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13 FEBRUARY 2022

Marks: 600

Time: 180 minutes

ROLL NO.: _____	NAME: _____
SIGNATURE: _____	DATE / TIME: _____

INSTRUCTIONS FOR THE CANDIDATES

1.	The question booklet contains English section (Q 1-40), Mathematics Section (Q 41-120) and Social Studies (121-150)
2.	Before attempting the paper carefully read all the Instructions & Examples given on Side 1 of Answer Sheet (OMR Sheet) supplied separately.
3.	At the start of the examination, please ensure that all pages of your Test booklet are properly printed; your Test booklet is not damaged in any manner and contains 150 questions. In case of any discrepancy the candidate should immediately report the matter to the invigilator for replacement of Test Booklet. No claim in this regard will be entertained at the later stage.
4.	An OMR Answer Sheet is being provided separately along with this Test booklet. Please fill up all relevant entries like Roll Number, Test Booklet Code etc. in the spaces provided on the OMR Answer Sheet and put your signature in the box provided for this purpose.
5.	Make sure to fill the correct Test booklet code on Side 2 of the OMR Answer Sheet. If the space for the Booklet Code is left blank or more than one booklet codes are indicated therein, it will be deemed to be an incorrect booklet code & Answer Sheet will not be evaluated. The candidate himself will be solely responsible for all the consequences arising out of any error or omission in writing the test booklet code.
6.	This Test Booklet consists of 12 pages containing 150 questions. Against each question four alternative choices (1), (2), (3), (4) are given, out of which one is correct. Indicate your choice of answer by darkening the suitable circle with BLACK/BLUE pen in the OMR Answer Sheet supplied to you separately. USE OF PENCIL IS STRICTLY PROHIBITED. More than one answers indicated against a question will be deemed as incorrect response.
7.	The maximum marks are 600. Each question carries four (4) marks. There will be negative marking of minus one (-1) for each incorrect answer.
8.	Do not fold or make any stray marks on the OMR Answer Sheet. Any stray mark or smudge on the OMR Answer Sheet may be taken as wrong answer. Any damage to OMR Answer Sheet may result in disqualification of the candidate.
9.	On completion of the test, candidate must hand over the OMR Answer Sheet to the invigilator on duty in the room/hall. You may retain the Question Booklet.
10.	Use of Mobile phones, wrist watches and calculators etc. are not allowed.
11.	Keep all your belongings outside the Examination hall. Do not retain any paper except the ADMIT CARD.

SECTION – ENGLISH

Directions (Question 1 to 7). In these questions, out of the four alternatives, choose the one which best expresses the meaning of the given word.

- | | |
|---|--|
| 1 | Ironic
1) sarcastic 2) sympathetic 3) bitter 4) sincere |
| 2 | enormity
1) outrageous 2) goodness 3) immensity 4) heinous |
| 3 | Nonplussed
1) surprised 2) concerned 3) troubled 4) nervous |
| 4 | Unabashed
1) sheepish 2) timid 3) unapologetic 4) shameful |
| 5 | construe
1) interpret 2) suggest 3) intimate 4) misunderstand |
| 6 | vociferous
1) lucid 2) vehement 3) timid 4) silent |
| 7 | didactic
1) inquisitive 2) misleading 3) instructive 4) erroneous |

Directions (Question 8 to 12). Fill in the blanks with a word from amongst the choices given

- | | |
|----|--|
| 8 | All my friends admire the _____ of military life.
1) friendship 2) rigidity 3) camaraderie 4) regulations |
| 9 | The Company's previous boss got fired because of _____ funds.
1) misconduct 2) embezzlement 3) mischief 4) misbehaviour |
| 10 | It was an _____ climb up the mountain.
1) arduous 2) confusing 3) demanding 4) hard |
| 11 | The new regulations will be _____ for small businesses to cope with.
1) easy 2) baffling 3) abstract 4) burdensome |
| 12 | I was completely _____ after a workout.
1) exhausted 2) happy 3) elated 4) cut off |

Directions (Question 13 to 16). In these questions, out of the four alternatives, choose the one which can be substituted for the given words/sentences.

- | | |
|----|---|
| 13 | An act of renouncing the throne
1) dethrone 2) defeat 3) exile 4) abdication |
| 14 | A story, a picture, or a poem that can be interpreted to reveal a hidden meaning, typically a moral or political one.
1) allegory 2) sonnet 3) limerick 4) elegy |
| 15 | The arrangement of events or dates in the order of their occurrence.
1) procedure 2) listwise 3) chronology 4) serially |
| 16 | An imaginary ideal society free of poverty and suffering.
1) civilization 2) region 3) settlement 4) Utopia |

Directions (Question 17 to 18). Find the correctly spelt word out of the four alternatives

- | | |
|----|---|
| 17 | 1) acomodation 2) accomodation 3) accommodation 4) accomodasion |
| 18 | 1) embarrassed 2) embarassed 3) embarrased 4) embarased |

Directions (Question 19 to 23) four alternatives are given for the idiom/phrase in italics in the sentence. Choose the one which best expresses the meaning of the idiom/phrase

- | | |
|----|--|
| 19 | They don't talk about Harvard anymore, turns out he was <i>the black sheep</i> for the family.
1) sheep black in colour 2) being a coward 3) being a disgrace for the family 4) being obstinate |
| 20 | My pet dog is <i>down for the count</i> after swimming in the pool.
1) tired 2) playful 3) lazy 4) excited |
| 21 | I hope you <i>break a leg</i> at your interview tomorrow.
1) encourage someone 2) break one's leg 3) saying good luck to someone 4) give a push |
| 22 | She asked me to have dinner with her, but I had a task on hand so I said, <i>rain check</i> .
1) cancel a plan 2) decide on a plan 3) postpone a plan 4) adhere to a plan |
| 23 | Everyone took hours to decode the password but Ajay did it <i>like a cakewalk</i> .
1) simple task 2) fast work 3) good work 4) easy task |

Directions (Question 24 to 27). In these questions, out of the four alternatives, choose the one which is opposite to the meaning of the given word.

24	never 1) frequently 2) always 3) often 4) sometimes
25	gallant 1) coward 2) proud 3) ungentlemanly 4) silly
26	conscientious 1) negligent 2) observant 3) mindful 4) incapable
27	annoy 1) irritate 2) irk 3) ruffle 4) satisfy

Directions (Question 28 to 29). a part in the following sentences is underlined, which may or may not be correct. Improve the sentence by choosing one of the options. If no improvement is possible choose the option accordingly.

28	He waded <u>through</u> the rivulet to reach the other part of the forest. 1) into 2) from 3) no improvement 4) across
29	The bird sat <u>atop</u> the oak tree. 1) on 2) from 3) no improvement 4) in

Directions (Question 30 to 32). Reorder P, Q, R, S to make meaningful sentences.

30	Students P: must write Q: in the end of the letter R: to the editor S: a few suggestions 1) PSRQ 2) QSPR 3) QPRS 4) PSQR
31	The Hornbill is P: Naga festivities Q: often displayed on the R: traditional tribal headgears S: worn during 1) QRSP 2) PQRS 3) PSRQ 4) RQPS
32	Each one P: is a step towards Q: eradication R: of illiteracy S: teach one 1) PQRS 2) SPQR 3) SQPR 4) RSPQ

Directions (Question 33 to 40). In these questions, you have two brief passages with four questions following each passage. Read the passage carefully and choose the best answer out of the four alternatives

PASSAGE – 1

Another favourite combination with power food takers is yoghurt and bananas. This makes for a perfect snack after a rough game of football. Exercising burns sugar and thus lowers glucose levels. Yoghurt is packed with proteins that help preserve muscle mass, and bananas are packed with carbohydrates that help in refueling energy and preventing muscle soreness. A quick and easy recipe with bananas is a banana smoothie topped with cool yoghurt..

33	What makes for a perfect snack? 1) Yoghurt 2) Banana and yoghurt 3) Smoothie 4) Cool yoghurt
34	Exercising 1) lowers blood levels 2) burns sugar 3) makes you pant for breath 4) makes you hungry
35	Yoghurt is a good source of 1) carbohydrates 2) glucose 3) proteins 4) minerals
36	Bananas help in 1) replenishing the energy 2) depleting energy 3) developing muscles 4) refuelling energy

PASSAGE – 2

A chimpanzee is one of the great apes and the nearest in intelligence to man. Chimpanzees exhibit great concern for each other. When chimpanzees meet after having been apart they greet each other in a very human way by touching each other or even clasping hands. Chimpanzees have amazing social discipline. When a dominant male arrives, the rest of the chimpanzees hurry to pay respect to it. The members of a party also spend considerable amount of time grooming each other and themselves. Mothers go through the fur of their babies for any foreign particles, dirt, and ticks and they aid each other when they are injured.

37	A _____ is one of the great apes. 1) orangutan 2) gorilla 3) Monkey 4) Chimpanzee
38	Chimpanzees have amazing 1) social skills 2) intelligence 3) social discipline 4) grooming skills
39	How are the baby chimps groomed?

	1) The fathers go through the furs of the babies for any foreign particles or dirt. 2) The mothers go through the furs of the babies for any foreign particles . 3) The mothers go through the furs of the babies for any foreign particles , dirt or ticks. 4) The fathers go through the furs of the babies for any foreign particles or dirt.
40	Chimpanzees greet each other 1) folding hands 2) joining hands 3) waving to each other 4) by touching each other or even clasping hands.

SECTION – MATHEMATICS

41	In a school, there are 1000 students in the year 1999. The number of students increased by 20 % in the year 2000. It further increased by 15 % in the year 2001 and then decreased by 20% in 2002. The number of students in 2002 is 1) 1004 2) 1100 3) 1104 4) 1105
42	The value of $\frac{(2.39)^2 - (1.61)^2}{2.39 - 1.61}$ is 1) 2 2) 4 3) 6 4) 8
43	What decimal of an hour is a second? 1) 0.0025 2) 0.00027 3) 0.0256 4) 0.000126
44	Which of the following is a correct statement? 1) Every prime number is odd. 2) Every even number is composite 3) The sum of two odd numbers is always odd 4) The HCF of two numbers is a factor of their LCM
45	The HCF of the smallest prime and the smallest composite number is 1) 1 2) 2 3) 3 4) 4
46	If the eight-digit number 1965y785 is divisible by 15, the least value of y is 1) 2 2) 4 3) 6 4) 1
47	If one zero of the polynomial $x^2 - 4x + 1$ is $2 - \sqrt{3}$, the other zero is 1) $2 + \sqrt{3}$ 2) $2 - \sqrt{3}$ 3) $\sqrt{3} - 2$ 4) $\sqrt{3} - 2$.
48	If α and β are the zeroes of $f(x) = 2x^2 + 8x - 8$, then which of the following is true? 1) $\alpha + \beta + \alpha\beta = 0$ 2) $\alpha + \beta = \alpha\beta$ 3) $\alpha + \beta > \alpha\beta$ 4) $\alpha + \beta < \alpha\beta$
49	The value of k for which the pair of equations $2x + ky = 8$ and $3x + y = 6$ has no solution is 1) -2 2) 2 3) $\frac{3}{2}$ 4) $\frac{2}{3}$
50	The solution of $8^{x+y} = 512$ and $512^{x-y} = 8$ is 1) $x = \frac{4}{3}, y = \frac{5}{3}$ 2) $x = \frac{5}{3}, y = \frac{4}{3}$ 3) $x = \frac{-5}{3}, y = \frac{4}{3}$ 4) None of these
51	Two friends Arun and Amit have a certain number of marbles each. Arun tells Amit "If you give me 10 of your marbles, I will have twice the number of marbles left with you." To this Amit replies "If you give me 10 of your marbles, I will have the same number of marbles as you will have." The number of marbles with Arun and Amit respectively are

	1) 20, 30	2) 50, 70	3) 70, 50	4) 30, 20
52	The difference between 42% of a number and 28% of the same number is 210. Then, 59% of the number is			
	1) 700	2) 775	3) 785	4) 885
53	Instead of multiplying a number by 7, the number is divided by 7. The approximate percentage of error is			
	1) 92%	2) 94%	3) 96%	4) 98%
54	The price of sugar increases by 20%. By what percentage should a lady reduce the consumption of sugar so that she does not have to incur extra expenditure on it.			
	1) 15%	2) 20%	3) 16.66%	4) 16.75%
55	A sum of money is to be distributed among four friends A, B, C and D in the ratio 5 : 2 : 4 : 3. If C gets Rs 1000 more than D, then B's share is			
	1) Rs 1000	2) Rs 2000	3) Rs 3000	4) Rs 5000
56	If $\frac{7m+2n}{7m-2n} = \frac{5}{3}$, then $\frac{m}{n}$ is equal to			
	1) $\frac{7}{8}$	2) $\frac{-7}{8}$	3) $\frac{8}{7}$	4) $\frac{-8}{7}$
57	In a mixture of 60 Litres, the ratio of milk to water is 2 : 1. If this ratio is to be 1 : 2, then the quantity of water to be added is			
	1) 20 L	2) 30 L	3) 40 L	4) 60 L
58	The sum and the product of the zeroes of the polynomial $6x^2 - 5$ respectively are			
	1) 0 and $\frac{-6}{5}$	2) 0 and $\frac{6}{5}$	3) 0 and $\frac{5}{6}$	4) 0 and $\frac{-5}{6}$
59	The sum of a two-digit number and the number obtained by reversing the order of the digits is 99. If the digits of the number differ by 3, then the number is			
	1) 63	2) 85	3) 72	4) 52
60	A shopkeeper sells a toy for Rs 24 and gains as much percent as the cost price of the toy. The amount for which the shopkeeper bought the toy is			
	1) Rs 10	2) Rs 20	3) Rs 40	4) Rs 60
61	The solution(s) of $\sqrt{6x+7} - (2x-7) = 0$ is/are			
	1) $7, \frac{3}{2}$	2) $3, \frac{7}{2}$	3) $\frac{5}{2}, 4$	4) $0, \frac{-1}{2}$
62	The roots of the quadratic equation $25x^2 + 20x + 7 = 0$ are			
	1) Real and equal	2) Real and distinct	3) Real roots	4) Imaginary roots
63	A and B can together complete a piece of work in 6 days. A takes 5 days less than B to complete the work alone. The number of days B takes to complete the work alone is			

	1) 6	2) 9	3) 12	4) 15
64	The sum of the squares of three consecutive integers is 110. Then, the smallest positive integer among them is			
	1) 4	2) 5	3) 6	4) 7
65	If the points $(p, 0)$, $(0, q)$ and $(1, 1)$ are collinear, then $\frac{1}{p} + \frac{1}{q}$ equals			
	1) 0	2) -1	3) 1	4) 2
66	OPQR is a rectangle such that O is the origin and the coordinates of P and Q are $(0, 3)$ and $(-5, 3)$ respectively. Then the length of its diagonal is			
	1) 5 units	2) 3 units	3) $\sqrt{34}$ units	4) $\sqrt{29}$ units
67	The coordinates of the centre of a circle and one end of a diameter are $(\frac{4}{3}, -2)$ and $(3, 2)$ respectively. The coordinates of the other end of the diameter are			
	1) $(\frac{1}{3}, 6)$	2) $(6, \frac{-1}{3})$	3) $(\frac{-1}{3}, -6)$	4) $(\frac{1}{3}, -6)$
68	The point $(\frac{23}{5}, y)$ divides the join of the points $(5, 7)$ and $(4, 5)$ in the ratio 2 : 3 internally. Then y is equal to			
	1) $\frac{24}{5}$	2) $\frac{31}{5}$	3) $\frac{33}{5}$	4) $\frac{27}{5}$
69	The value of $\tan 1^\circ \tan 2^\circ \tan 3^\circ \dots \tan 89^\circ$ is			
	1) 0	2) 1	3) -1	4) $\frac{1}{\sqrt{2}}$
70	If $\sin x + \operatorname{cosec} x = 2$, then $\sin^{15} x + \operatorname{cosec}^{16} x$ is equal to			
	1) 2^{10}	2) 2^{20}	3) 2^{30}	4) 2
71	If A, B and C are the interior angles of a triangle, then $\cos(\frac{B+C}{2})$ is equal to			
	1) $\sin \frac{A}{2}$	2) $\cos \frac{A}{2}$	3) $-\sin \frac{A}{2}$	4) $\tan \frac{A}{2}$
72	At a certain time of the day, it is observed that the ratio of the lengths of the shadow of a pole to the length of the pole is $\sqrt{3}:1$. The sun's altitude at this time is			
	1) 30°	2) 45°	3) 60°	4) 90°
73	The angles of elevation of the top of a tower, from two points on the ground, at distances of x m and y m from its foot are complementary. Then the height of the tower is			
	1) xy m	2) $x^2 y^2$ m	3) \sqrt{xy} m	4) $\frac{x}{y}$ m
74	How many litres of oil at Rs 40 per litre should be mixed with 240 litres of a second variety of oil costing Rs 60 per litre so as to get a mixture whose cost is Rs 52 per litre?			
	1) 110 L	2) 120 L	3) 160 L	4) 180 L
75	A man sold two chairs for Rs 1200 each. On one he gained 20% and on the other he lost 20%. His total gain/loss on the whole deal is			
	1) 1% loss	2) 2% loss	3) 4% loss	4) 15% gain

76	A dress marked at Rs 2000 is sold with two successive discounts of 20 % and 10 % respectively. Also, an additional discount of 5 % is given for payment by cash. If a Meera pays for the dress by cash, the amount to be paid by her is					
	1) Rs 1368		2) Rs 1386		3) Rs 1468	
					4) Rs 1668	
77	If the radius of a circle is 7 cm, the perimeter of the semicircle is					
	1) 7 cm		2) 14 cm		3) 36 cm	
					4) 42 cm	
78	A wire is in the form of a circle of radius 7 cm. It is bent into a square. The area of the square is					
	1) 11 cm ²		2) 121 cm ²		3) 154 cm ²	
					4) 169 cm ²	
79	A hollow cube of edge 22 cm is filled with identical marbles of radii 0.25 cm. If one-eighth of the space in the cube remains unfilled, then the number of marbles in the cube are					
	1) 142296		2) 142396		3) 142496	
					4) 142596	
80	The volumes of two spheres are in the ratio 64 : 27. Then the ratio of their surface areas is					
	1) 3 : 4		2) 4 : 3		3) 9 : 16	
					4) 16 : 9	
81	What is the area swept by the minute hand of a clock whose length is 12 cm between 11:15 am and 11:50 am?					
	1) 260 cm ²		2) 264 cm ²		3) 280 cm ²	
					4) 284 cm ²	
82	A cylinder, a cone and a sphere have the same height and radius. What is the ratio of their volumes (in the same order)					
	1) 1 : 2 : 3		2) 2 : 3 : 1		3) 3 : 2 : 1	
					4) 3 : 1 : 2	
83	When two dice are thrown, the probability of getting a sum of 7 on the dice is					
	1) $\frac{1}{2}$		2) $\frac{1}{5}$		3) $\frac{1}{6}$	
					4) $\frac{3}{4}$	
84	The probability of having 53 Wednesdays in a leap year is					
	1) $\frac{1}{7}$		2) $\frac{2}{7}$		3) $\frac{3}{7}$	
					4) 1	
85	The probability that two friends Asha and Kiran have their birthdays falling on the same date in a year is					
	1) 0		2) 1		3) $\frac{1}{365}$	
					4) $(\frac{1}{365})^2$	
86	If the difference between the mode and the median of a given data is 36, then the difference between the median and the mean of the data is					
	1) 12		2) 16		3) 18	
					4) 20	
87	The value of x for which the mode of the following data is 67 is					
	Class Interval		40 – 50	50 – 60	60 – 70	70 – 80
	Frequency		5	x	15	12
						7

	1) 7	2) 8	3) 9	4) 10
88	One card is drawn from a well-shuffled pack of 52 playing cards. The probability that the card drawn is not a face card is			
	1) $\frac{2}{13}$	2) $\frac{5}{13}$	3) $\frac{3}{13}$	4) $\frac{10}{13}$
89	The perimeter of two similar triangles ABC and PQR, such that $\Delta ABC \sim \Delta PQR$, are 48 cm and 36 cm respectively. Then, the ratio of the areas of ΔABC and ΔPQR is			
	1) 4 : 3	2) 3 : 4	3) 9 : 16	4) 16 : 9
90	Which term of the arithmetic progression 5, 15, 25,..... is 140 more than its 31 st term?			
	1) 40	2) 45	3) 50	4) 55
91	The number of three-digit numbers divisible by 8 are			
	1) 110	2) 112	3) 114	4) 116
92	PA and PB are tangents drawn from an external point P to circle such that PA is 10 cm and $\angle APB = 60^\circ$. Then the length of the chord AB is			
	1) 5 cm	2) 10 cm	3) 15 cm	4) 20 cm
93	Find the smallest number which when divided by 25, 40 and 60 leaves remainder 7 in each case			
	1) 607	2) 608	3) 609	4) 610
94	ABCD is a quadrilateral circumscribing a circle with centre O. If $\angle AOD = 75^\circ$, measure of $\angle BOC$ is			
	1) 75°	2) 85°	3) 95°	4) 105°
95	From a point on the ground, Ravi observes that the angle of elevation of an aeroplane flying at a constant height of $3000\sqrt{3}$ m is 60° . After 30 seconds, he observes that the angle of elevation has changed to 30° . At what speed is the aeroplane flying?			
	1) 100 m/s	2) 200 m/s	3) 3000 m/s	4) 1500 m/s
96	In an agricultural field, a cylindrical pipe of diameter 14 cm is used to irrigate a rectangular patch of land whose dimensions are 50 m by 44 m. If the water flows through the pipe at the rate of 5 km /hr, how much time will it take to get 7 cm of standing water in the field?			
	1) 1 hr	2) 2 hrs	3) 3 hrs	4) 30 min
97	The value of $\frac{\cos^3\theta + \sin^3\theta}{\cos\theta + \sin\theta} + \frac{\cos^3\theta - \sin^3\theta}{\cos\theta - \sin\theta}$ is			
	1) 0	2) 1	3) 2	4) -1
98	The mean of the first n natural numbers is 15. Then n is equal to			
	1) 29	2) 30	3) 31	4) 32
99	A toy is in the form of a hemisphere surmounted by a cone. The height of the conical part is 4 cm and its radius is 3 cm. Then, the total surface area of the toy is			
	1) 15π	2) 18π	3) 32π	4) 33π
100	AP and AQ are tangents drawn from an external point A to a circle with centre O. At a point R on the minor arc PQ, a tangent is drawn so as to meet AP at C and AQ at B. If AP = 15 cm, the			

	perimeter of the ΔABC is 1) 15 cm 2) 20 cm 3) 25 cm 4) 30 cm												
101	The number of polynomials that can be formed with -2 and 5 as its zeroes are 1) 0 2) 1 3) 2 4) Infinite												
102	If one zero of the polynomial $(a^2 + 9)x^2 + 13x + 6a$ is the reciprocal of the other, the value of a is 1) 1 2) 2 3) 3 4) 4												
103	A fraction becomes $\frac{4}{5}$ when 1 is added to each of the numerator and denominator. If, however, 5 is subtracted from each of them, the fraction becomes $\frac{1}{2}$. The numerator of the original fraction is 1) 4 2) 6 3) 7 4) 9												
104	In the following table, the sum of the lower limits of the median class and the modal class is <table border="1" style="margin-left: auto; margin-right: auto;"> <tbody> <tr> <td>Class Interval</td> <td>0 - 20</td> <td>20 - 40</td> <td>40 - 60</td> <td>60 - 80</td> <td>80 - 100</td> </tr> <tr> <td>Frequency</td> <td>8</td> <td>10</td> <td>13</td> <td>6</td> <td>3</td> </tr> </tbody> </table> 1) 60 2) 80 3) 100 4) 140	Class Interval	0 - 20	20 - 40	40 - 60	60 - 80	80 - 100	Frequency	8	10	13	6	3
Class Interval	0 - 20	20 - 40	40 - 60	60 - 80	80 - 100								
Frequency	8	10	13	6	3								
105	A milk vendor has 23 litres of goats' milk, 69 litres of buffaloes' milk and 92 litres of cows' milk. If he wants to pack them in cans so that each can contains same litres of milk and does not want to mix any two kinds of milk in a can, then the least number of cans required is 1) 6 2) 7 3) 8 4) 9												
106	If the sum of the first 16 terms of an arithmetic progression is 1360 and first term is 10, then its 25 th term is 1) 240 2) 250 3) 260 4) 300												
107	Three circular pieces of cardboard, each of radius 3.5 cm, are placed on a table in such a way that each of them touches the other two. The area of the table enclosed between these three circles is ($\sqrt{3} = 1.73$) 1) 1.94 cm ² 2) 19.25 cm ² 3) 19.4 cm ² 4) 21.19 cm ²												
108	The areas of two similar triangles are 121 cm ² and 64 cm ² respectively. If the median of the first triangle is 12.1 cm, then the corresponding median of the second triangle is 1) 8 2) 11 3) 8.8 4) 12.1												
109	In a parallelogram ABCD, points P and Q are on the sides AB and CD such that AP : PB = 3 : 2 and CQ : QD = 4 : 1. If PQ meets AC at R, AR : AC is equal to 1) 3 : 7 2) 4 : 7 3) 2 : 3 4) 3 : 4												
110	If $(x + 1)$ and $(x - 2)$ are factors of $x^3 + (a + 1)x^2 - (b - 2)x - 6$, the values of a and b respectively are 1) 1, 7 2) -1, -7 3) 1, -7 4) 7, -1												
111	A car covers a distance of 390 km with certain speed. If the speed had been 4 km/hr more, it												

	would have taken 2 hours less to cover the same distance. The original speed of the car is 1) 20 km/hr 2) 26 km/hr 3) 30 km/hr 4) 32 km/hr
112	The cross section of a railway tunnel is in the shape of a square surmounted by a semicircle. If the height of the cross section at the centre is 10.5 m and the length of the tunnel is 50 m, the cost of plastering the internal surface of the tunnel at the rate of Rs 10 per m ² is 1) Rs 11000 2) Rs 11500 3) Rs 12000 4) Rs 12500
113	The reflection of the point (4,-7) about the origin is 1) (4,7) 2) (-4,7) 3) (4,-7) 4) (-4,-7)
114	The coordinates of the centroid of a triangle PQR are (2, -5). If the coordinates of Q and R are (-6, 5) and (11, 8) respectively, the coordinates of P are 1) (7,8) 2) (-1,28) 3) (1,-28) 4) (-7,8)
115	Sindhi Sweet Shop was placing an order for cardboard boxes for packing their sweets. They decided to order 250 boxes each of two different sizes. The larger box was to measure 25 cm x 20 cm x 5 cm and the smaller one, 15 cm x 12 cm x 5 cm. If, for all the overlaps, 5% of the total surface area is required and the cost of cardboard is Rs 40 per m ² , the cost incurred by the sweet shop to procure the boxes 1) Rs 2000 2) Rs 2184 3) Rs 2250 4) Rs 3000
116	What is the common difference of four terms in an AP such that the ratio of the product of first and fourth terms to that of the second and the third is 2 : 3 and the sum of all the four terms is 20? 1) 3 2) 1 3) 4 4) 2
117	Find the area of a segment of a circle of radius 21 cm, if the arc of the segment has a measure of 60°. ($\sqrt{3} = 1.73$) 1) 45.27 cm ² 2) 41.6 cm ² 3) 40.26 cm ² 4) None of these
118	If a and b are the zeroes of the polynomial px^2-5x+q , then the values of p and q, if $a+b=ab=10$, are 1) 5 and $\frac{1}{2}$ 2) 5 and 2 3) $\frac{1}{2}$ and 5 4) 10 and 1
119	The radius of the cycle wheel is 14cm. The distance covered by the wheel in 50 rotations is 1) 88 cm 2) 2200 cm 3) 440 cm 4) 4400 cm
120	If the mean of x and $\frac{1}{x}$ is M, then the mean of x^3 and $\frac{1}{x^3}$ is 1) $M = \frac{M^2 - 3}{2}$ 2) $M(4M^2 - 3)$ 3) M^3 4) $M^3 + 3$

SECTION – SOCIAL STUDIES

121	The custom of BEGAR in pre-independence era refers to- (1) Entire family working in the same field at the same time (2) Working in fields of landlords without any wages. (3) Allowing use of wells turn by turn (4) Having a fix ratio of crops among different villages decided by sarpanchs
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122	Indians were agitating against the Rowlatt Act because- (1) Because it denied Indians' right to protest against the British government (2) It gave powers to detain political prisoners without trial for two years. (3) It was enacted without representation of any Indian in British ruled India (4) (2) & (3)
123	Fossil fuel is an example of (1) Non-renewable resource (2) Biotic resource (3) Renewable resource (4) National resource
124	Cereals and pulses grow well in – (1) Black soil (2) Laterite soil (3) Alluvial soil (4) Arid soil
125	What percent of their deposits do banks hold as cash- (1) 50 percent (2) 15 percent (3) 80 percent (4) 35 percent
126	Modern form of money includes- (1) Paper notes, coins and bank deposits (2) Dollars and Rupees (3) Paper notes, coins and gold bonds (4) Coins
127	Which of the following is missing from a non-democratic government- (1) Economic equality (2) Economic growth (3) Transparency (4) Welfare of public
128	The demand of Purna Swaraj (Complete independence) was formalised during which session of the Indian National Congress- (1) Belgaum session of 1924 (2) Calcutta session of 1928 (3) Lahore Session of 1929 (4) Karachi session of 1931
129	The Salt March (Dandi March) marked the beginning of the- (1) Attack on traders of British goods (2) Boycott of civil services by Indians (3) Agitation of the farmers of the United Province (4) Civil Disobedience movement
130	The major cause of land degradation in Punjab is – (1) Intensive Cultivation (2) Deforestation (3) Over grazing (4) Over irrigation
131	The major coffee producing state in our country is – (1) Karnataka (2) Telangana (3) Gujarat (4) Maharashtra
132	What do you understand by 'Collateral' – (1) It is the guarantee given by the lender to the borrower (2) It is the total sum of money with a person (3) It is the security to the lender until the loan is repaid (4) It is the money a person receives through his provident fund
133	In which of the following terms democracies differ from one another- (1) Social situation (2) Culture (3) Economic activities (4) All the above
134	Medium of exchange is called as- (1) Wealth (2) GDP (3) Money (4) Income
135	Who was the head of Oudh Kisan Sabha- (1) Ashfaqullah (2) Jawaharlal Nehru (3) Kunwar Singh (4) Bijli Passi
136	_____ was the female allegory which represented the peoples nation in France- (1) Marianne (2) Germania (3) Bharat Mata (4) Monalisa
137	The purpose of Bhoodan was to- (1) To free the landless farmers of the debt (2) Distribute land among landless farmers (3) To educate the farmers about the use of organic pesticides (4) To bring irrigation facilities to the fields in the arid land
138	What is main source of income of banks- (1) Interest on loans (2) Selling of collaterals of the loan defaulters (3) Interest earned on investments (4) Difference between the interests charged on borrowers and depositor

139	The process of rapid integration or interconnection between countries is called as- (1) Globalisation (2) Liberalisation (3) MNCs (4) Privatisations
140	Which of the following is NOT TRUE with reference to democracy- (1) Democratic government is a legitimate government. (2) Democratic government take decisions very fast (3) Democratic government is accountable government (4) Decision making in democracies is based on norms and procedures
141	The act of union between _____ and _____ resulted in the formation of the United Kingdom of the Great Britain- (1) Russia and England (2) England and Prussia (3) England and Scotland (4) England and France
142	Who played the key role in unifying Germany- (1) Kaiser William –I (2) Metternich (3) Adolph Hitler (4) Otto Von Bismarck
143	Kandla and Ramagundam are in the states of _____ and _____ respectively- (1) Maharashtra- Gujarat (2) Gujarat- Telangana (3) Gujarat- Andhra Pradesh (4) Telangana- Gujarat
144	Crops that are grown with the onset of monsoon are- (1) Kharif crops (2) Rabi crops (3) Zaid crops (4) Zaid and Rabi crops
145	The main aim to form 'World Trade Organisation (WTO)' was to – (1) To promote the trade of rich countries (2) To liberalise international trade (3) To promote the trade of poor countries (4) To promote the trade of poor countries
146	Special Economic Zones (SEZs) have been set up to attract- (1) Foreign investments (2) Trade of foreign goods in international market (3) Foreign policies (4) Tourism industry
147	Which of the following is NOT A FEATURE of federalism- (1) There are two or more levels of government (2) Different tiers of government govern the same citizens (3) The central government can order the state government (4) Sources of revenue for each level of government are clearly specified
148	Jacobin Clubs were spreading the idea of - (1) Awareness against epidemics (2) Inspiring the youth to join military services (3) Values of sports among the youth (4) Nationalism
149	The main cause of farmers' suicide in our country is- (1) Their land is forcibly grabbed by the businessmen for industrial activities (2) Village landlords are not permitting them to switch over from agriculture to any other occupation (3) They are unable to afford high prices of fertilizers, electricity and irrigation water (4) Their inability to repay loans due to crop failure
150	Who remarked – <u>When France sneezes, the rest of Europe catches cold</u> (1) Napoleon (2) Metternich (3) Hitler (4) Winston Churchill