

A Specially Designed Initiative
to Encourage Young Talent by



TALLENTEX 2018 : (08, October 2017)

PAPER CODE

D



CLASS - 6th (VI)

Duration: 2 Hrs. | Maximum Marks : 320

Answer Sheet No.

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Tallentex Roll No.

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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.

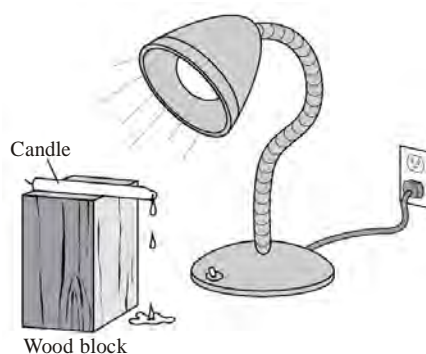
INSTRUCTIONS

1. This Booklet is your Question Paper. DO NOT break seal of Booklet until the invigilator instructs to do so.
2. Fill your TALLENTEX 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 **12 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.

- Which of the following is not dwarf planet ?
(1) Haumea (2) Makemake (3) Ceres (4) Europa
- Which of the following planets is called "Red planet" ?
(1) Mars (2) Jupiter (3) Saturn (4) Mercury
- One metre has 10 equal parts called _____.
(1) millimeter (2) centimeter (3) decimeter (4) decameter
- A class is learning about states of matter. The teacher shows the students how to set up the investigation shown in the diagram. What kinds of energy are needed in this investigation to change the state of matter of the candle?

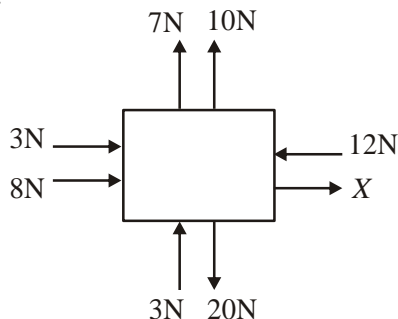


- (1) Light, mechanical, and thermal (2) Electrical and thermal
(3) Mechanical, light, and electrical (4) Thermal and mechanical
- Which among the following statements is wrong?
(1) Light is something that enables us to see things around us.
(2) A luminous object gives out light of its own.
(3) A shadow has the colour of the object.
(4) Electric bulb is an artificial source of light.
- A material that does not allow any light to pass through it is called
(1) translucent (2) transparent (3) opaque (4) none of these
- What is the speed of something that moves 400 meters in 4 minutes?
(1) 100 m/s (2) 6 km/h (3) 10 km/h (4) 10 m/min
- Match the column :

Column-I		Column-II	
(A)	7 cm test tube	(p)	700 cm rope
(B)	7 m saree	(q)	7000 m tent cloth
(C)	7 km distance	(r)	70 mm pin

- (1) A-p, B-q, C-r (2) A-r, B-p, C-q (3) A-q, B-p, C-r (4) A-q, B-r, C-p

9. The different group of stars is known as
(1) Comet (2) Constellation (3) Asteroids (4) Celestial bodies
10. A number of forces are acting on the block as shown in figure. What is the value of force X (in N), so that net force on block is zero?



- (1) 8N (2) 7N (3) 1N (4) 2N
11. If net force acts on a body is zero, it must ?
(1) Get deformed
(2) Move with increasing speed
(3) Either remain at rest or move in a straight line at constant speed
(4) Break
12. _____ energy is used to operate and run computers, machines, fans, etc.
(1) Thermal (2) Electrical (3) Nuclear (4) Solar

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. Which one among the following can **not** flow ?
(1) Juice (2) Air (3) Water (4) Table
14. Petroleum is also called as
(1) White gold (2) Black gold (3) Gold (4) Black silver
15. Which of the following allow light to pass through it ?
(1) Transparent (2) Translucent (3) Both (1) and (2) (4) Opaque
16. The property used in separating a mixture of two solids by winnowing is
(1) difference in colour (2) difference in size
(3) difference in weight (4) attraction by a magnet
17. By the process of filtration, we cannot separate
(1) mixture of sand and water (2) mixture of two liquids
(3) insoluble solid from a liquid (4) mixture of chalk and water
18. Cotton grows best in
(1) black soil and warm climate (2) black soil and cool climate
(3) red soil and warm climate (4) both (1) & (3)
19. The fibres obtained from animals are made up of -
(1) proteins (2) carbohydrates (3) cellulose (4) vitamins

20. Look at the classification table below. Which of the following sets of headings is correct?

I	II	III
Oil	Iron	Wind
Paint	Wood	Oxygen

I	II	III
(1) gas	liquid	solid
(2) liquid	gas	solid
(3) liquid	solid	gas
(4) solid	gas	liquid

21. Which one of the following is not a **GREEN HOUSE GAS** ?

- (1) CO₂ (2) O₂ (3) CH₄ (4) CFC

22. A separating funnel is used to separate the components of a mixture of

- (1) iodine and sugar (2) ethanol and water
(3) cooking oil and water (4) ammonium chloride and iron filings

23. Pick out the bad conductor of electricity from the following.

- (1) Copper (2) Steel (3) Impure water (4) Air

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 animal is a secondary consumer?

- (1) Elephant (2) Deer (3) Bacteria (4) Tiger

25. Which of the following is/are animal products?

(i) Leather, (ii) Wool, (iii) Resin, (iv) Gum, (v) Paper, (vi) Horn

- (1) (i), (ii) and (v) (2) (i), (ii) and (iii)
(3) (i), (ii) and (vi) (4) (ii) and (iv)

26. Which of the following diseases spread through insects?

(i) Chicken pox, (ii) Malaria, (iii) Sleeping sickness, (iv) Kala azar

- (1) (i) and (ii) (2) (i) and (iii) (3) (ii) and (iii) (4) (ii), (iii) and (iv)

27. _____ is an allergic condition which causes difficulty in breathing.

- (1) Cancer (2) Asthma (3) Typhoid (4) Dysentery

28. Which of the following seed/fruits is/are dispersed by animals?



- (1) Plant 1 (2) Plant 2
(3) Plant 3 (4) All three plants are dispersed by animals

29. Read the following two statements and select the correct option.

Statement I: Beri-Beri is a disease which is caused due to deficiency of Vitamin B1.

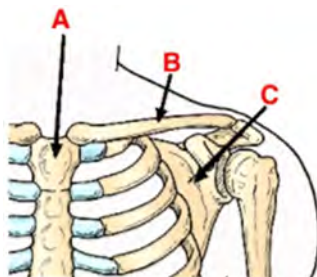
Statement II: Symptoms of Beri-Beri are pale skin, frequent headache and weak bones.

- (1) Both statements I and II are true and statement II is the correct explanation of statement I.
- (2) Both statements I and II are true and statement II is not the correct explanation of statement I.
- (3) Statement I is true but statement II is false.
- (4) Both statements I and II are false.

30. Which part of the earth ecosystem includes trees, grasses and squirrels ?

- (1) Hydrosphere (2) Stratosphere (3) Atmosphere (4) Biosphere

31. Name the parts A, B and C in the diagram.



- (1) A = rib, B = breast bone, C = shoulder blade.
- (2) A = breast bone, B = collar bone, C = vertebra.
- (3) A = breast bone, B = collar bone, C = shoulder blade.
- (4) A = collar bone, B = vertebra, C = shoulder blade.

32. Disappearance of forests will lead to increase in amount of carbon dioxide in air. It is likely to result in

- (1) Eutrophication (2) Global Warming (3) Reforestation (4) Afforestation

33. Rohan's father was obese and recently he was diagnosed with heart problem. What could be the reason for this?

- (1) His diet has an excess of roughage and water.
- (2) His diet lacks proper amount of vitamins and minerals.
- (3) His diet has an excess of fats and carbohydrates.
- (4) His diet lacks proper amount of proteins and carbohydrates.

34. Given below is a set of health problems.

- I. Lack of sleep
- II. High blood pressure
- III. Stress
- IV. Complete or partial hearing loss
- V. Anxiety

Which of the health problems given above are caused by noise pollution?

- (1) I, II and III (2) II, III and IV
- (3) II, III, IV and V (4) I, II, III, IV and V












35. Which of the following options contain food obtained from stem of the plant ?

- (1) Spinach, potato, ginger (2) Ginger, potato, onion
- (3) Carrot, onion, garlic (4) Carrot, beet root, turnip

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. Students of Class VI in a school were given a task to count the number of articles made of different materials in the school. The information collected by them is represented as follows:

Material used	Articles	 = 20 articles
Wood	 	
Glass		
Metal	  	
Rubber	 	
Plastic	 	

Observe the pictograph and answer the question.

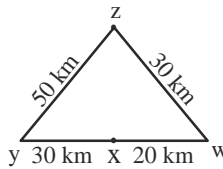
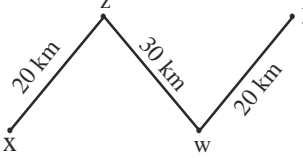
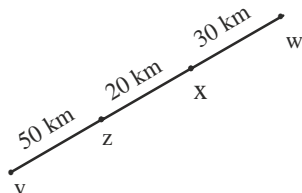
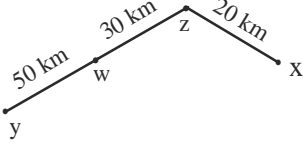
What is the total number of articles counted by the students ?

- (1) 120 (2) 140 (3) 180 (4) 160
37. The length and breadth of a rectangular field are 260 m and 130 m respectively, then its area is (in m²) _____.
(1) 338 (2) 33800 (3) 3.8 (4) 3.38
38. Find the value of $\frac{7(-2) - 2(-1)}{(-2)(-5) - 2(-1)}$.
(1) 2 (2) -2 (3) -1 (4) 1
39. The pictorial representation shows the distances of town w, x and y from town z.

Team w	  
Team x	 
Team y	    

One  represent 10 km

Which of the following road maps shows the correct position of towns w, x, y & z.

- (1) 
- (2) 
- (3) 
- (4) 

40. Which of the following statement is false.

- (1) A line segment has two end points. (2) A line has no end points.
(3) A ray has only one end point. (4) None of these

41. If the length of a rectangle is two times its breadth and area is 288 cm^2 , then length and breadth are respectively _____.

- (1) 20 cm, 10 cm (2) 12 cm, 24 cm
(3) 24 cm, 12 cm (4) 16 cm, 18 cm

42. Look at the calendar. What best describes the dates that are on Saturdays?

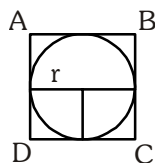
S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

- (1) Multiples of 2 (2) Multiples of 3 (3) Multiples of 4 (4) Multiples of 7

43. The intersection point of altitude is

- (1) Circumcentre (2) Centroid (3) Orthocentre (4) Incentre

44. A circle is inscribed in a square as shown. If the radius of the circle is 4 cm, then the perimeter of the square is _____.



- (1) 28 cm (2) 24 cm (3) 32 cm (4) 36 cm

45. Every integer below integer '0' has the sign

- (1) - (2) + (3) \times (4) \div

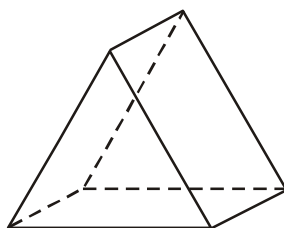
46. If the number $7254*98$ is divisible by 22, the digit * is

- (1) 1 (2) 2 (3) 6 (4) 0

47. What should be subtracted from $\frac{-7}{8}$ so as to get $\frac{5}{12}$

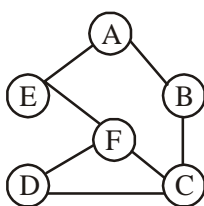
- (1) $\frac{-15}{8}$ (2) $\frac{-31}{24}$ (3) $\frac{-33}{24}$ (4) $\frac{31}{24}$

48. How many faces does the figure has ?



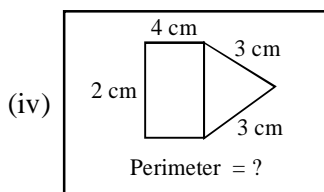
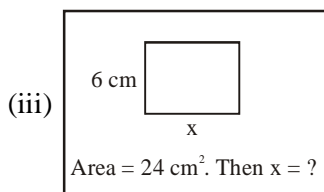
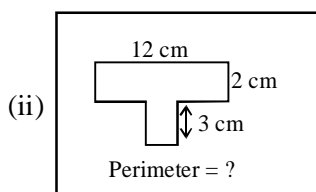
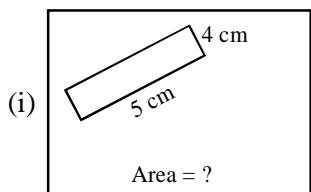
- (1) 4 (2) 5 (3) 6 (4) 2

49. Which fraction is between $\frac{1}{4}$ and $\frac{1}{5}$
- (1) $\frac{1}{3}$ (2) $\frac{1}{20}$ (3) $\frac{9}{40}$ (4) $\frac{1}{6}$
50. The product of place value and face value of '2' in the smallest 4 digit number formed by using the digit 4, 0, 7, 2 only once.
- (1) 400 (2) 4000 (3) 200 (4) 2000
51. In a sum, the dividend is 28087, the divisor is 264 and the remainder 103. What is the quotient?
- (1) 102 (2) 104 (3) 106 (4) 108
52. The value of $0.25 \div 0.10 \times 0.04 + 0.06$ is
- (1) 0.16 (2) 0.006 (3) 0.106 (4) 0.016
53. In the adjoining figure how many different paths can be travelled from point A to point D by visiting a point only once in a path ?



- (1) 2 (2) 3 (3) 4 (4) 5
54. Which of the following is greater than 5000.05 ?
- (1) 0.00050005×10^6 (2) 0.00005×10^8 (3) 5.5×10^2 (4) 5.00005×10^4
55. Match the column :

Column I



Column II

(P) 34 cm

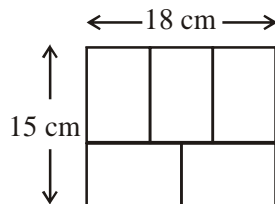
(Q) 20 cm^2

(R) 16 cm

(S) 4 cm

- (1) (i) - (P), (ii) - (R), (iii) - (Q), (iv) - (S) (2) (i) - (Q), (ii) - (P), (iii) - (S), (iv) - (R)
- (3) (i) - (P), (ii) - (S), (iii) - (P), (iv) - (R) (4) (i) - (Q), (ii) - (P), (iii) - (R), (iv) - (S)

56. Five identical rectangles fit together as shown. What is the area of one rectangle ?



- (1) 30 cm^2 (2) 36 cm^2 (3) 54 cm^2 (4) 270 cm^2
57. How many days are there in 12,000 hours?
 (1) 200 days (2) 365 days (3) 500 days (4) 865 days
58. The price of a train ticket has a direct relation to the length of the journey. If Rs 504 is charged for a journey $4x$ km long, then what is charged for a journey $\frac{x}{2}$ km long.
 (1) Rs. 126 (2) Rs. 63 (3) Rs. 252 (4) Rs. 504
59. A person earns Rs. 216 a day. How much money does he earns in the year 2017 ?
 (1) Rs. 21600 (2) Rs. 20170 (3) Rs. 78840 (4) Rs. 98740
60. What is the positive integral value of x for which $(x^2 - 9)$ is a prime number.
 (1) 2 (2) 3 (3) 4 (4) 5

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. Arrange the given words in the sequence in which they occur in the Dictionary and locate the last word.
 (1) Frankenstein (2) Frankincense
 (3) Frankalmoign (4) Frauendienst
62. Arrange the words in order to the sequence in which they occur in dictionary.
 (a) Property (b) Priest (c) Project (d) Preamble
 (1) b, d, c, a (2) a, b, c, d
 (3) d, b, c, a (4) d, c, b, a
63. A man travels 4 km due North, then travels 6 km due East and further travels 4 km due North. How far he is from the starting point?
 (1) 6 km (2) 14 km (3) 8 km (4) 10 km
64. Rohan is facing North-West. He turns 90° in clockwise direction and then 45° in anticlockwise direction. Which direction is he facing now?
 (1) North (2) North East (3) East (4) West
65. In a certain code language, '3a 2b, 7c' means 'truth is eternal', '7c, 9a, 8b, 3a' means 'enmity is not eternal' and '4d, 2b, 8b' means 'truth does not'. Which of the following means 'enmity' in that language?
 (1) 3a (2) 7c (3) 8b (4) 9a

66. A tourist drives 10 Km towards East and turns to the right hand and drives 3 Km. Then, he drives towards West (turning to his right) 3 Km. He, then turns to his left and drives 2 Km. Finally he turns to his right and travels 7 Km. How far is he from his starting point and in which direction would he be?
- (1) 10 Km, East (2) 9 Km, North
(3) 8 Km, West (4) 5 Km, South
67. Study the following arrangement of numbers, letters and symbols carefully and answer the question given below.

R @ 2 9 T V A Y 5 © # J 1 P 8 Q \$ E 3 ★ H % 6 W 4 I 8 U Z

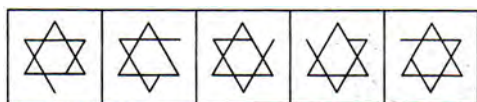
Which of the following is the fifth to the right of the nineteenth element from the right end?

- (1) P (2) V (3) W (4) Q
68. In a certain code ABCD is written as ZYXW, then the word DANCE will be coded as :
- (1) WZMXV (2) MXZWV
(3) VMZXM (4) ZMWXV

Direction : (69 & 70)

- (i) Q is to the immediate right of T.
(ii) S is exactly between P and T.
(iii) Q is exactly between T and R.
69. Who among P, Q, R, S, T is in the exactly middle while standing in a line?
- (1) P (2) Q (3) R (4) T
70. Who are sitting on extreme ends?
- (1) P, Q (2) P, R (3) R, S (4) P, T
71. In the question given below which one from the four answer figures should come at the right of the problem figure to complete the series logically.

Question Figure



Answer Figure



72. Find the missing term :

2, 8, 18, 32, 50, ?

- (1) 64 (2) 72 (3) 70 (4) 68

73. Find the missing term in the given series :

3, 128, 6, 64, 9, ?, 12, 16, 15, 8

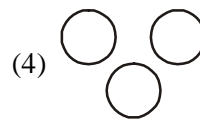
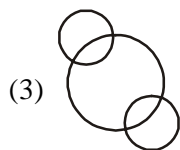
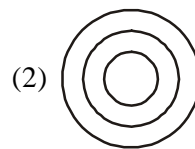
(1) 32

(2) 12

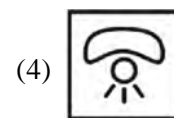
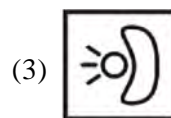
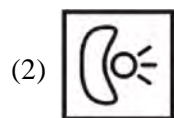
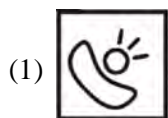
(3) 108

(4) 72

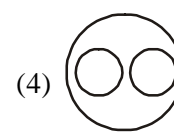
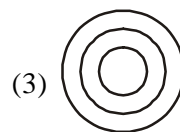
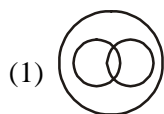
74. Select from the four alternative diagrams, the one that best illustrates the relationship among the three classes : Truck, Ship, Goods



75. Choose the alternative which is closely resembles the mirror image of the given figure



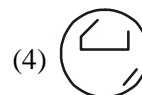
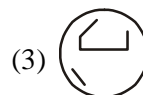
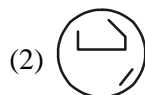
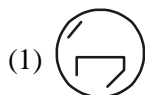
76. Identify the diagram that best represents the relationship among classes given below.
Sportsmen, Cricketers, Batsman



77. Find the water image of the following figure (X).



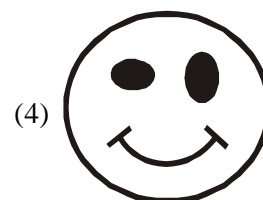
(X)



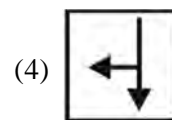
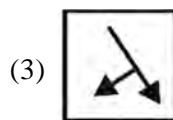
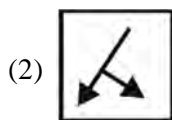
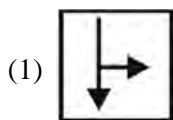
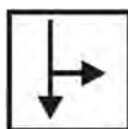
78. Find the water image of the following figure (X).



(X)



79. Choose the alternative which is closely resembles the mirror image of the given figure.



80. If RADIO is written as PYBGM, then how would OQDKNG be written in that code?

(1) MOBIEL

(2) MOBLIE

(3) MOIBLE

(4) MOBILE

SPACE FOR ROUGH WORK

ANSWER KEY : 08-10-2017						CLASS – VI						CODE : D			
Q.No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Ans.	4	1	3	2	3	3	2	2	2	3	3	2	4	2	3
Q.No.	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Ans.	3	2	1	1	3	2	3	4	4	3	4	2	4	3	4
Q.No.	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
Ans.	3	2	3	4	2	4	2	3	2	4	3	4	3	3	1
Q.No.	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
Ans.	3	2	2	3	2	3	1	3	4	2	3	3	2	3	3
Q.No.	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75
Ans.	4	3	4	1	4	4	4	1	4	2	1	2	1	3	3
Q.No.	76	77	78	79	80										
Ans.	3	4	3	4	4										