0.1
- Q.32 Median of the data
  - 13, 16, 12, 14, 19, 12, 14, 13, 14 is \_\_\_\_.
- (b) 19
- (c) 12
- (d) 13
- O.33 Which figure encloses more area: a square of side 2 cm; a rectangle of side 3 cm & 2 cm; An equilateral triangle of side 4 cm
  - (a) Rectangle
  - (b) Square
  - (c) Triangle
  - (d) Same of rectangle & square
- Q.34 The area of rectangle whose length is 15 cm & breadth is 6 m
  - (a)  $9000 \text{ cm}^2$
- (b)  $90 \text{ cm}^2$
- (c)  $9 \text{ cm}^2$
- (d)  $900 \text{ cm}^2$
- Q.35 In the figure  $\triangle$ ABC is isosceles AE = 6 cm, BC = 9 cm, the area  $\triangle ABC$  is
  - (a)  $27 \text{ cm}^2$
- (b)  $54 \text{ cm}^2$
- (c)  $22.5 \text{ cm}^2$
- (d)  $45 \text{ cm}^2$
- Q.36 The area of parallelogram is
  - (a) Base + height
- (b) Base × height
- (c) Base × base
- (d) Height × height
- Q.37 The base in the area of parallelogram is
  - height
- (c) area × height
- (d) Area

- Q.38 The area of parallelogram whose base 6 cm & altitude 7 cm is
  - (a)  $18 \text{ cm}^2$
- (b)  $20 \text{ cm}^2$
- (c)  $9 \text{ cm}^2$
- (d)  $42 \text{ cm}^2$
- Q.39 The height of parallelogram whose area is 35 cm<sup>2</sup> and altitude 7 cm
  - (a) 5 cm
- (b) 5 cm<sup>2</sup>
- (c) 245 cm
- (d)  $245 \text{ cm}^2$
- One hectare is equal to Q.40
  - (a)  $100 \text{ m}^2$
- (b)  $1000 \text{ m}^2$
- (c)  $10,000 \text{ m}^2$
- (d)  $1,00,000 \text{ m}^2$

#### REASONING

- Q.41 Mohan travels 7 km Eastwards, then he turns right and travels 3 km and further turns right again and travels 11 km. How for is he from the starting point?
  - (a) 5

- (b) 14
- (c) 21
- (d) 23
- Q.42 A man walks 9 km due East and then 12 km due South. How far is he from the starting point?
  - (a) 15 km
- (b) 6 km
- (c) 7 km
- (d) None of these
- Q.43 How many 5's are there in the following sequence which are immediately followed by 3 but not immediately preceded by 7?

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- (a) One
- (b) Two
- (c) Three
- (d) Four

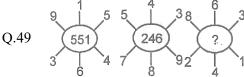
- In the following number series how many 8's are Q.44 there which are exactly divisible by the numbers which are preceded and followed by it?
  - (a) 1

(c) 3

- (d) 4
- What is the value of  $(48-12) \div 4 + 6 \div 2 \times 3 = ?$ 0.45
  - (a) 10
- (b) 0.6

(c) 2

- (d) 18
- Q.46 3, 6, 18, 72, 360,?
  - (a) 720
- (b) 1080
- (c) 1600
- (d) 2160
- 6, 12, 7, 11, 8, 10, 9,? O.47
  - (a) 8
- (b) 9
- (c) 11
- (d) 10
- O.48 0, 5, 22, 57, 116,?
  - (a) 205
- (b) 216
- (c) 192
- (d) 207



- (a) 262
- (b) 622
- (c) 631
- (d) 337

- Q.50
- 5 6 93 15 50 5 3 8 6 (b) 19
  - (a) 5 (c) 27
- (d) 89