## LEAD TALENT SEARCH EXAM - LTSE 2017 <br> A Project by LEAD Trust, Bangalore. <br> ENTRANCE TEST FOR 10TH STANDARD STUDENTS FOR 2 YEAR RESIDENTIAL PU COACHING AT PARTNER INSTITUTIONS FOR COMPETITIVE LAW / CA / UPSC EXAMS

Selected students qualify for freeships/scholarships for admission into Partner Colleges in Karnataka. The students will be provided extensive coaching for CLAT 2019 (Law) / CPT (Commerce) / IAS / KAS entrance exams.

NAME OF THE STUDENT
NAME OF THE SCHOOL $\qquad$
REGISTRATION NUMBER ( 6 -digit code number in OMR)
TELEPHONE NUMBER (as mentioned in the application form): $\qquad$
EMAIL ID (as mentioned in the application form) : $\qquad$

## INSTRUCTIONS TO THE CANDIDATE:

1. This question paper consists of $\mathbf{4}$ sections.

- Section I Logical Reasoning - 20 questions
- Section II General Knowledge - 20 questions
- Section III English - 20 questions
- Section IV Numerical Ability - 20 questions

2. Each question contains four alternatives out of which only ONE is correct.
3. Indicate your answers ONLY on the OMR sheet.
4. NEGATIVE MARKING: Each correct answer will be awarded one mark, $1 / 4$ marks will be deducted for each incorrect answer. More than one answer marked against a question will be deemed as an incorrect response and will be negatively marked.
5. Use of Calculators, Smartphones and Electronic devices is NOT allowed.

| PROCEDURE OF FILLING UP THE ANSWERS IN OMR SHEET |  |  |  |
| :---: | :---: | :---: | :---: |
| Wrong Filli |  | Right Filling |  |
| (4) (8) (0) | Tick mark | (A) (c) © | Fully darken with HB Pencil |
| (a) $\times$ ( ${ }^{\text {( }}$ | Cross mark | (A) (c) © | Fully darken with HB Pencil |
| (4) (2) (c) | Half filled or semi dark | (A) (c) (b) | Fully darken with HB Pencil |
| (B) © © | Light filled | (B) (c) (D) | Fully darken with HB Pencil |

## Section I: Logical Reasoning

1. A cube painted red on two adjacent faces, and pink on the faces opposite to the orange faces, and violet on the remaining faces, is cut into sixty-four smaller cubes of equal sizes. How many cubes have less than three but atleast one face painted?
(A) 8
(B) 24
(C) 28
(D) 48
2. $P \times Q$ means $P$ is the brother of $Q . P+Q$ means $P$ is the father of $Q . P / Q$ means $P$ is the sister of $Q$. Which of the following means ' $A$ is the uncle of $M$ '?
(A) $A+D / M$
(B) $A \times D+M$
(C) $A+D \times M$
(D) $A / D+M$
3. A man said to a woman, "Your brother's only sister is my mother". What is the relation of the woman with the maternal grand mother of that man?
(A) M other
(B) Sister
(C) Niece
(D) None of the above
4. Six students $A, B, C, D, E$ and $F$ are sitting in the field. $A$ and $B$ are from Calicut while the rest are from Bangalore. D and F are tall while others are short. A, C and D are girls while others are boys. Who is the tall girl from Bangalore?
(A) C
(B) D
(C) E
(D) F
5. What will come in place of the question mark "?"

B2S, F6P, J14M , ?
(A) N301
(B) M 241
(C) N30J
(D) P24J
6. Salmah remembers that she met her sister Haleema on Saturday after 13th of any month. If the first day of the month was Tuesday then possibly on what date did she meet her sister?
(A) 18
(B) 20
(C) 19
(D) 21
7. A factory was cutting rolls of cloth into 1 metre lengths, from a 200 metre roll. How long would it take for the machine to cut the roll if each cut took 4 seconds?
(A) 13.34 mins
(B) 13.27 mins
(C) 14 mins
(D) 13.67 mins
8. Statement: Yaks are heavier than cows but lighter than horses. Birds are heavier than donkeys but lighter than cows.
Conclusions:
I) Donkeys are lighter than cows.
II) Cows are lighter than horses.
III) Birds are lighter than yaks.
IV) Donkeys are the lightest.

Assume that the above Statement is true. Based on it, which conclusion follows?
(A) Conclusions I, II and III are true
(B) Conclusions II, III and IV are true
(C) Only I and IV are true
(D) All the conclusions are true
9. Wasim started to move in the direction of south. After 15 m , he turned to his left and moved 15 m . Again he turned to his left and moved 15 m . Now how far is he from his starting point and in what direction?
(A) 15 m , north
(B) 15 m , south
(C) 30 m , east
(D) 15 m , east
10. Ram is 11th in a queue which has 45 people. The number of men in the queue are double than the number of ladies. If 5 men are in front of Ram, how many ladies are behind him?
(A) 10
(B) 9
(C) 8
(D) 11
11. How many circles are there in the given picture?
(A) 12
(B) 24
(C) 11
(D) 13

12. In a code language, if BOXER is written as AQW GQ, then VISIT will written as
(A) UKRKU
(B) UKRKS
(C) WKRKU
(D) WKRKS
13. Complete the series: $38,27,18,11$, $\qquad$
(A) 6
(B) 4
(C) 5
(D) 3
14. Outside of an assembly house, M asood was told by a person that each meeting takes place after 3 hours 15 minutes. Last meeting has been over just before 45 minutes and next meeting will take place at 2:00 pm . At what time did M asood receive this information?
(A) 10:20 AM
(B) $11: 45 \mathrm{AM}$
(C) $12: 30 \mathrm{PM}$
(D) 11:30 AM
15. 3 boxes are in a room. You know that one contains only apples, one contains only oranges, and one contains both apples and oranges. But you don't know the contents of the specific boxes. The boxes are labeled, "APPLES", "ORANGES" and "APPLESAND ORANGES". Each box has the wrong label on it. You must identify the contents of each box by picking one piece of fruit from only one box. Which box will you pick first to label the boxes correctly?
(A) APPLES
(B) ORANGES
(C) APPLES AND ORANGES
(D) None of the above
16. Four people witnessed a theft. Each gave a different description of the thief. Which description is probably right?
(A) He was average height, thin, and middle-aged.
(B) He was tall, thin, and middle-aged.
(C) He was tall, thin, and young.
(D) He was tall, of average weight, and middle-aged.
17. There are 40 pens in a box. Each pen is either a ballpoint pen or a fountain pen, and each pen is either red or blue. 15 pens are red, and 20 pens are ballpoint pens. If there are 9 blue fountain pens, how many red ballpoint pens are there?
(A) 4
(B) 8
(C) 11
(D) Cannot tell
18. Engine is to Car, as $\qquad$ is to Bicycle
(A) Tyre
(B) Road
(C) Paddle
(D) Chain
19. Three of the following four are alike in a certain way and so form a group. Which is the one which does not belong to the group?
(A) Calculator
(B) Computer
(C) Piano
(D) Typist
20. Find the missing combination of operators in the below equation
$1 \ldots 2 \ldots 3 \ldots 4=6$
(A),,++-
(B),,+-+
(C),,--+
(D),,-++

## Section II: General Knowledge

21. How many bones are there in the human skull?
(A) 21
(B) 22
(C) 23
(D) 24
22. How many seats are there in Lok Sabha?
(A) 543
(B) 544
(C) 545
(D) 546
23. Which is the coldest planet of the solar system?
(A) Pluto
(B) Neptune
(C) Saturn
(D) Jupiter
24. Which country is known as the land of windmills?
(A) India
(B) USA
(C) Poland
(D) Netherland
25. Which country first introduced the Value Added Tax (VAT) system?
(A) France
(B) India
(C) England
(D) USA
26. How many coastal states are there in India?
(A) Seven
(B) Eight
(C) Nine
(D) Ten
27. What does the abbreviation "R.S.V.P" stand for?
(A) Read it properly
(B) Respond if you please
(C) Return sum when possible
(D) None of the above
28. The Election Commissioner can be removed by
(A) Prime Minister of India
(B) President of India
(C) Vice President of India
(D) The parliament
29. What is the unit of magnetic field?
(A) Volt
(B) Watt
(C) Tesla
(D) Pascal
30. The Durgapur steel plant in West Bengal was built with the collaboration of
(A) Dutch
(B) Britain
(C) Portuguese
(D) France
31. In 1924, the first winter Olympics were held in
(A) Greece
(B) Italy
(C) France
(D) Austria
32. Kaziranga national park is located in
(A) Uttar Pradesh
(B) Karnataka
(C) Andhra Pradesh
(D) Assam
33. Which sector is the second largest source of employment in India?
(A) Retail
(B) Textile
(C) Mining
(D) Banking
34. In which year did India adopt liberal and free-market principles?
(A) 1991
(B) 1993
(C) 1995
(D) 1997
35. Total number of Olympic medals won by India in 2012 were
(A) 8
(B) 7
(C) 6
(D) 5
36. When is the Earth Day celebrated?
(A) 1st January
(B) 30th April
(C) 22nd April
(D) None of the above
37. Who won the first Nobel Prize in Literature?
(A) Theodor Mommsen
(B) Sully Prudhomme
(C) Rudyard Kipling
(D) Henryk Sienkiewicz
38. The European renaissance started in which country?
(A) France
(B) Spain
(C) England
(D) Italy
39. In which year was oil first discovered in Saudi Arabia?
(A) 1938
(B) 1940
(C) 1941
(D) 1943
40. Who discovered Atom?
(A) M adam Curie
(B) James Chadwick
(C) Rutherford
(D) John Dalton

## Section III: English Language

Direction for Question No. 41 to 44: Choose the word that is most nearly opposite in meaning to the given words
41. NADIR
(A) M odernity
(B) Zenith
(C) Liberty
(D) Progress
42. CHAFFING
(A) Serious
(B) Achieving
(C) Sneezing
(D) Expensive
43. ENDEMIC
(A) Dry
(B) Universal
(C) Decorative
(D) Infectious
44. FASTIDIOUS
(A) Absurd
(B) Sloppy
(C) Indifferent
(D) Facetious

Directions for Questions No. 45 to 48: There is a blank in each sentence. Choose the correct answer from the options
45. We are justified $\qquad$ the anti-social elements.
(A) in the shunning of
(B) in shunning
(C) in the shunning
(D) in shunning of
46. He will ........ his journey on M onday.
(A) start
(B) begin
(C) commence
(D) have begun
47. He had no sooner reached there $\qquad$ it began to rain.
(A) then
(B) than
(C) when
(D) as soon as
48. The employees were unhappy because their salary was not increased ........
(A) marginally
(B) abruptly
(C) substantially
(D) superfluously

Direction for Question No. 49 to 52: Choose the most appropriate synonym
49. IM POSTURE
(A) Claim
(B) Status
(C) Destruction
(D) Deception
50. SAGACIOUS
(A) Contumacious
(B) Illustrative
(C) Wise
(D) Benevolent
51. SQUANDERING
(A) Disturbing
(B) Dissipation
(C) Contentment
(D) Wandering
52. METICULOUS
(A) Painstaking
(B) Overt
(C) M eritorious
(D) Steadfast

Directions for Question No. 53-56: Read the passage carefully and choose the correct answer from the given options:

India is predominantly a rural society with about 70\% people living in rural areas and if things are determined as per majority it may well be said that India lives in villages. M ahatma Gandhi rightly said that the prosperity of India depended upon the prosperity of villages and until and unless the condition of the villages was improved, all talk of national development would be nothing but an exercise in futility. The father of the Nation exhorted the leaders and social workers of India that emancipation of India lay in the emancipation of villages. If we are really interested in national development and social transformation, villages are to be given the first priority. Villages are to be given the first priority not only because the majority of Indian population lives in villages, but because the agriculture occupies a crucial place in India's economy with about $44 \%$ of national income accruing from agriculture. While the economic status of the villages is to be raised, and social and cultural enlightenment to be brought in, the first and foremost requisite for the accomplishment of the objective is the preparing of the infrastructure; and that can be provided by education. Keeping all these aspects of rural education in view, a study should be carried out to evolve the curriculum to be introduced for the education of the rural people. Obviously, vocational education will have to be given top priority, but before this the basis is to be provided by imparting instruction in three 'Rs'-Reading, Writing and Arithmetic, so as to enable the village people to keep abreast of the latest developments in agricultural science and technology and induce them to try new ways and means to realize the maximum possible benefits. For this purpose, every village in India should have at least primary schools and Junior High Schools. Some provision will also have to be made for adult education; refresher courses may be arranged in villages so as to acquaint the villagers with the latest techniques and methods. Dissemination in the villages of new knowledge acquired in agricultural universities and agricultural research institutes and gained from the outside world through exchange of experts should be carried out to the extent of hundred per cent in order that what is learnt in laboratories and from experience of others may be utilized in the actual field. There is no point in allowing new information to remain in research papers and books. Periodical visits in the villages by experts and explaining the new techniques and other information to the villagers may cut much ice in the direction of educating village people. It would be of still greater benefit if the agricultural research institutes are set up in the rural surroundings in order to facilitate the dissemination of new knowledge among the agriculturists expeditiously. Rural universities may also be established for higher education for those who are talented and can further pursue the studies, though, of course, the education imparted to them should be agriculture-oriented. Higher studies in agricultural engineering, plant pathology, animal husbandry etc. may be in their curriculum.
53. Every village in India should have Primary and Junior High school because
(A) Villagers are to be instructed in three 'Rs'
(B) Villagers cannot afford for higher education
(C) Higher education in villages will create a feeling of dislike for agriculture among the villagers
(D) Teachers for primary and junior schools only may be available for villagers
54. For making education really successful for the villagers
(A) We have to develop curriculum that is to be introduced for education of the rural masses
(B) We have to make education free in schools
(C) There should be schools in every village
(D) Education up to high school should be made compulsory for every village boy and girl
55. What type of education is needed for village schools?
(A) Agricultural education
(B) Vocational education
(C) Practical education
(D) Technical education
56. What is the ratio of rural population to the total population of the country?
(A) $3: 5$
(B) $2: 5$
(C) $7: 10$
(D) $2: 2$

Directions for Question No. 57-60; Each of the following sentences or phrases is followed by four alternatives one of which describes in brief the meaning of the sentence or phrase. Choose the correct answer
57. A medicine to cause vomiting
(A) Emetic
(B) Anodyne
(C) Opiate
(D) Antidote
58. To scatter liquid
(A) Startle
(B) Dwindle
(C) Sprinkle
(D) Squeeze
59. A person who compiles a dictionary
(A) Author
(B) Grammarian
(C) Linguist
(D) Lexicographer
60. Science or hobby of studying the history of coins
(A) M inting
(B) Numismatics
(C) Coinology
(D) Coinage

## Section IV: Numerical Ability

61. The average monthly income of a person in a certain family of 5 members is Rs.1000. What will be the monthly average income of one person in the same family if the income of one person increased by Rs.12,000/- per year?
A) 1200
B) 1600
C) 1100
D) 1400
62. A dishonest shopkeeper uses a weight of 800 gm for a kg and professes to sell his good at cost price. His profit is
A) $20 \%$
B) $21 \%$
C) $24 \%$
D) $25 \%$
63. By selling 11 oranges for a rupee, a man loses $10 \%$. How many oranges for a rupee should he sell to gain $10 \%$ ?
A) 9
B) 10
C) 8
D) 5
64. A person takes 3 hours to walk a certain distance and riding back. If he could walk both ways in 5 hours, how long would it take to ride both ways?
A) 1.5 hours
B) 1 hour
C) 0.5 hour
D) 2 hours
65. $12.5 \%$ of 80 is equal to
A) 8
B) 20
C) 10
D) 40
66. Which number should complete the series $1,2,4,5,7,8,10,11$,
A) 12
B) 13
C) 14
D) 15
67. The average age of 29 boys in a class is equal to 14 years. When the age of the class teacher is included, the average becomes 15 years. Find the age of the class teacher.
A) 44 years
B) 40 years
C) 52 years
D) 66 years
68. It takes 8 people working at equal rates to finish a work in 96 days. How long will it take for 6 workers to do the same work?
A) 92 days
B) 128 days
C) 111 days
D) 84 days
69. Value of " A " in the expression $5+12 \times 10$ / $(120 / 240)=\mathrm{A} \times 10$ is
A) 11
B) 24.5
C) 34
D) 6.5
70. The LCM of $0.12,9.6$ and 0.6 is
A) 9.6
B) 0.12
C) 0.6
D) None of the above
71. A farmer has some hens and some goats. If the total number of animal heads is 80 and the total number of animal feet is 200 , what is the total number of goats?
A) 40
B) 60
C) 20
D) Cannot be determined
72. Akbar will turn 50 when his son Jehangir turns 18. What will Akbar's age be when it will be exactly 5 times that of Jehangir?
A) 36
B) 40
C) 44
D) 48
73. Arun can climb a coconut tree by 1.5 feet by each lift; however he slips 0.5 feet every time he makes the next lift. How many individual lifts should he have to reach the top of the coconut tree of 18.5 feet?
A) 20
B) 19
C) 18
D) 17
74. The ratio of two numbers is $4: 5$. But if each number is increased by 20 , the ratio becomes $6: 7$. The sum of such numbers is
A) 90
B) 95
C) 100
D) 60
75. A box contains 90 discs which are numbered 1 to 90 . If one disc is drawn at random from the box, the probability that it bears a perfect square is:
A) $1 / 10$
B) $1 / 11$
C) $1 / 90$
D) $1 / 9$
76. Two coins are tossed simultaneously. The probability of getting at most one head is:
A) $1 / 4$
B) $1 / 2$
C) $3 / 4$
D) 1
77. A flag pole 18 m high casts a shadow 9.6 m long. What is the distance of the top of the pole from the far end of the shadow?
A) 20 metres
B) 20.04 metres
C) 20.4 metres
D) 24 metres
78. In a staff room of 25 teachers, 13 drink black coffee, 7 milk coffee, 9 drink both tea and either type of coffee, and everyone drinks either of the beverages. How many teachers drink only tea?
A) Insufficient information
B) 5
C) 6
D) 9
79. A bag contains 19 Red balls, 37 Blue balls, and 27 Green balls. If a ball is picked up from this bag at random, what is the probability of picking a blue ball?
A) $19 / 83$
B) $37 / 87$
C) $34 / 81$
D) None of the above
80. A cylindrical tennis ball container contain maximum three balls stacked on one another. The top and bottom balls also touch the lid and the base of the container respectively. If the volume of a tennis ball is $240 \mathrm{~cm}^{3}$, then what is the volume of the container?
A) $33617.4 \mathrm{~cm}^{3}$
B) $720 \mathrm{~cm}^{3}$
C) $1080 \mathrm{~cm}^{3}$
D) None of the above
