#### PRATAPGARH TALENT SEARCH EXAMINATION-2022

# DATE: ..........., VENUE-EINSTEIN PUBLIC SCHOOL, LALGANJ (AJHARA) INSTRUCTIONS

Note – Do not open this test Booklet until you are told to do so.

Time 3:00 hrs	Max. Marks – 100
Write your Roll no. in Box	

- ❖ To mark answer use black/blue ball Point Pen only
- Candidate must read all the instructions before writing answer
- ❖ You are to mark your answer on answer-sheet only. When the examination is over, handover the Answer-sheet to the invigilator.

#### **Important Instructions**

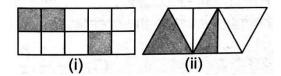
- 1. There are two Section
- 2. Answer all questions. All questions carry equal marks
- 3. The candidate should indicate the correct roll number on the answer-sheet, otherwise the answer-sheet will not be evaluated and the candidate will be solely responsible for it.
- 4. This booklet contains 100 questions. Each question has four (4) alternative answers. Bubble indicating the correct answer shall be filled up in the answer-sheet using black/ blue ball point pen only. If more than one answer are marked, it shall be treated wrong answer and it will not be evaluated.
- 5. Do not write anything on the cover page of the test booklet except Roll No.
- 6. There will not be any penalty for wrong answers.

1.	Ninety million ninety thousand	nd ninety is same as
	(A) 9090090 (C) 909090	(B) 90090090 (D) 9090900
2.	What will we get, if we subtr	act 1 from the smallest 6-digit number?
	(A) 99999 (C) 19999	(B) 100009 (D) 999999
3.	100 lakh =	
	(A) 10 million (C) 100 million	(B) 1 million (D) 10 crore
4.	Face value of 3 in 7, 21, 348	is
	<ul><li>(A) Three</li><li>(C) Three thousand</li></ul>	<ul><li>(B) Three hundred</li><li>(D) Three lakh</li></ul>
5.	Largest 5-digit number that	can be formed by using digits 6, 4, 0 and 7 each atleast once is
	(A) 77460	(B) 64770
	(C) 76740	(D) 77640
6.	Which of the following numb	per is prime ?
	(A) 35	(B) 88
	(C) 41	(D) 92
7.	What could be the number in	the START box?
	START → ÷16 →	X 20 → 132820
	(A) 116256	(B) 106256
	(C) 384120	(D) 102656
8.	The sum of 3 <sup>rd</sup> multiple of 3 s	and 5 <sup>th</sup> multiple of 5 is divisible by
	(A) 5	(B) 3 (D) 2
g	(C) 4 The quotient when 222816 is	(D) 2 divided by 24 is
7.	(A) 9286	(B) 9284
	(C) 9248	(D) 2984
10.	-	on $1^{st}$ November was ₹ 58709. He withdrew ₹ 13090 and ₹ deposits ₹ 1680 in his account in that month. What was the $\frac{1}{2}$ th?
	(A) ₹ 30001	(B) ₹ 29101

(D) ₹ 30781

(C) ₹ 29001

11. What is the sum of the shaded fractions of the given figures?



(A)  $\frac{27}{40}$ 

(B)  $\frac{13}{20}$ 

(C)  $\frac{40}{27}$ 

- (D)  $\frac{20}{13}$
- 12. In the product of 27.45 and 5, find the place value of digit 2.
  - (A) 0.02

(B) 0.20

(C) 2

- (D) 20
- 13. Which of the following shows the equivalent fraction of  $\frac{4}{7}$ ?
  - $(A) \frac{8}{12}$

(B)  $\frac{12}{21}$ 

 $(C)\frac{12}{24}$ 

- (D)  $\frac{24}{40}$
- 14. What must be added to  $2\frac{2}{5}$  to give  $3\frac{3}{10}$ ?
  - (A)  $\frac{9}{10}$

(B)  $1\frac{1}{5}$ 

 $(C)\frac{5}{6}$ 

- (D)  $5\frac{7}{10}$
- 15. Vineet packed  $\frac{3}{4}$  kg of sugar each into 42 bags. Find the total weight of sugar Vineet packed.
  - (A) 34.5 kg

(B) 3.45 kg

(C) 31.5 kg

- (D) 345 g
- 16. A pole is painted red and white. The red portion is 1.8 m long and the white portion is three times as long as the red portion. How long is the pole?
  - (A) 5.4 m

(B) 7.2 m

(C) 3.6 m

- (D) None of these
- 17. Reema pours 2 L 50 mL of juice equally into 9 glasses. How much juice is there in each glass?
  - (A) 600 mL
- (B) 300 mL

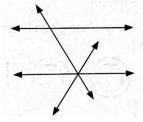
(C) 250 mL

- (D) 150 mL
- 18. The cost of 1 kg of potatoes and 1 kg of onions are ₹ 25.20 and ₹ 35.70 respectively. If Rakesh bought 3 kg potatoes and 5 kg onions, then find the total amount paid by him.
  - (A) ₹ 180.50
- (B) ₹ 296

(C) ₹ 320

(D) ₹ 254.10

- 19. At what time given below do the minute and hour hands of a clock make a straight angle?
  - (A) 12 O'clock
- (B) 6 O'clock
- (C) 5 O'clock
- (D) 3 O'clock
- 20. How many pairs of intersecting lines are there in the given figure?



(A) 0

(B)4

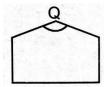
(C) 2

- (D) 5
- 21. An angle which measures 180° is called \_\_\_\_\_ angle.
  - (A) Acute

(B) Obtuse

(C) Right

- (D) Straight
- 22. Which type of angle best describes angle Q?

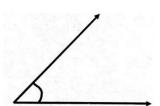


(A) Obtuse

(B) Acute

(C) Right

- (D) Straight
- 23. What is the approximate measure of the angle shown in the given figure?

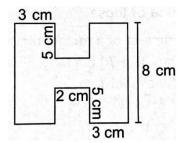


(A)  $20^{\circ}$ 

(B) 45°

(C)  $110^{\circ}$ 

- (D) 135°
- 24. Find the perimeter of the given figure (not drawn to scale).



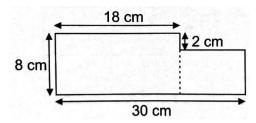
(A) 50 cm

(B) 60 cm

(C) 52 cm

(D) 48 cm

25. The given figure (not drawn to scale) is made up of two rectangles. Find its total area.



- (A) 144 sq. cm
- (B) 216 sq.cm
- (C) 240 sq. cm
- (D) 300 sq. cm
- 26. How many prime numbers are there between 1 and 25?
  - (A) 8

(B) 11

(C) 9

- (D) 15
- 27. Mansi practices on her guitar  $7\frac{1}{2}$  hours in a week. If she practices  $1\frac{1}{2}$  hours on each day, then how many days does she practice each week?
  - (A) 5

(B) 6

(C)9

- (D) 8
- 28. All the factors of 60 greater than are \_\_\_\_\_
  - (A) 2, 3, 5 and 6
- (B) 20 and 30
- (C) 12, 15, 20, 30 and 60
- (D) 60, 120 and 180
- 29. 91 is a multiple of \_\_\_\_\_.
  - (A) 3

(B)9

(C) 11

- (D) 13
- 30. Which one of the following is a prime number?
  - (A) 161

(B) 221

(C)373

- (D) 437
- 31. In how many ways can the number 616 be written as a product of the two numbers one of which is a prime number ?
  - (A) 1

(B) 2

(C)3

- (D) 4
- 32. Which one of the following is different from all others?
  - $(A)\frac{12}{20}$

(B)  $\frac{15}{25}$ 

 $(C)\frac{18}{30}$ 

- (D)  $\frac{21}{40}$
- 33. By how many minutes is  $3\frac{1}{4}$  hours greater than  $1\frac{7}{12}$  hours?
  - (A)  $60\frac{2}{3}$  minutes
- (B) 62 minutes
- (C) 75 minutes
- (D) 100 minutes

34.	2 hour 40 min is $\frac{5}{8}$ of	
	(A) $1\frac{1}{2}$ h	(B) $1\frac{2}{3}$ h
	(C) $8\frac{1}{3}$ h	(D) $4\frac{4}{15}$ h
35.	A vessel had $3\frac{1}{4}$ litres of milk	x. A cat drank $\frac{1}{2}$ litres. How much milk is left in the vessel?
	(A) $3\frac{1}{2} l$	(B) $3\frac{1}{8} l$
36.	(C) $2\frac{1}{4}l$ Pradeep bought 3 handkerch What was the price of the thin	(D) $2\frac{3}{4}l$ nief for ₹ 72. The average price of two of them was ₹ 19.90. rd one?
	(A) ₹ 24 (C) ₹ 39.80	(B) ₹ 32.20 (D) ₹ 52.10
37.	If $0.8 \times x = 0.0004$ , then the	e value of x is
	(A) 0.005 (C) 0.5	(B) 0.0005 (D) 5
38.	3 hours after 9:30 am is	
	(A) 12:30 pm (C) 1:00 am	(B) 12:30 am (D) None of these
39.	Area of a square is given by	·
	(A) side × side (C) 3 × side	(B) side + side (D) 4 × side
40.	The perimeter of a rectangula	ar picture is 160 cm. It is 30 cm wide. How long is it?
	(A) $5\frac{1}{3}$ cm (C) 100 cm	(B) 50 cm (D) 130 cm
41.	Which figure has an area of 9 of side 1 unit.	9 square units and a perimeter of 12 units? Each square block is
	(A)	(B)
	(C)	(D)

42.	How many times is the volum	ne of a 10 cm cube as I	large as the volume of 5 cm cube?	
	(A) 2 (C) 5	(B) 4 (D) 8		
43.	A line has			
	<ul><li>(A) fixed length</li><li>(C) no length</li></ul>	<ul><li>(B) infinite length</li><li>(D) none of these</li></ul>		
44.	Which one of the following i	s a false statement?		
	<ul><li>(A) A line segment has two e</li><li>(C) A line has no end point</li></ul>	ended points	<ul><li>(B) A ray has no end point</li><li>(D) None of these</li></ul>	
45.	Points which lie on a straight	line are		
	<ul><li>(A) angular</li><li>(C) collinear</li></ul>	<ul><li>(B) non-collinear</li><li>(D) pointless</li></ul>		
46.	Parallel lines are always	·		
	<ul><li>(A) coincident</li><li>(C) equidistant</li></ul>	(B) equal (D) none of these		
47.	A triangle whose all sides are	e equal is		
	<ul><li>(A) scalene triangle</li><li>(C) isosceles triangle</li></ul>	(B) equilateral triangl (D) none of these	e	
48.	Half of a circle is called			
	(A) a diameter (C) an arc	(B) a chord (D) a semi circle		
49.	Choose the one which is diffe	erent from the other.		
	(A) 263 (C) 242	(B) 111 (D) 383		
50.	How many even numbers are there in the sequence: 5 1 4 7 3 9 8 5 7 2 6 3 1 5 8 6 3 8 5 2 2 4 3 4 9 6 which are immediately preceded and also immediately followed by an even number?			
	(A) 1 (C) 3	(B) 2 (D) 4		
51.	One paisa is worth one hund of a rupee ?	redths of a rupee. Which	ch of the following represents 5 hundredth	
	(A) ₹ 5.00 (C) ₹ 0.005	(B) ₹ 0.50 (D) ₹ 0.05		

52. What should be added to 18962 to make it exactly divisible by 13?

(A) 2(B)3(C)4(D) 5 53. 1 is: (A) a multiple of 10 (B) an even number (C) a composite number (D) an odd number 54. In the given figure, points A, O and B are collinear. What is  $\angle AOC + \angle COB$ ? (A)  $90^{\circ}$ (B) 180° (C)  $270^{\circ}$ (D)  $360^{\circ}$ 55. When n is divisible by 4, the remainder is 3. What is the remainder when 2n is divided by 4? (B) 2(A) 1(C) 3 (D)656. In the figure, PAC and QAB are straight lines. The value of x is \_\_\_\_\_. (A) 63(B) 52 (C)49(D) 39 57. In which sets of figures 'all sides are equal'? (A) Rhombus, Square (B) Rhombus, Rectangle (C) Parallelogram, Rhombus (D) Rectangle, Square 58. If a seven sided polygon is divided into triangles, by drawing all diagonals from one vertex, how many triangles would be there? (A) 1(B)4(C) 5 (D) 6

- 59. The angle which is one-fifth of its complement is \_\_\_\_\_.
  - (A) 180°

(B) 360°

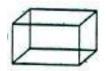
(C) 270°

- (D) None of these
- 60. Which figure has 4 faces, 6 edges and 4 vertices?





(B)



(C)



(D)



- 61. Select the incorrect statement out of the following
  - (A) Species are obtained from plants
  - (B) Eating less amount of fibre rich food can lead to constipation
  - (C) Skull has no joints and encloses the brain
  - (D) Night blindness is caused by deficiency of vitamin A
- 62. In case of an LPG gas leak in the house, you should \_\_\_\_\_.
  - (A) Open all doors and windows of the house
  - (B) Not switch on or off any electrical switch
  - (C) Not light a matchstick
  - (D) All of these
- 63. We should exercise yoga daily, because it \_\_\_\_\_.
  - (A) Strengthens muscles
- (B) Increases stamina
- (C) Improves concentration
- (D) All of these
- 64. In our diet, we should have different nutrients in sufficient amounts. Select the option that gives correct order of amount of different nutrients required by our body.
  - (A) Carbohydrates < Proteins < Fats < Minerals
  - (B) Carbohydrates > Proteins > Fats > Minerals
  - (C) Proteins < Fats < Minerals < Carbohydrates
  - (D) Proteins > Fats > Minerals > Carbohydrates
- 65. The purpose of the activity shown in the picture is



- (A) To separate grains from the stalks of the crop
- (B) To protect the crop from grazing animals
- (C) To irrigate the crop fields
- (D) To separate grains from the chaff

66.	Select the correct stat	ement regarding natural resources.			
	(A) They can never be exhausted				
	(B) They are obtained	from soil only			
	(C) Wind energy is a	renewable natural resource			
	(D) None of these				
67.	is the organ	ic component of the soil formed by action of soil my microorganism.			
	(A) Gravel	(B) Humus			
	(C) Sand	(D) Clay			
68.	Which of the following	Which of the following statements is correct?			
	(A) Coal is the most a	abundant fossil fuel on Earth			
	(B) Silica is an examp	(B) Silica is an example of metallic mineral			
	(C) Gneiss is a sedim	entary rock formed from conglomerate			
	(D) Shale is a hard and heavy volcanic rock formed due to quick cooling down a lava				
69.	Select the correct statement out of the following.				
	(A) Sandy soil needs regular addition of fertilisers as it holds a large amount of water				
	(B) Loamy soil has good qualities of both sandy and clayey soil and thus is most suitable for pottery				
	(C) Clayey soil develops cracks in hot weather causing harm to the roots of plants, thus is not suitable for agriculture				
	(D) The water holding	g capacity is highest in clayey soil and lowest in loamy soil			
70.		number of dead fish drifting towards the shore. Many dead birds with and feathers could also be seen there. A/Anmight have occurred			
	<ul><li>(A) Tsunami</li><li>(C) Oil spill</li></ul>	<ul><li>(B) Volcanic eruption</li><li>(D) Earthquake</li></ul>			
71.	Select the method that	at prevents soil erosion by water.			
	(A) Terrace farming	(B) Wind breaks			
	(C) Embankments	(D) Both (A) and (C)			
72.	When oxides of nitro	gen and sulphur react with water vapour in the air they cause			
	(A) Ozone depletion	(B) Global warming			
	(C) Acid rain	(D) Oil spill			

- 73. If an earthquake occurs, which of the following you should do?
  - (A) If you are indoors, stay in and get under a desk or a table.
  - (B) If you are outdoors, stay away from trees and buildings.
  - (C) If you are on a beach, get into the sea.
  - (D) Both (A) and (B)
- 74. Which one of the following pairs is wrongly classified?

#### Positive effect on the environment

#### **Negative effect on the environment**

- (A) Incinerating rubbish in residential areas open
- Covering opened dustbins left out in the

open

- (B) Using public transport and cutting down use of fossil fuel
- Cutting down trees

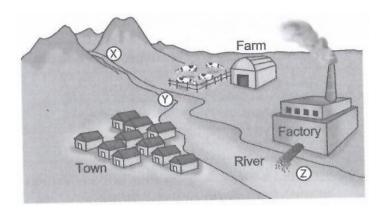
(C) Collecting rainwater for watering garden plants

Discharge of agricultural runoff into water bodies

(D) Using recycled material

Leaving unfinished food at the canteen table

- 75. Which of the things listed below are non-biodegradable?
  - (i) Cotton T-shirt
- (ii) Glass Cup
- (iii) Gold necklace
- (iv) Roasted chicken
- (v) Debit card
- (vi) Banana
- (A) (i) and (ii) only
- (B) (iii) and (iv) only
- (C) (iii), (iv) and (v) only
- (D) (ii), (iii) and (v) only
- 76. Referred to the given figure and select the correct option regarding sides X, Y and Z.

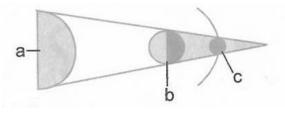


- (A) The amount of dissolved oxygen could be maximum at site Z.
- (B) Number of fish at site X will be more than at site Y.
- (C) Site X has the most poor quality of water
- (D) Both (A) and (B)

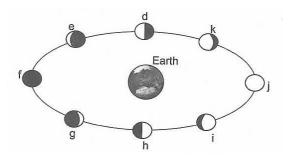
77. The constellation shown here is known as \_\_\_\_\_.



- (A) Ursa Major
- (B) Ursa Minor
- (C) Cassiopeia
- (D) Scorpius
- 78. Tides are caused by \_\_\_\_\_.
  - (A) Gravitational pull of Earth
- (B) Gravitational pull of Sun
- (C) Gravitational pull of Moon
- (D) Both (B) and (C)
- 79. Select the correct match from the following.
  - (A) Venus It has 2 moons
  - (B) Saturn Its rings are made of ice, rocks and dust
  - (C) Jupiter Largest and farthest planet from the Sun
  - (D) Mercury Hottest planet
- 80. Look at the given figure. It shows lunar eclipse. Where is the Moon in it?



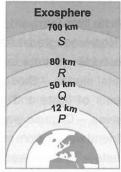
- (A) a
- (B) b
- (C) c
- (D) None of these
- 81. The given figure shows the phases of the Moon. Select the phases of the Moon during which the highest tides are seen.



- (A) d and h
- (B) f and j
- (C) e and g
- (D) i and k

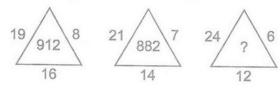
82.	should be used to mal	ke a cooking pot and can be used to make its handle.		
	(A) Glass, Iron	(B) Rubber, Wood		
	(C) Aluminium, Wood	(D) Iron, Silver		
83.	A solid can be changed into a	a liquid by the process of		
	(A) Condensation	(B) Evaporation		
	(C) Freezing	(D) Melting		
84.	Naphthalene balls may reduce in size or disappear due to			
	(A) Evaporation	(B) Condensation		
	(C) Sublimation	(D) Precipitation		
85.	Select the activity that is an e	example of chemical change.		
	(A) Melting of ice cream	(B) Rusting of iron nails		
	(C) Making curd from milk	(D) Both (B) and (C)		
86. What will happen when three bar magnets are hung in the manner as		e bar magnets are hung in the manner as shown below?		
	N S N	S S N Y Z		
	(A) Nothing will happen	(B) Magnet Y will turn round and round		
	(C) Magnet Y will move tow	vards magnet Z (D) Magnet Y will move towards magnet X		
87.	In which of the following a p	ermanent magnet is used?		
	(A) Magnetic door catchers	(B) Loudspeakers		
	(C) Compasses	(D) All of these		
88.	How many north and south p magnetism?	ooles are present if a magnet is broken into 6 pieces without loss of		
	(A) Six	(B) Twelve		
	(C) Two	(D) Zero		
89.	Which of the following is a c	orrect match?		
	(A) Waste from farmyards ar	nd food courts – Non-biodegradable waste		
	(B) Pesticides, pharmaceutic	als and heavy metal sludge - Biodegradable waste		
	(C) Peels of fruits and vegeta	bles, tea leaves – Organic waste		
	(D) Mineral wastes from min	ing and rubber waste - Kitchen waste		

- 90. Kanika noticed that her potted plant was not growing healthily. She put few earthworms into the pot. After a few weeks, she noticed that her plants look healthier. What could be the possible reason for this?
  - (A) The earthworms ate up the pests in the soil.
  - (B) The earthworms helped the plant to take in water.
  - (C) The earthworms allowed the plant to make food faster.
  - (D) The earthworms increased the air and nutrient content of the soil.
- 91. Refer to the given figure representing different layers of Earth's atmosphere and select the incorrect statement regarding it.



Layers of atmosphere

- (A) Wind, storm and snow are formed in P layer of atmosphere.
- (B) Q is the atmospheric layer where most clouds are formed as, 99% of the water vapours are present in this layer.
- (C) In atmospheric layer R meteors burn up.
- (D) In atmospheric layer S temperature increases with height.
- 92. Find the missing number, if the same rule is followed in all the three figures.



(A) 1356

(B) 862

(C) 1234

- (D) 864
- 93. What is the next term in the given series?



(A) 962

(B) 385

(C)583

(D) 853

94. A boy introduced a woman as the only daughter of the father of his mother. How is the boy

	related to the woman?	
	(A) Brother	(B) Father
	(C) Uncle	(D) Son
95.	How many 5's are then	re in the following sequence, each of which is immediately preceded by
	4 but not immediately t	ollowed by 9?
	359545535845	67357554524590
	(A) 2	B) 3
	(C) 4	D) 5
96.	Find the missing numb	er which will complete the given series.
	8, 14, 26, ?, 6	3, 98
	(A) 32	B) 44
	(C) 52	D) 48
97.	Which of the following	best explains why lifting a heavy object with a single fixed pulley and
	rope makes the task see	ems easier?
	(A) The direction of the	e force required to lift the object is changed
	(B) The force required	to move the object is applied over a greater distance
	(C) More work is done	while moving the object
	(D) Less force is neede	d to lift the object
98.	A clock is started at no	on. By 20 minutes past 5 PM on the same day, the angle through which
	the hour hand has turne	d is
	(A) 150°	(B) 160°
	(C) 145°	(D) 155°

99. Match column I (method of separation ) with column II (property of the components) and select the correct option from the given codes.

C	olumn	I			Column II
P. Sedimentation				(i)	Solubility
Q. Sieving				(ii)	Weight of particles
R. Winnowing				(iii)	Size of particles
S. Separating funnel			el	(iv)	Miscibility
	P	Q	R	S	
(A)	(iv)	(ii)	(i)	(ii)	
(A) (B)	(iv) (i)	(ii) (iii)	(i) (ii)	(ii) (iv)	
` /	. ,	` /		, ,	
(B)	(i)	(iii)	(ii)	(iv)	

100. Select the incorrect match

Plant	Reproduces by	
(A) Fern	-	Spores
(B) Dahlia	-	Stem
(C) Bryophyllum	-	Leaf
(D) Tapioca	-	Root