DEV LULLA SIR'S

Lulla Classes

OM SAI RAM
|| ओम साई ||

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SCHOLARSHIP CUM ADMISSION TEST

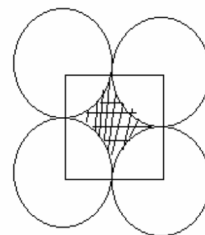**LSAT MOVING TO STD 8**   **Time 1 hrs Marks : 150**

General Instructions

1. This booklet consists of 50 questions. Time allowed will be 60 minutes
2. The answer sheet, OMR, is provided separately. DO NOT tamper with/ Mutilate the OMR or the booklet
3. Submit OMR sheet when asked for by the invigilator. Write all the details which are requested for in capital letters.
4. Side spaces of the question paper booklet may be used for rough work.
5. Marking System: The total test is of 150 marks. +3 marks will be awarded for every correct answer and -1 will be awarded for every incorrect answer.

ANSWER THE BELOW GIVEN QUESTIONS ON THE OMR SHEET ONLY

1. $\dfrac{17}{0}$ is -----------.

   (a) a counting number (b) a whole number (c) a rational number (d) none of these

2. 874000000 can be written in scientific notation as -----------.

   $(a)\ 8.74 \times 10^7$ $(b)\ 8.74 \times 10^8$ $(c)\ 87.4 \times 10^7$ $(d)\ 87^4 \times 10^6$

3. $\sqrt[3]{(2.54 + a)^3}$ = ----------- if $a = 0.46$

   $(a)\ 1$ $(b)\ 2$ $(c)\ 3$ $(d)\ 0$

4. If E stands for an even number and O stands for an odd number, decide
   $2O^3 + E^3$ is ---------- number.

   (a) even (b) odd (c) special (d) none

5. If $(a + b)^3 = 729$ and $(a - b)^2 = 25$ then ---------- are values of a and b.

   (a) 2, 7 (b) 1, 8 (c) 8, 1 (d) 7, 2

6. $x = 5$ and $y = 7$ are line parallel to -------- and ---------- axis respectively in a graph.

   $(a)\ X - $ axis , Y- axis (b) Origin on X- aixs (c) Y – axis, X – axis (d) On Y- axis, origin.

7. -------------- is mean of first six multiples of 5.

   (a) 16.5 (b) 15.5 (c) 17.5 (d) 16

8. Rahul notes the time when his bus has been coming for the last 11 days.

8 : 52 am	8 : 48 am	8 : 48 am	8.59 am
8 : 53 am	8 : 49 am	8 : 47 am	8.46 am
8 : 58 am	8 : 57 am	8 : 51 am	

   If Rahul reaches his bus stop at 8 : 55, what is probability that he has missed the bus ?

   $(a)\ \dfrac{6}{11}$ $(b)\ \dfrac{8}{11}$ $(c)\ \dfrac{10}{11}$ $(d)\ \dfrac{12}{11}$

9. If $x5y4z$ is exactly divisible by 9, then the least value of $x + y + z$ is ---------.

   (a) True statemen (b) Answer is 9 (c) False statement (d) None

10. A circular were of radius 42 cm is cut and bent in form of a rectangle whose sides are in ratio of 6:5. ----------------- is smaller side of rectangle.

    (a) 60 cm (b) 80 cm (c) 100cm (d) 40 cm

11. If a figure when rotated through $120°$, $240°$ and $360°$ such that it fits exactly onto inself each time , then it has a rotational symmetry of order ----------.
   (a) One (b) Two (c) Three (d) Four

12. $\left|\left[\left\{(2)^{-1}\right\}^{-2}\right]\right|$ = ----------.
   (a) 0 (b) 1 (c) 4 (d) $\frac{1}{4}$

13. ------- is degree of polynomial [$\left| x^5 y^7 - x^4 y^8 - x^2 y^3 - 3x \right|$
   (a) 0 (b) 5 (c) 12 (d) 6

14. If P = -2 then ----------- is value of $\left(- 2p^3 3p^2 + 4p + 7\right)$
   (a) 3 (b) -3 (c) 2 (d) 2

15. Diameter of a coin is 1 cm. If four of these coins be placed on a table so that rim of each touches that of other two, is area of unoccupied space between them . $(\pi = 3.14)$
   (a) 0.115 cm^2 (b) 0.215 cm^2 (c) 0.315 cm^2 (d) 0.015 cm^2

16. Angles of a Quadrilateral are in ratio 1 : 2 : 3 : 4. --------- type of Quadrilateral is formed.
   (a) Parallelogram (b) Trapezium (c) Rhombus (d) Square

17. 9 men working 6 hours a day earn Rs.9,450 per week. ---------- Will be the earning per week of 6 men working 8 hours a day.
   (a) 8200 Rs. (b) 8400 Rs. (c) 8100 Rs (d) 8300 Rs.

18. Rinku's weight is 30% that of Meenu's weight and 45% that of Cheenu's. What percentage of Cheenu's weight is Meenu's weight.
   (a) 50% (b) 100% (c) 120% (d) 150%

19. Solution of equation $\dfrac{x - 2a}{2} = 0$ is
   (a) $x = 2a - 2$ (b) $x = 2a + 2$ (c) $x = 2a$ (d) $x = -2a$

20. A banana costs 6 Rs. and an apple costs 5 Rs. How many apples and bananas can be purchased for a total of 32 Rs. ?
   (a) 3 and 2 (b) 3 and 4 (c) 1 and 2 (d) 2 and 4

21. Penicillin was discovered by
   (a) Alexander Fleming (b) Albert Einstein (c) Archimedes (d) Aryabhatta

22. The member of bones in human skeleton as
   (a) 200 (b) 206 (c) 212 (d) 218

23. Unit of current is
   (a) Ohm (b) Watt (c) Ampere (d) Volt

24. The currency of Indonesia is -------------.
   (a) Rupian (b) Dinar (c) Ringet (d) Riyal

25. There are ---------- member of SAARC
   (a) 5 (b) 6 (c) 7 (d) 8

26. A wire twisted many times in the form of circles is called –
   (a) Coil (b) Fuse (c) Electromagnet (d) Circuit

27. A fuse wire is made up of alloy -
   (a) Nichrome (b) Tin-lead (c) Manganin (d) Constantan

28. Match the two columns & select the correct option -

Column I	Column II
(a) Electromagnet	(i) Volt
(b) Electric iron	(ii) Solenoid
(c) Potential difference	(iii) Joule heating

   (a) a (i), b (iii), c (ii) (b) a (ii), b (i), c (iii) (c) a (ii), b (iii), c (i) (d) a (i), b (ii), c (iii)

29. When a person moves closer to a plane mirror, the size of his image in the mirror -

(a)Increases (b)Remains same (c)Decreases (d)First increases, then decreases

30. The image of teeth seen by dentist while testing teeth is -
(a)Erect & real (b)Erect & virtual (c)Inverted & virtual (d)Inverted & real

31. Mercury is used as a thermometer substance because -
(a)It is very costly (b)It expands less than glass (c)It does not wet the wall of glass tube (d)None

32. Raghav categorized the following household items into acids & bases -
        Acids   Bases
(1) Lemon   (4) Baking soda
(2) Antacid   (5) Vinegar
(3) Tea   (6) Curd
Which of them are placed under wrong category.
(a)3 & 5 (b)2 & 6 (c)3, 4 & 5 (d)2, 5 & 6

33. Which of the following changes caused by heat is irreversible –
(a)Change in size & temp. (b)Change in state (c)Change in colour (d)Change in substance

34. What happens during a cyclone -
(a)Heat is absorbed from the atmosphere
(b)Warm air rises up & causes drop in the pressure
(c)Cool air, being heavier settle down with increase pressure.
(d)How speed wind revolve around the high pressure system.

35. How atmosphere pressure exists on the earth in which of the following latitudes ?
(a)At the equator (b)At $30°$ N and S (c)At the poles (d)At the equator & at $60°$ N and S

36. Which of the following does not happen, when we breathe in ?
(a)Air rushes into lungs (b)Our ribs are raised
(c)Our diaphragm is relaxed & raised (d)The volume of our chest increases.

37. Pulmonary --------- carries ----------- rich blood from heart to the lungs & pulmonary --------- carries ----- rich blood from the lungs to the heart.
(a)Vein, CO_2, Artery, O_2 (b)Vein, O_2, Artery, CO_2 (c)Artery, CO_2, Vein , O_2 (d)Artery, O_2, Vein, CO_2

38. Germination takes place when the -
(a)Previously dormant embryo is activated
(b)Cotyledons emerge above ground.
(c)Hypocotyl or epicotyl emerges above ground.
(d)Vascular tissue begins the transport of water & minerals.

39. Which vitamins saves us from problem of bleeding gums ?
(a)Vit A (b)Vit B (c)Vit C (d)Vit D

40. Identify the food that is considered to be complete except that it lack fibres.
(a)Maize (b)Mango (c)Milk (d)Methi

Read the passage and answer the following questions no 41 to 45

Software technology will soon replace the routine of singling out and frisking airport passengers based on discretion currently practiced at all airport nationwide. Advanced Passenger Profiling System-developed by National Informatics Centre and installed at IGI's Terminal 3 in March 2014 is a database – driven system that records details of every passenger entering or leaving the country. Based on traveling pattern and profile details of passengers, APIS' built-in algorithm detects and sends alerts to custom officials. Already in place in the United States and several other developed countries, such a passenger profiling system is used as a preventive measure to identify possible threats to airspace. Installed as an anti-smuggling initiative, the system is ultimately expected to act as a counter-terrorist measure. While the records that US maintains for its flyers is exhaustive -50 details for every Passenger, the system that has been installed in Delhi has 20 entries to every passenger such as name, address, passport number and nationality, among others. "The work on compiling the database began around a year ago. Data was collected from airports across India. In APIS we have set certain parameters like origin and destination apart from personal info. Over a period of time we get a pattern of travel from which

we are able to draw some conclusions," said an airport source. The officer explained that particular points in the global airspace are known for being sources of illegal gold trade. In case a passenger to India has made trips to those venues repeatedly and at certain times, the system will issue an alert and inputs will be obtained about that passenger.

The airport source said 100 suspicion alerts on individuals have already been raised and more than 150kgs of illegal gold recovered from some of them. Now customs officials cannot use their discretioinary powers to single out people, which sometime becomes a tricky, ethical question. Corruption, if already happening between smugglers and customs officials colluders in the customs department, will thus be completely weeded out.

41. What inference can be drawn from the passage ?

   (a) APIS system will help minimize smuggling and corruption.

   (b) Custom officials are corrupt and the main reason behind smuggling.

   (c) India is copying USA's technology.

   (d) All of these.

42. What is Advanced Passenger Profiling System ?

   (a) A database driven system   (b) Punch card based system based on entering and exist

   (c) Information Technology   (d) Terrorist detecting system

43. What was the core purpose behind the installation of such a system ?

   (a) Becoming technology friendly.   (b) To find corrupt custom officials.

   (c) To arrest terrorist.   (d) Anti-smuggling initiative

44. Choose the most appropriate synonym of the word DISCRETION.

   (a) Ignorance   (b) Negligence   (c) Judgement   (d) Heedless

45. Choose the most appropriate antonym of the word ETHICAL.

   (a) Moral   (b) Kosher   (c) Virtuous   (d) Dishonest

Pick out the nearest correct meaning of synonym of the words given below :

46. ABODE

   (a) Stop   (b) mountain   (c) plenty   (d) dwelling

Pick out the antonyms of the words given below :

47. INTEGRAL

   (a) Minor   (b) major   (c) essential   (d) independent

Rearrange the following six sentences (A), (B), (C), (D), (E) and (F) in the proper sequence to form a meaningful paragraph; then answer the questions given below them.(Q. 48 – 50)

(A)   We were interested by contrast in understanding what lessons actual teams and non-teams had for others to choose to struggle with change and performance.

(B)   Still, we suspected that most of these focused on persuading readers that ? terms are important?

(C)   After all we thought teams are a well-known subject and there must be a thousand books on the subject already.

(D)   By going down this path we hope to discover something to say that was different from most books on the subject.

(E)   We approached the idea of a book on teams cautiously.

(F)   Alternatively they focused on providing you to advice on building teams as an objective in it self.

48.   Which of the following will be the SECOND sentence ?

   (a) A   (b) B   (c) F   (d) C

49.   Which of the following will be the FIRST sentence ?

   (a) E   (b) A   (c) B   (d) C

50.   Which of the following will be the THIRD sentence ?

   (a) E   (b) C   (c) B   (d) F

Solutions

1.	(d) none of these		26.	(a) Coil
2.	$(b)\ 8.74 \times 10^8$		27.	(c) Manganin
3.	$(c)\ 3$		28.	$(c)\ a\ (ii),\ b\ (iii),\ c\ (i)$
4.	(a) even		29.	(b) Remains same
5.	$(d)\ 7, 2$		30.	(b) Erect & virtual
6.	(c) Y – axis, X – axis		31.	(c) It does not wet the wall of glass tube
7.	$(c)\ 17.5$		32.	$(d)\ 2, 5\ \&\ 6$
8.	$(b)\ \dfrac{8}{11}$		33.	(d) Change in substance
9.	(c) False statement		34.	(b) Warm air rises up & causes drop in the pressure
10.	$(a)\ 60$ cm		35.	(a) At the equator
11.	(c) Three		36.	(c) Our diaphragm is relaxed & raised
12.	$(d)\ 1/4$		37.	(c) Artery, CO_2, Vein, O_2
13.	$(c)\ 12$		38.	(a) Previously dormant embryo is activated
14.	$(a)\ 3$		39.	(c) Vit C
15.	$(b)\ 0.215\ cm^2$		40.	(c) Milk
16.	(b) Trapezium		41.	(A)
17.	$(b)\ 8400$ Rs.		42.	(A)
18.	$(d)\ 150\%$		43.	(D)
19.	$(c)\ x = 2a$		44.	(C)
20.	$(d)\ 2$ and 4		45.	(A)
21.			46.	(D)
22.	$(b)\ 206$		47.	(C)
23.	(c) Ampere		48.	(D)
24.	(a) Rupian		49.	(A)
25.	$(d)\ 8$		50.	(C)