## RAMAANYA TALENT SCHOLARSHIP EXAMINATION रामन्या छात्रवृत्ति प्रतिभा परीक्षा 2021–22

Gen	eral Instructions:				MARK- 80
	<ul> <li>All questions are Objective types.</li> <li>All questions are compulsory.</li> <li>Each question carries 1 Marks.</li> <li>Four options are given for each question.</li> <li>No Negative mark for wrong questions.</li> <li>Choose the correct option and indicate it by blackening the appropriate circle [•] in the answer sheet.</li> </ul>				TIME— 90 MINTUES CLASS — 10
			ENGLISH		
1.	Why was Lencho satis	sfied?			
	<ul><li>(a) On seeing a</li><li>(c) On seeing a</li></ul>	a new tractor in his the field of ripe con	s field rn with flowers	( 5. (	(b) On seeing a new buffalo (d) None of the above.
2.	Mandela had to spent	thirty years in –			
	(a) Prison	(b) School	(c) Foreign	ı (	(d) None
3.	What food did the sea	gull's mother get f	or it?		
	(a) Earthworm	(b)	Fish	(c) Insec	ct (d) Rodents
4.	On which date did An	ne record the incid	lent in Mr. kee	sing's class i	n her diary?
	(a) 12 June, 19	042 (b) 21 June	, 1942 (c)	20 June, 194	(d) 22 June, 1942
5.	Who lived in Boggins	Heights?			
	(a) Maddie	(b) Peggy	(c)	Wanda	(d) Cecile
6.	How would you descr	ibe Miss Manson's	feeling toward	ds the class?	

(a) Angry (b) Upset (c) Happy	
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(d) Cheerful

7.	Who is the author of "A Baker form Goa"?						
	(a) Arup Kumar Dutta (b) Lokesh Abrol (c) Lucio Rodrigues (d) None of these						
8.	"Mijbil was neither hostile nor friendly" he was simply allof and indifferent" from the action of the given set of friend's,						
	Choose the person who's behavior is likely to resemble Mijbil's.						
	<ul><li>(a) Akansksha rudely tells her best friend to stop calling</li><li>(b) Piyush was amicable since the day he walked into his new classroom</li><li>(c) Rishabh became nasty as soon as he started earning money.</li><li>(d) Urvashi was distance for a while after losing her grandmother.</li></ul>						
9.	Who is the author of the lesson "Madam Rides the Bus"?						
	(a) Gavin Maxwell (b) Valli Kkannan (c) Paulo Coehlo (d) Arup Kumar Dutta						
10.	Which seed did Buddha ask kisa to bring?						

(a) Pumpkin seeds (b) Mustard seeds (c) Sunflower seeds (d) Sesame seeds

11. According to Lomov. What amount would be good enough for buying squeezer?

(a) 60 Roubles	(b) 35 Roubles	(c) 25 Roubles	(d) 40 Roubles
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12. "In two weeks he had been transformed into a lithe, hard – muscled animal". What is the meaning of the world "lithe"?

(a) Dirty (b) Graceful (c) Misbehaving (d) Rude

13. What was the name of the shop above which Anil lived?

(a) Laddu sweet shop	(b) Rasgulla sweet shop
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(c) Jamun sweet shop (d) Jumma sweet shop

- 14. Which choice is the correct reported speech of the following sentence?My mother often says to me, "Honesty is the best Policy."
  - (a) My mother often told me that honesty was the best policy.
  - (b) My mother said that honesty was the best policy.
  - (c) My mother taught me that honesty was the best policy.
  - (d) My mother often says to me that honesty is the best policy.
- 15. She took lessons\_\_\_\_\_ to swim.

16.

17.

18.

19.

	(a) learning	(b) to learn		(c) for learning	(d) learn		
To ke	eps one's temper (Ph	rase)					
	(a) To become hung	gry		(b) To be in good n	nood		
	(c) To be aloof from	n		(d) None of these			
Don't	mix with the bad hat	<u>s</u> .					
(Choo	ose the meaning of the	e idiom/ phrase)	)				
	<ul><li>(a) People of bad cl</li><li>(c) People of poor s</li></ul>	naracter	(b) Peo (d) Peo	ople of poor status			
Find the most opposite meaning of SUBVERSION							
	(a) Destabilization	(b) Clarity		(c) Compliance	(d) Sanity		
	is the antonym	of "DISSIPAT	Е".				
	(a) Utilize	(b) Conserve		(c) Manage	(d) Organize		

20. In which city were Anne and Margot sent to live with their grandmother?

(a) Berlin (b) Aachen (c) Munich (d) Bonn

## **SCIENCE**

21. An example of reaction in which precipitate is formed is :-

- (a) Reaction between hydrogen and oxygen
- (b) Reaction between lead nitrate and potassium iodide
- (c) Reaction between hydrochloric acid and zinc.
- (d) Reaction between sodium and water
- 22. In the double displacement reaction between aqueous potassium iodide and aqueous lead nitrate a yellow precipitate of lead iodide is formed. While performing the activity if lead nitrate is not available. Which of the given can be used in place of lead nitrate?

(a) Lead Sulphate	(b) Lead Acetate
(c) Ammonium Nitrate	(d) Potassium Sulphate

23. Soda ash chemical formula is

(a)  $NaHCO_3$  (b)  $Na2CO_3$ ,  $9H_2O$  (c)  $Na2CO_3$  (d)  $Na2CO_3$ ,  $10H_2O$ 

24. Which of following acid is present in tamarind?

(a) Ethanoic acid (b) Sulphuric acid (c) Nitric acid (d) Tartaric acid

25. Galvanisation is method of protecting iron from rusting by coating with a thin layer of.

(a) Gallium (b) Aluminum (c) Zinc (d) Silver

26. Which of the following represents Neopentyl Alcohol?

	(a) CH <sub>3</sub> CH (CH <sub>3</sub>	3) CH <sub>2</sub> CH <sub>2</sub> OH	(b) (CH) <sub>3</sub> CCH <sub>2</sub> OH				
	(c) $CH_3CH_2 CH_2$	2 CH <sub>2</sub> OH	(d) CH <sub>3</sub> CH <sub>2</sub> CH (OH) CH <sub>2</sub>				
27.	Oxidation of alcohol in	Oxidation of alcohol in presence of alk. kMnO <sub>4</sub> results of formation of					
	(a) Aldehyol	(b) Ester	(c) Acid	(d) Ketone			
28.	14 elements after Actini	um is called					
	(a) Lantharides		(b) Actirides				
(c) D – block elements		(d) $P - bl$	(d) P – block elements				
29. An element 'X' is placed in group 13 and third period of the periodic table. It an oxide which is anphoteric in nature. Identify the chemical formula of its c			table. It burns in oxygen to form a of its chloride.				
	(a) CCl <sub>4</sub>	(b) BCl <sub>2</sub>	(c) GaCl <sub>3</sub>	(d) AlCl <sub>3</sub>			
30. The internal energy reserve in autotrophs is							
	(a) Glycogen	(b) Protein	(c) Starch	(d) Fatty acid			
31.	Gustatory receptors dete	ect					
	(a) Touch	(b) Smell	(c) Taste	(d) Temperature			
32.	Which of the following statements is correct about receptors?						
	(a) Gustatory receptors detect taste while olfactory receptors detect smell						
	(b) Both gustatory and olfactory receptors detect smell						
	(c) Auditory rece	(c) Auditory receptors detect smell land olfactory receptors detect taste					
	(d) Olfactory rec	eptors detect taste an	d gustatory receptors sr	nell			
33.	Which of the following	is not a sexually trans	smitted disease?				

	(a) Warts (b) Ka	alazar	(c) Syphillis	(d) Gonorrhoea
34.	If two pairs of characters an	e crossed in pea plants	, then they show an ind	ependent inheritance because:-
	<ul><li>(a) They are separat</li><li>(c) Reproduction is</li></ul>	e characters of asexual type	<ul><li>(b) They are present of</li><li>(d) They are present of</li></ul>	on separate chromosomes on separate plants
35.	SI unit of power of lens is			
	(a) Micro meter	(b) Dioptre	(c) Kilometer	(d) Meter
36.	The fluid between the retin	a and the lens called		
	(a) Vitreous humou	r (b) Fluid humour	(c) Aqueous humour	(d) Aqua
37.	Which acid is used in cola	to give it a biting sharp	taste.	
	(a) Sulphuric acid	(b) Tartaric acid	(c) Phosphoric acid	(d) Citric acid
38.	What is the maximum resis	tance which can be ma	de using five resistor ea	ach of 1/5 w?
	(a) 1/5Ω	(b) 10Ω	(c) 5Ω	(d) 1Ω
39.	The most important safety or over loading is.	device method used for	protecting electrical ap	opliances, from short circuiting
	(a) Earthing	(b) Use of stabilizer	(c) Use of elec	ctric meter (d) Fuse
40.	IUPAC name of the compo	und given below is		
	$CH_3 - CH - CH_2 - CH_2 - I$	$     \operatorname{Er}_{2} - \operatorname{C}_{C} - \operatorname{ch}_{3}_{Br} $		

$$CH_3 - CH - CH_2 - CH_2 - CH_2 - CH_2 - CH_3 - CH_3 - CH_3$$
  
I Br  
OH

(a) 6, 6- di bromoheptan -2- ol

(b) 2,2–di bromoheptan – 6- ol

(c) 6,6 dibromophetan – 2- al

(d) none of these

## <u>MATH</u>

41. There are 312, 260 and 156 student in class X, XI an XII respectively, Buses are to be hired to take these students to a picnic, find the maximum number of students who can sit in a but if each bus of students number of students.

(a) 52 (b) 56 (c) 48 (d) 63

- 42. If the graph of a polynomials intersects the x-axis at exactly two points, then it
  - (a) can be a cubic or a quadratic polynomial
  - (b) cannot be a linear or a cubic polynomial
  - (c) can be a quadratic polynomial only
  - (d) can be a linear or a quadratic polynomial
- 43. The value of k, for which the system of equations x + (k + 1)y = 5 and (k + 1)x + 9y = 8k 1 has infinitely many solutions is
  - (a) 2 (b) 3 (c) 4 (d) 5
- 44. Which of the following statement is TRUE?
  - (a) A quadratic equation in variable X is of the form  $ax^2 + bx + c = 0$ , where a, b, c are real numbers  $a \neq o$
  - (b) If we can factorise  $ax^2 + bx + c$ ,  $a \neq o$  into product of two linear factors then roots can be found by equating each factor to zero
  - (c) A real number R is said to be a root of the quadratic equation  $ax^2 + bx + c = o$

 $\text{if } a(R)^2 + bR + c = 0$ 

- (d) All of above
- 45. In a flower bed, there are 23 rose plant in the first row, 21 in the second, 19 in the third, and so on. There are rose plants in the last row. How many rows are there in the flower bed ?

(a) 1010ws (b) 2010ws (c) 5010ws (d) 1510	(a) 10 rows	(b) 20 rows	(c) 30 rows	(d) 15 row
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46. Amit starts his exercise with 25 push ups on Monday. He plans to increase 5 push ups every following Monday. How many push ups will he be doing on the 3<sup>rd</sup> Monday since he Started ?

(a) 60 (b) 70 (c) 45 (d) 35

- 47. A girl of height 90 cm is walking away from the base of a lamp past at a speed of 1.2 m/s. If the lamp is 3.6 m above the ground. Find the length of her shadow after 4 seconds.
  - (a) 1.6 m (b) 1.8 m (c) 2.8 m (d) 2.9 m
- 48. D and E are points on the sides AB and AC respectively of a  $\triangle ABC$  such that DE||BC. Which of the following statement is true? (i)  $\triangle ADE \sim \triangle ABC$ (ii) (area of  $\triangle ADE$ / Area of  $\triangle ABC$ ) =  $\left(\frac{AD^2}{AB^2}\right)$ (iii) (area of  $\triangle ADE$ / are of  $\triangle ABC$  =  $(AB^2/AD^2)$ 
  - (a) only (iii) (b) only (i) (c) only (i) and (ii) (d) all (i), (ii) & (iii)
- 49. The line segment joining the points (3,-1) and (-6,5) is trisected. the coordinates of point of trisection are

(a) (3,3) (b) (-3,3) (c) (3,-3) (d) (-3,3)

- 50. The distance between the points (3, 4) and (8, -6) is
  - (a)  $2\sqrt{5}$  units (b)  $3\sqrt{5}$  units (c)  $\sqrt{5}$  units (d)  $5\sqrt{5}$  units
- 51. Which of the following numbers can form sides of a right angled triangle?

(a)	13 cm, 27 cm, 15 cm	(b)	4 cm, 5 cm, 9 cm
(c)	2 cm, 17 cm, 9 cm	(d)	10 cm, 6 cm, 8 cm

- 52. A tower stand vertically on the ground from a point on the ground which is 15m away from the foot of tower. If the height of tower is meters find the angle of elevation.
  - (a)  $120^0$  (b)  $60^0$  (c)  $30^0$  (d)  $90^0$
- 53. A kite is flying, attached to a thread which is 165 m long. The thread makes an angle of 300 with the ground . The height of the kite from the ground, assuming that there is no stack in the thread is
  - (a) 84 m (b) 80 m (c) 82.5 m (d) 81.5 m
- 54. The angle between two tangents drawn from an external point to a circle is 1100. The angle subtended at the centre by the segments joining the points of contact to the centre of circle is :-

- (a)  $70^{0}$  (b)  $90^{0}$  (c)  $55^{0}$  (d)  $11^{0}$ 55. In the figure QA and PB are perpendicular on AB. If AO = 10 cm, BO = 6 cm and PB = 9 cm, then AQ is
  - (a) 15 cm (b) 12 cm (c) 18 cm (d) 20 cm
- 56. A wire is bent in the form of circle of radius 28 cm. it is re bent to form a square. The length of side of the square will be
  - (a) 44 cm (b) 40 cm (c) 88 cm (d) 30 cm
- 57. A hemispherical tank full of water is emptied by a pipe at the rate of  $3\frac{4}{7}$  liters per second. How much time will it take to empty half the tank. If it is 3 m in diameter ?  $\left(\pi = \frac{22}{7}\right)$ 
  - (a) 16.5 minutes (b) 17.5 minutes (c) 18.5 minutes (d) 19.5 minutes
- 58. The ratio between the LCM and HCF of 5, 15, 20 is :
  - (a) 9 : 1 (b) 4 : 3 (c) 11 : 1 (d) 12 : 1
- 59. The perimeters of two similar triangles are 25 cm and 15 cm respectively. If one side of first triangle is 9 cm, the corresponding side of the other triangle is



60. A sector of a circle of radius 10.5 cm subtends an angle of  $45^0$  at the centre of the circle as in adjoining figure. Find the perimeter of sector.



(a) 37.25 cm (b) 36 cm

(c) 21.25 cm

(d) 29.25 cm

## **GENERAL KNOWLEDGE**

- 61. In which year Jharkhand was formed as a separate state?
  - (a) 1998 (b) 2000 (c) 2001 (d) 2003
- 62. Who establishes the Jamshedpur city ?

(a) JN Tata (b) Dorabji Rata (c) Ratan Tata (d) Nusserwanji Tata

63. Who was the first chief minister of Jharkhand ?

(a) Shibu Soren (b) BabulaMarandi (c) Arjun Munda (d) Madhukoda

- 64. "Dhumkuria" social organization belongs to which tribal community?
  - (a) Oraon (b) kurukh (c) Munda (d) Santhal
- 65. Which one is the highest mountain peak of Jharkhand ?
  - (a) Netarhat (b) Trikut (c) Parasnath (d) Tagore Hill
- 66. The Jagannath Temple in Ranchi was established by-
  - (a) Ram Shah (b) Raghunath Shah (c) Aninath Shahdeo (d) Dur Jamsal
- 67. When was the chotanagpur tenancy act enforced?
  - (a) 1907 (b) 1908 (c) 1909 (d) 1910
- 68. When did the santhalpargana tenancy act came into force?
  - (a) 1857 (b) 1862 (c) 1867 (d) 1876

69. Which of the f	ollowing is th	e largest p	roducer of	Alloy state in Indi	ia?			
(a) Bokaro	(b) Bł	nilai (c)	Durgapur	(d) Rourkela				
70. Betla National	park is reser	ved for?						
(a) Deers	(b)	Lions (c)	Bird and A	quatic animals	(d) None of these			
71. When was the	first aluminu	ım industry	establishe	d in Jharkhand?				
(a) 1937	(b) 1	950 (c)	1985 (	d) 1934				
72. Total number	of Legislature	Unicamer	al in Jharkh	and?				
(a) 81	(b) 85	(c) 92		(d) None of thes	se			
73. The Number o	f wildlife san	ctuaries in .	Iharkhand	2				
(a) 9	(b) 5	(c) 3	(d	) None of these				
74. When was the production of iron steel started in Jharkhand?								
(a) 1907	(b) 2015	(c) 181	3 (d) 200	0				
75. Which is the m	nost develope	ed area of J	harkhand a	agriculture?				
(a) Lower ${}_{\!$	(a) Lower gold gate							
(b) Agricul	tural region o	f the Ranch	ni plateau					
(c) North e	astern margi	nal agricult	ural region	I				
(d) Agricultural region of Hazaribagh plateau								
76. Which of the f	ollowing is st	ate flower	of Jharkhar	nd?				
(a) Lotus	(b) Kopup	ohul (c)	Palash	(d) Orchid tr	ee			
77. Which of the f	ollowing rock	s are called	d "Metallic	Reserves "?				
(a) Dharwa	adyugene (b	) Apatite R	ock phospl	nate (c) Silver o	ore (d) Cobalt			
78. Which district	of Jharkhand	has lowest	male liter	acy?				

(a) Giridih (b)Ramgarh (c)Chatra (d)Pakur

79. Which of the following river of Jharkhand has got Stone Age Tools in Deoghar?

(a) Gandak (b) Ganges (c) Damodar River (d) Brakar River

80. "Rescue and cultures of India", there is an information about of santhal Tribe, which author is associated with this book?

(a) Imtiaz Ali (b) Sriram Dalton (c) D.N.Majumdar (d) Imran zahid