

A Specially Designed Initiative  
to Encourage Young Talent by



TALLENTEX 2018 : (15, October 2017)

PAPER CODE

X

**TALLENTEX**

ALLEN'S Talent Encouragement Exam

2018

**CLASS - 5<sup>th</sup> (V)**

**Duration: 2 Hrs. | Maximum Marks : 320**

Answer Sheet No.

T

6

Tallentex Roll No.

6

**Please read the instructions carefully. You are allotted 5 minutes specifically for this purpose.**

**Things NOT ALLOWED in EXAM HALL :** Blank Paper, clipboard, log table, slide rule, calculator, camera, mobile and any electronic or electrical gadget. If you are carrying any of these, then keep them at a place specified by invigilator at your own responsibility.

## INSTRUCTIONS

1. This Booklet is your Question Paper. DO NOT break seal of Booklet until the invigilator instructs to do so.
2. Fill your TALLENTX Roll No. & Answer Sheet No. in the space provided on the cover page.
3. Carefully fill your **PAPER CODE** and present **CLASS** in space provided (**Serial No. 6 & 12**) of optical response sheet.
4. Please make sure that paper you received is of your class only.
5. Please make sure that the **Paper Code** Printed on the **Test Booklet Cover Page** and **Inner Pages** are the same. In case of discrepancy, the candidate should immediately report the matter to the Invigilator for replacement of Test Booklet.
6. The Answer Sheet is provided to you separately which is a machine readable Optical Response Sheet (ORS). You have to mark your answers in the ORS by darkening bubble, as per your answer choice, by using black or blue ball point pen.
7. After breaking the Question Paper seal, check there are **11 pages** in the booklet. This Question Paper contains 80 MCQs with 4 choices (Subjects: Physics: 12, Chemistry: 11, Biology: 12, Maths: 25 & Mental ability: 20).
8. Answer once marked by pen cannot be cancelled.
9. Each correct answer carries 4 marks. **(There is no negative marking)**
10. If you are found involved in cheating or disturbing others, then your ORS will be cancelled.
11. Do not put any stain on ORS and hand it over back properly to the invigilator.
12. You can take along the question paper after the test is over.

## SECTION-A : PHYSICS

This section contains **12 Multiple Choice Questions**. Each question has four choices (1), (2), (3) and (4) out of which **ONLY ONE** is correct.

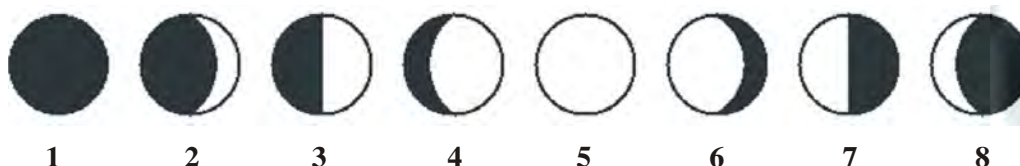
1. What is the total weight measured by given measuring weights if used together?



- (1) 1000 g                      (2) 750 g                      (3) 850 g                      (4) 1050 g
2. The diagram below shows a pencil being measured with paper clips. What is the length of the pencil in paper clips?



- (1) 4.0                      (2) 4.5                      (3) 5.0                      (4) 5.5
3. Densest Planet in the solar system is
- (1) Saturn                      (2) Earth                      (3) Uranus                      (4) Jupiter
4. The hot interior of earth is another source of energy called \_\_\_\_ energy.
- (1) Solar                      (2) Hydro                      (3) Geothermal                      (4) Atomic
5. Which of the following is not a natural disaster?
- (1) Flood                      (2) Nuclear war
- (3) Earthquake                      (4) Landslides
6. Cubic meter is the unit of :
- (1) Temperature                      (2) Time                      (3) Volume                      (4) Length
7. Choose the incorrect statement :
- (1) Bulb converts electrical energy into light energy.
- (2) An electric cell converts chemical energy stored in it into electrical energy.
- (3) Wind mill converts electrical energy to heat energy.
- (4) Electric heater converts electrical energy to heat energy.
8. Identify new moon and full moon respectively from the given figure.



- (1) 2, 8                      (2) 1, 5                      (3) 5, 1                      (4) 3, 7

9. What is the gas that traps the solar energy in the atmosphere and causes the green house effect ?  
 (1) Oxygen (2) Carbondioxide (3) Nitrogen (4) None of these
10. Which of the following is an example of a wedge ?  
 (1) See-saw (2) Knife (3) Wheel (4) None of these
11. Choose the incorrect statement :  
 (1) Earthquakes occur because of deforestation  
 (2) Molten rocks coming out of a volcano are called lava.  
 (3) In case of a natural disaster, very often transport, electricity, water supply and other facilities of affected areas are destroyed.  
 (4) Events which cause damage to property and human life are called calamities.
12. If you leave your house at 10:00 AM and return to home at 10:30 PM, for how much time you are away from your home ?  
 (1) 30 min (2) 12 hours (3) 12 hour 30 min (4) 10 hours

### SECTION-B : CHEMISTRY

This section contains **11 Multiple Choice Questions**. Each question has four choices (1), (2), (3) and (4) out of which **ONLY ONE** is correct.

13. The process shown would be classified as



- (1) Precipitation (2) Condensation (3) Transpiration (4) Evaporation
14. Which of the following is not a matter ?  
 (1) Sugar (2) Thought (3) Glass (4) Pen
15. When Riva went to Delhi, it was extremely hot. Very hot winds blew over the land. Her mother explained that this occurred in summer in many places in the interior of India. These hot winds are known as \_\_\_\_\_.  
 (1) Storm (2) Land breeze (3) Cyclone (4) Loo
16. High heat and pressure can change Sedimentary rocks first into :  
 (1) Igneous (2) Minerals (3) Gangue (4) Metamorphic
17. Pebbles and gravel cemented together by minerals and sand forms—  
 (1) Shale (2) Gneiss (3) Conglomerate (4) Pumice
18. Which word describe water in a solid state ?  
 (1) Ice (2) Rain (3) Clouds (4) Humidity
19. Match the following :
- | Matter             | Chemical/Physical state |
|--------------------|-------------------------|
| (i) Sugar          | (p) Mixture             |
| (ii) Alcohol       | (q) Solid               |
| (iii) Water vapour | (r) Liquid              |
| (iv) Soil          | (s) Gas                 |
- (1) (i) - (s), (ii) - (q), (iii) - (r), (iv) - (p) (2) (i) - (q), (ii) - (r), (iii) - (s), (iv) - (p)  
 (3) (i) - (r), (ii) - (s), (iii) - (p), (iv) - (q) (4) (i) - (p), (ii) - (s), (iii) - (q), (iv) - (r)

20. From the table below, figure out the number of water contaminants.

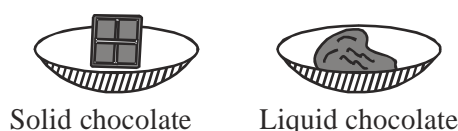
(1)	Sewage	Fishes	Plastic	Animal and human excreta
(2)	Pesticides	Dust	Rocks	Fertilizers
(3)	Plants	Rain	Chemicals	Gravels

- (1) 6                      (2) 7                      (3) 10                      (4) 11

21. Which of these can be mined from Earth and used as an energy source?

- (1) Coal                      (2) Gravel                      (3) Granite                      (4) Limestone

22. The diagram below shows a solid piece of chocolate before it was melted and the same piece of chocolate after it was melted into a liquid.



Which property of the piece of chocolate is the same in the two diagrams?

- (1) Mass                      (2) Shape  
(3) Temperature                      (4) Texture

23. Which of the following does not take the shape of the container?

- (1) Milk                      (2) Air                      (3) Pen                      (4) Water

### SECTION-C : BIOLOGY

This section contains **12 Multiple Choice Questions**. Each question has four choices (1), (2), (3) and (4) out of which **ONLY ONE** is correct.

24. Which of the following statements describe an important difference between mushrooms and green plants?

- (1) Mushrooms can grow in wet areas, but green plants grow only in dry soil.  
(2) Mushrooms can grow in cold areas, but green plants grow only in hot areas.  
(3) Mushrooms reproduce by spreading roots, but green plants need insects to reproduce.  
(4) Mushrooms get energy from decomposing matter, but green plants produce their own food.

25. If diet is deficient in citrus fruits then the person will suffer from which disease ?

- (1) Rickets                      (2) Beri beri  
(3) Scurvy                      (4) Night blindness

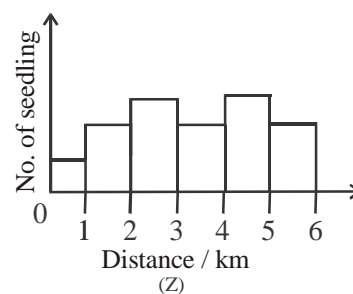
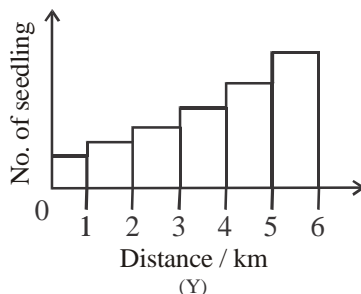
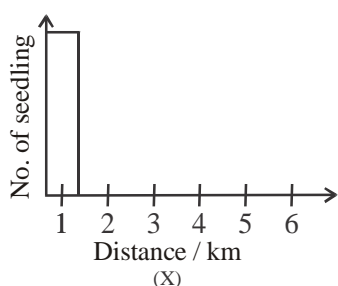
26. This organ stores and concentrates bile

- (1) Liver                      (2) Stomach  
(3) Pancreas                      (4) Gall bladder

27. Which of these is not given by plants?

- (1) Wood                      (2) Cotton                      (3) Tea                      (4) Glass

28. Chameleon  
 (1) is an arboreal animal  
 (2) shows camouflage  
 (3) is carnivorous  
 (4) All the above are correct
29. Three different types of plants X, Y and Z were selected by scientist who want to document their method of seed dispersal. The graph below show the approximate number of seedling found at various distance around the parent plant.



Which option most correctly lists the method of seed dispersal in each plant ?

- | X                    | Y                | Z      |
|----------------------|------------------|--------|
| (1) Water            | Explosive action | Animal |
| (2) Explosive action | Wind             | Animal |
| (3) Wind             | Animal           | Water  |
| (4) Wind             | Explosive action | Animal |
30. Which among the following organisms is an autotroph (can make their own food) ?  
 (1) Mushroom                      (2) Penicillium                      (3) Blue green algae                      (4) Bread mould

31. Match the following :

**Column-A**

- (a) Polar animal  
 (b) Terrestrial animal  
 (c) Aquatic animal  
 (d) Camouflage  
 (1) a-iii, b-iv, c-ii, d-i  
 (3) a-iv, b-iii, c-i, d-ii

**Column-B**

- (i) Octopus  
 (ii) Grass hopper  
 (iii) Ant  
 (iv) Walrus  
 (2) a-ii, b-iii, c-i, d-iv  
 (4) a-iii, b-iv, c-i, d-ii

32. How many stages are there in a butterfly's life cycle?  
 (1) 5                                      (2) 4                                      (3) 3                                      (4) 2
33. New plants arise from the leaf buds of  
 (1) Rose                                      (2) Bryophyllum  
 (3) Onion                                      (4) Potato
34. Which one of the following is not required for germination?  
 (1) Pressure                                      (2) Temperature  
 (3) Light                                      (4) Water



35. The whiskers of a river otter and the antennae of a cockroach are shown below.



How do structures such as whiskers and antennae benefit organisms?

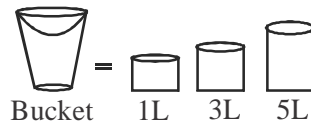
- (1) They help the organisms to detect their surroundings.
- (2) They help the organisms to eat food quickly.
- (3) They help the organisms to fight with predators.
- (4) None of these

### SECTION-D : MATHEMATICS

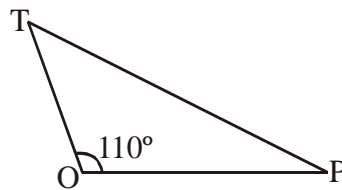
This section contains **25 Multiple Choice Questions**. Each question has four choices (1), (2), (3) and (4) out of which **ONLY ONE** is correct.

36. The smallest 4 digit number formed by using digit 5, 0, 3, 1, 7 without repeating any digit in the number.
- (1) 0 in thousands place
  - (2) 5 in tens place
  - (3) 3 in tens place
  - (4) 7 in units place
37. Which of the following is the least odd composite number ?
- (1) 15
  - (2) 3
  - (3) 7
  - (4) 9
38. What type of angles do equilateral triangle have ?
- (1) Acute angles
  - (2) Obtuse angles
  - (3) Right angles
  - (4) Straight angles
39. Read the statement and choose the correct option.
- Statement A :** As per the place value system, multiplication is performed from left to right i.e. Highest place value to lowest place value.
- Statement B :** As per the place value system, division is performed from left to right i.e. Highest place value to lowest place value.
- (1) Only A is true
  - (2) Only B is true
  - (3) Both A and B are true
  - (4) Both A and B are false
40. 
$$\begin{array}{r} 3 \text{ kg } 350 \text{ g} \\ + 5 \text{ kg } 230 \text{ g} \\ \hline \end{array}$$
- (1) 8.580 kg
  - (2) 88.500 kg
  - (3) 7.350 kg
  - (4) 73.50 kg
41. The sum of place value of all digits of the number 6,001 is
- (1) 7
  - (2) 61
  - (3) 6,001
  - (4) 6,000
42. The angle between the two legs of alphabet 'L'
- (1)  $60^\circ$
  - (2)  $45^\circ$
  - (3)  $180^\circ$
  - (4)  $90^\circ$

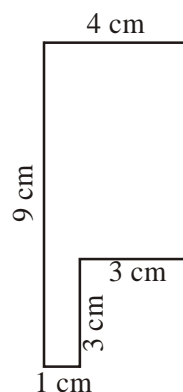
43. Which of the following number is divisible by both 6 and 9  
 (1) 9999999 (2) 9393938 (3) 152753 (4) 9119142
44. A bucket can be filled by either of 3 measuring cylinders exactly as shown. How much water can the bucket hold?



- (1) 15 L (2) 9 L (3) 14 L (4) 20 L
45. 190216536 is written with commas in Indian system as  
 (1) 190,216,536 (2) 1,9,0,2,1,6,5,3,6  
 (3) 19,02,16,536 (4) 1902,1,65,36
46. The number which has exactly one factor is  
 (1) 0 (2) 1 (3) 2 (4) 3
47. Measure of  $\angle T + \angle P$  in triangle TOP is

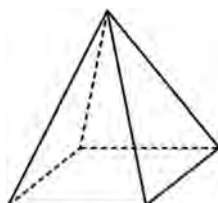


- (1)  $110^\circ$  (2)  $70^\circ$  (3)  $180^\circ$  (4) Can't be determined
48. What shape has two sets of parallel lines ?  
 (1) Triangle (2) Pentagon (3) Parallelogram (4) Hexagon
49. Find the perimeter of the given figure ?

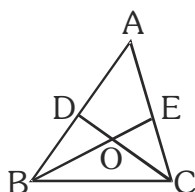


- (1) 31 cm (2) 28 cm (3) 26 cm (4) 25 cm
50. Which measurement is equivalent to 3 metres ?  
 (1) 30 cm (2) .03 cm (3) 300 mm (4) 300 cm
51. How many times of right angle formed one- third of straight angle?  
 (1)  $\frac{1}{3}$  (2)  $\frac{2}{3}$  (3) 1 (4)  $\frac{4}{3}$

52. What is the smallest common factor of 4, 12 and 16 ?  
 (1) 3 (2) 2 (3) 4 (4) 1
53. If the side of a square park is 5 m, then its perimeter is \_\_\_\_\_  
 (1) 10 m (2) 25 m (3) 20 m (4) 15 m
54. If Rahul bought 20 kg potatoes but 42.56 kg potatoes were rotten. How much potatoes were good?  
 (1) 16.44 kg (2) 15.744 kg (3) 174.44 kg (4) 22.56 kg
55. How many edges does the following figure have



- (1) 12 (2) 8 (3) 6 (4) 4
56. If two opposite rays have a common end point then they formed an angle of \_\_\_\_\_.  
 (1)  $90^\circ$  (2)  $180^\circ$  (3)  $270^\circ$  (4)  $360^\circ$
57. The perimeter of a rectangle having length 1.4 m and breadth 0.6 m is  
 (1) 4 m (2) 2 m (3) 8 m (4) 6 m
58. The difference of smallest 6-digit number and the greatest 4 digit number is  
 (1) 1 (2) 90000 (3) 90001 (4) 900001
59. How many possible triangles are there in the diagram given here ?



- (1) 6 (2) 7 (3) 8 (4) 9
60. Find the area of a square of side 6 cm.  
 (1)  $16 \text{ cm}^2$  (2)  $24 \text{ cm}^2$  (3)  $36 \text{ cm}^2$  (4)  $6 \text{ cm}^2$

### SECTION-E : MENTAL ABILITY

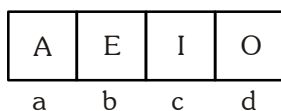
This section contains **20 Multiple Choice Questions**. Each question has four choices (1), (2), (3) and (4) out of which **ONLY ONE** is correct.

61. A man travels 2 m towards North, then he turns towards East and travels 3 m. Finally, he travels 6 m in South direction. In which direction is he from his starting point:  
 (1) South-West (2) North (3) South-East (4) West
62. Which of the following words will come last as per the arrangement according to the English dictionary?  
 (1) Sport (2) Spouse (3) Sprout (4) Snap

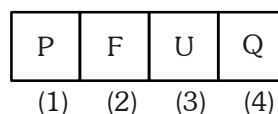


63. Rahul goes 40 m North, then turns right and walks 50 m, then again turns right and walks 30 m, then again turns right and walks 50 m. How many metres is he from his original position?  
(1) 10 m (2) 30 m (3) 50 m (4) 20 m
64. Arrange the given words in the sequence in which they occur in dictionary and choose the correct sequence.  
(a) Eagle (b) Earth (c) Eager (d) Early  
(e) Each  
(1) a, e, b, d, c (2) b, a, d, c, e (3) b, c, e, d, a (4) e, c, a, d, b
65. 3, 7, 15, 31, 63, 127, \_  
Insert the missing number in the given series.  
(1) 255 (2) 154 (3) 254 (4) none
66. Nitin goes 5 km East, then he turns right and goes 4 km, then he turns left and goes 5 km. Which direction is he facing now?  
(1) North (2) South (3) East (4) West
67. The following questions are based upon the alphabetical series given below.  
S L U A Y J V E I O N Q G Z B D R H  
If 'SU' is related 'HD' and 'UY' is related to 'DZ' in a certain way, to which of the following is YV related to follow the same pattern?  
(1) IN (2) ZQ (3) QO (4) BG
68. Find the next term of the given series:  
C - 3, F - 6, I - 9, L - 12, ?  
(1) O - 13 (2) Q - 17 (3) P - 16 (4) O - 15
69. Following questions consists of four figures marked a, b, c and d called problem figures. Following by four other figures marked 1, 2, 3 and 4 called the answer figures. Select a figure from amongst the answer figures which will continue the same series.

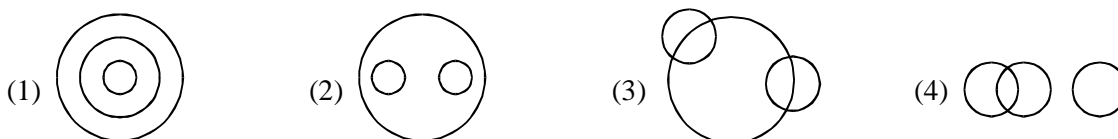
**Problem figure**



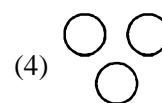
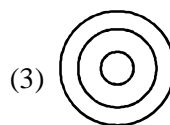
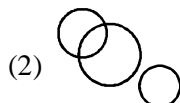
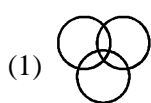
**Answer figure**



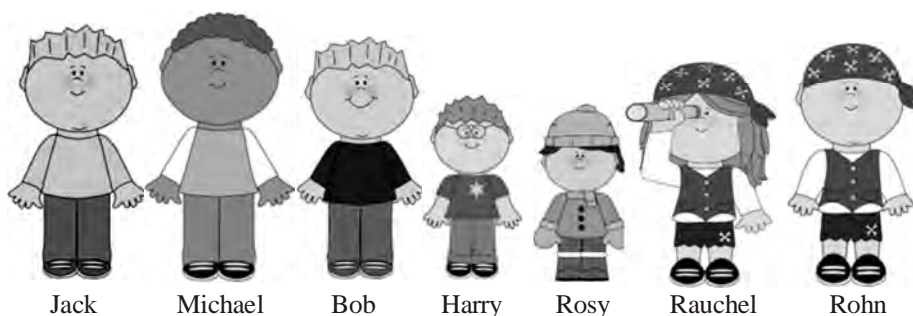
70. Dilip's position from the left in a row of students is 10th and 20th from the right. How many students are there in the row ?  
(1) 33 (2) 44 (3) 42 (4) 29
71. Which one of the following Venn diagrams correctly illustrates the relationship among the classes: Table, Chair, Furniture ?



72. Which one of the following Venn diagrams correctly illustrates the relationship among the classes:  
State, Country, City

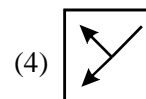
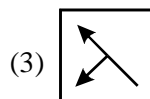
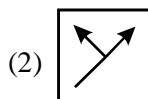
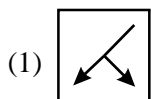
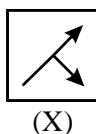


73. In a code DRLAL is coded as 62014314. How CAMEL is coded ?  
(1) 5315714 (2) 35729310 (3) 5313613 (4) None of these
74. Answer the following question According to the picture given below.

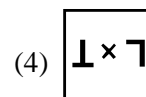
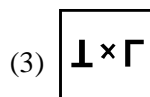
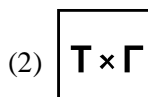
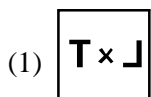
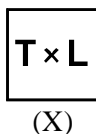


Who are the immediate neighbours of Rosy ?

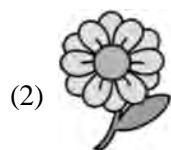
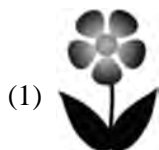
- (1) Michael and Rauchel (2) Harry and Rauchel  
(3) Harry and bob (4) Can't be determined
75. Choose the correct mirror image of figure (X):



76. Choose the odd pair:-  
(1) Car : Road (2) Ship : Sea (3) Rocket : Space (4) Aeroplane : Pilot
77. Choose the correct water image for the given figure (X):



78. Find the odd one out.



79. Choose the alternative which is closely resembles the mirror image of the given word:-

SOME

(1) ƆOƆE

(2) SOWE

(3) ƆOWE

(4) ƆMOƆ

80. Choose the alternative which is closely resembles the water-image of the given word.

rise

(1) ƭɹɿ

(2) esir

(3) ɹɿzɹ

(4) ɹɿɹ

**SPACE FOR ROUGH WORK**

ANSWER KEY : 15-10-2017						CLASS – V						CODE : X			
Q.No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Ans.	3	2	2	3	2	3	3	2	2	2	1	3	4	2	4
Q.No.	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Ans.	4	3	1	2	2	1	1	3	4	3	4	4	4	2	3
Q.No.	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
Ans.	3	2	2	1	1	3	4	1	2	1	3	4	4	1	3
Q.No.	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
Ans.	2	2	3	3	4	2	4	3	B	2	2	1	3	3	3
Q.No.	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75
Ans.	3	3	1	4	1	3	2	4	3	4	2	3	1	2	3
Q.No.	76	77	78	79	80										
Ans.	4	3	3	4	1										