

Talent Search Exam -2022

Class-vi

TEST
CODE **6000**

BOOKLET

L

Duration: 1:30 Hours

Max. Marks: 240

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

INSTRUCTIONS





A. General :

1. This booklet is your Question Paper. DO NOT break seal of Booklet until the invigilator instructs to do so. Total Questions to be Attempted 60: **Physics : 10, Chemistry : 10, Biology : 10, Mathematics : 20 & MAT : 10 Questions.**
2. 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 & blue ball point pen.
3. 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 risk.
4. Do not use white-fluid or any other rubbing material on answer sheet. Before handing over the answer sheet to the invigilator, candidate should check that **Roll No, Test code and Book Code** have been filled and marked correctly. Immediately after the prescribed examination time is over, the **Answer sheet is to be returned to the invigilator.**

B. Filling the Answer Sheet :

5. On Side-1 of Answer Sheet write your Name and Roll Number in the respective boxes. Do not write anything on Side-2.
6. **Marking Scheme:**
 - a. If darkened bubble is RIGHT answer : 4 Marks.
 - b. If no bubble is darkened in any question: No Mark.
 - c. If darkened bubble is WRONG answer: -1 Mark (Minus One Mark).
7. Think wisely before darkening bubble as there is negative marking for wrong answer

PROCEDURE OF FILLING UP THE ANSWER IN ANSWER SHEET

Avoid Improper Marking			Proper Marking
			
Partially Filled	Lightly Filled	Tick-Cross Marked	Fully darken

Name of the candidate (In Capital Letters)

I have read all the instruction and shall abide by them.

.....
(Signature of the candidate)

Roll Number

--	--	--	--	--

I have verified all the information filled in by the candidate.

.....
(Signature of the Invigilator)

You can never quit. Winners never quit, and quitters never win.

SCIENCE

1. Length : Metre : : Mass : Kilogram : : Time : Second : : ?
 (a) Temperature : Celsius
 (b) Temperature : Kelvin
 (c) Temperature : Fahrenheit
 (d) All of these
2. The motion that is repeated at regular interval of time is
 (a) vibratory motion (b) linear motion
 (c) random motion (d) none of these
3. Which type of glass is used to view a solar eclipse?
 (a) Transparent (b) Translucent
 (c) Opaque (d) Plane
4. Which of the following is an example of rectilinear of light?
 (a) Rainbow in the sky
 (b) Shining moon
 (c) Formation of shadow
 (d) Raising of the Sun
5. Which of these is not a source of light?
 (a) Moon (b) Lighted candle
 (c) Stars (d) Sun
6. A safety device that is used to protect an electric circuit from overloading is called
 (a) switch (b) insulator
 (c) fuse (d) conductor
7. Why is the metal spring used in electric torch?
 (a) To attach the positive terminal of the lower cell to switch
 (b) To make contact with the switch
 (c) To connect the bulb with the cell
 (d) None of these
8. Electric current is carried from a powerhouse by
 (a) fuse (b) live wire
 (c) earth wire (d) neutral wire
9. Which of the following of a magnet is/are used in navigation?
 (a) Attractive property
 (b) Directional property
 (c) Pair property
 (d) Repulsive property
10. Which of the following instruments use magnet?
 (a) Tape recorders (b) ATM cards
 (c) Microphones (d) All of these
11. Which of the following substances is bad conductor of heat and electricity?
 (a) Aluminium (b) Plastic
 (c) Iron nails (d) Steel
12. Plastic is
 (a) a good conductor of heat
 (b) a good conductor of electricity
 (c) a magnetic substance
 (d) an insulator
13. A steel glass containing hot tea becomes hot and is difficult to hold because
 (a) steel is a good conductor of heat
 (b) steel is a poor conductor of heat
 (c) steel is a hard substance
 (d) steel is a good conductor of electricity
14. Which of the following substances is insoluble in water?
 (a) Salt (b) Sugar
 (c) Mud (d) Ice
15. Sedimentation and decantation are used to separate a mixture in which
 (a) the insoluble solid is heavier than the liquid
 (b) the insoluble solid is lighter than the liquid
 (c) the insoluble solid remains suspended in the liquid
 (d) the solid is soluble in the liquid
16. Which of the following statements are correct?
 I. Larger solid particles can be separated from smaller ones by filtration.
 II. Cream can be separated from milk by churning
 III. A mixture of mud and water can be separated by loading, sedimentation and decantation
 IV. Grains can be separated from stalks by threshing.
 (a) I and II only (b) II and IV only
 (c) I, II and III only (d) II, III and IV only
17. Photosynthesis by green plants is a
 (a) physical change (b) chemical change
 (c) reversible change (d) undesirable change
18. Evaporation, condensation, melting and freezing are
 (a) physical changes (b) chemical changes
 (c) periodic change (d) non-periodic changes
19. Wicks for oil lamps is made from
 (a) linen fibre (b) cotton yarn
 (c) cotton wool (d) flax fibre
20. Which of the following is not a property of jute fibre?
 (a) Strength (b) Biodegradability
 (c) Durability (d) Smoothness
21. Match column I with column II and select the correct option from the given codes.

	Column I	Column II
(A)	Living organisms which can prepare their own food	(i) Scavengers
(B)	organism which obtain food by decomposing dead plants and animals	(ii) Herbivores
(C)	Animals that eat only plants	(iii) Autotrophs
(D)	Animals that feed on dead bodies	(iv) decomposers
		(v) Omnivores

- (a) (A) – (iii), (B) – (iv), (C) – (ii), D – (i)
 (b) (A) – (i), (B) – (iii), (C) – (v), D – (iv)
 (c) (A) – (v), (B) – (ii), (C) – (i), D – (iii)
 (d) (A) – (ii), (B) – (i), (C) – (iii), D – (v)
22. Match column I with column II and select the correct option from the given codes
- | Column I | | Column II | |
|--------------|------|-------------------------|------|
| (i) Rickets | | A. Excess of fat | |
| (ii) Goitre | | B. Lack of iodine | |
| (iii) Scurvy | | C. Vitamin D deficiency | |
| (iv) Obesity | | D. Vitamin C deficiency | |
| (i) | (ii) | (iii) | (iv) |
| (a) C | B | D | A |
| (b) C | D | B | A |
| (c) B | A | D | C |
| (d) A | D | C | B |
23. Excess loss of water from the body leads to (i).
(ii) is recommended for such patients.
 Select the correct option for (i) and (ii).
 (a) (i) – dehydration, (ii) – oral rehydrating solution
 (b) (i) – constipation, (ii) – Oral rehydrating solution
 (c) (i) – diarrhea, (ii) – Vegetable oil
 (d) (i) – anaemia, (ii) – Iron
24. Fibrous roots are present in
 (a) sunflower (b) basil
 (c) wheat (d) mango
25. Pivot joint is present
 (a) in neck region
 (b) between bones of ankle

- (c) between humerus and radius bones
 (d) between bones of fore arm and wrist
26. Respiration is essential for all living organisms because it
 (a) removes waste material from the body
 (b) helps them to produce new organisms of their own kind
 (c) provides them energy to carry out various life processes
 (d) helps to synthesise food
27. Deciduous trees are found mostly in the
 (a) tropical forest (b) boreal forests
 (c) grasslands (d) temperate forests
28. Rainwater harvesting means
 (a) harvesting of crops during rains
 (b) using rainwater to recharge groundwater
 (c) storing rainwater for future use
 (d) both (b) & (c)
29. Out of the total water present on Earth, about _____ percentage of water is present in oceans and seas.
 (a) 71 (b) 83
 (c) 97 (d) 90
30. Which of the following statements is correct?
 (a) Biodegradable substances are organic in nature.
 (b) Biodegradable substances are man-made, not natural
 (c) Non-biodegradable substances are always organic in nature
 (d) Non-biodegradable substances are natural, not man-made

MATHEMATICS

31. The chord of circle which passes through the centre is _____ the radius.
 (a) Thrice (b) Double
 (c) Half (d) Equal to
32. Which of the following statements is false?
 (a) Two diameters of a circle will necessarily intersect
 (b) The centre of a circle is always in its interior
 (c) Every diameter of a circle is also a chord
 (d) Every chord of a circle is also a diameter
33. Any three non-collinear points when joined together form a _____
 (a) Triangle (b) Quadrilateral
 (c) Rhombus (d) Square
34. Find : $1 - 2 + 3 - 4 + 5 - 6 + \dots + 17 - 18 + 19 - 20$
 (a) -10 (b) 100
 (c) -100 (d) 10
35. Add (-345) and 428 and then subtract 960 from the result. The answer will be _____.
 (a) -877 (b) 877
 (c) -536 (d) 536
36. The additive inverse of $6 - (-4)$ is

- (a) 2 (b) -10
 (c) 10 (d) none of these
37. $\frac{1}{6} + \left(\frac{55}{14} - \frac{1}{2} \right)$ is the reciprocal of
 (a) $3\frac{28}{42}$ (b) $4\frac{29}{151}$
 (c) $\frac{42}{151}$ (d) $3\frac{25}{42}$
38. $\frac{4}{7}$ of a pole is in the mud. When $\frac{1}{3}$ of it is pulled out, a 8 m long piece of the pole still remains in the mud. What is the full length of the pole?
 (a) 21m (b) 24m
 (c) 23m (d) 22m
39. Rahul and Sanjeev both bought two pizzas of same size. Rahul divided his pizza into 8 pieces and ate 3 pieces out of it while Sanjeev divided his pizza into 4 pieces and ate 3 pieces out of it. Who ate the bigger share of the pizza and by what part?

- (a) Rahul, $\frac{3}{8}$ (b) Rahul, $\frac{1}{4}$
 (c) Sanjeev, $\frac{3}{8}$ (d) Sanjeev, $\frac{5}{8}$
40. The difference of two fractions is $\frac{1}{8}$. If the smaller fraction is $\frac{2}{5}$, the greater fraction is
- (a) $\frac{21}{40}$ (b) $\frac{17}{40}$
 (c) $\frac{40}{21}$ (d) 21
41. The decimal for 3 hundreds + 8 hundredths is
- (a) 3.8 (b) 300.8
 (c) 300.08 (d) 300.008
42. Mr. Sharma spent Rs. 1287.90 on clothings, Rs. 389.96 on travelling and Rs. 1280.71 for hotel accommodation. If he has Rs. 5800 left with him, how much money did he have in the beginning?
- (a) Rs. 5875.75 (b) Rs. 8758.57
 (c) Rs. 7858.58 (d) Rs. 8578.57
43. A mountaineer climbs 67.32 metres from the base camp situated at an altitude of 2307.58 metres. He climbs further 75.86 metres. What altitude does he reach after this?
- (a) 2450.76 m (b) 2050.67 m
 (c) 1450.76 m (d) 2105.76 m
44. Mishika went to the market with Rs. 4000. She purchased one top, one toy and skates costing Rs. 578.75, Rs. 309 and Rs. 1862.85 respectively. How much money is left with her?
- (a) Rs. 2249.40 (b) Rs. 2750.60

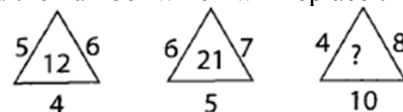
- (c) Rs. 1249.40 (d) Rs. 1750.60
45. Write the following statement using arithmetical numbers, literal numbers and arithmetical operations.
 '17 more than 3 times the product of two numbers l and m '
- (a) $3lm + 17$ (b) $3lm - 17$
 (c) $\frac{3lm}{17}$ (d) $17 \times 3 (l+m)$
46. Prachi took a total of 2 hours to write 30 party invitations. Which of the following equations can be used to find m , the number of minutes Prachi took to write 1 invitation?
- (a) $(60 \div 30) \div 2 = m$ (b) $(60 \times 30) + 2 = m$
 (c) $(60 \div 2) \times 30 = m$ (d) $(60 \times 2) \div 30 = m$
47. If $(k - 8)$ is the highest common factor of 56 and 77, then the value of k is
- (a) 7 (b) 11
 (c) 15 (d) 16
48. If one-third of a tank holds 80 litres of water, then the quantity of water that half of the tank holds is
- (a) $\frac{80}{3}$ litres (b) 100 litres
 (c) 120 litres (d) 240 litres
49. Find the greatest number of 6 digits exactly divisible by 24, 15 and 36.
- (a) 999720 (b) 999999
 (c) 999920 (d) 999990
50. Find the greatest number which divides 285 and 1249, leaving remainders 9 and 7 respectively.
- (a) 135 (b) 136
 (c) 137 (d) 138

MAT

51. If 'dust' is called 'air', 'air' is called 'fire', 'fire' is called 'water', 'water' is called 'colour', 'colour' is called 'rain' and 'rain' is called 'summer', then where do fish live?
- (a) fire (b) water
 (c) colour (d) dust
52. In a certain code language, FREEDOM is written as KWJJITR. How will STRANGER be written in that code language?
- (a) XYWFSLJW (b) WXVERKIV
 (c) VWUDQJHU (d) UVTCPIGT
53. Vinita walked 20 m towards North. Then, she turned right and walks 30 m. Then, she turns right and walks 35 m. Then, she turns left and walks 15 m. Finally, she turns left and walks 15 m. How far and in which direction is she now with respect to her starting point?
- (a) 45 m, East (b) 45 m, West

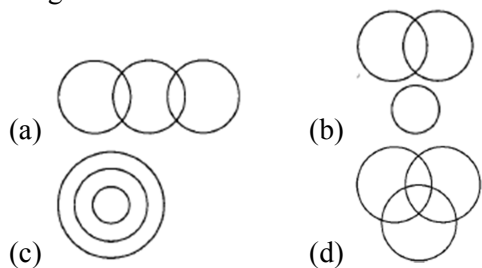
- (c) 35 m, West (d) 35 m, East
54. A man is facing West. He turns 45° in the clockwise direction and then another 180° in the same direction and then 270° in the anticlockwise direction. Which direction is he facing now?

- (a) South (b) North-West
 (c) West (d) South-West
55. Find the number which will replace the '?' mark.

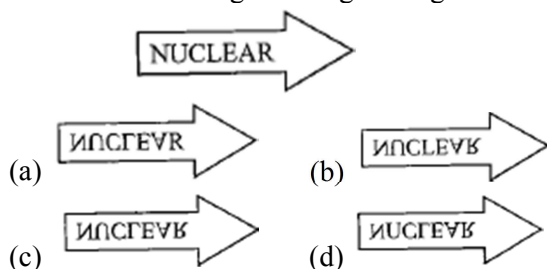


- (a) 22 (b) 30
 (c) 32 (d) 31
- Directions (Q.No.56) In each of the following question choose the missing number to complete the series.
56. 10, 18, 28, 40, 54, 70, ?

- (a) 85
(c) 87
57. Which of the following Venn diagrams best represents the relationship amongst, "Musicians, Singers and Writers"?

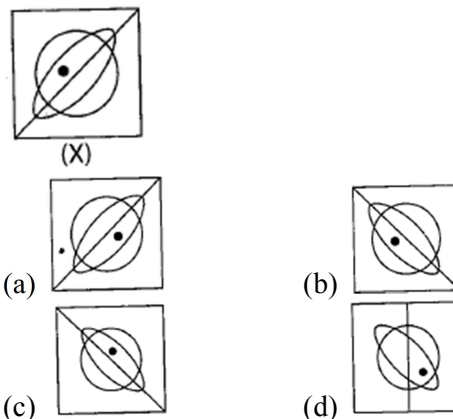


58. Find the water image of the given figure.



Direction (Q.No.59) In each of the following question, choose the correct mirror image of the figure?

59.



60. Five boys are standing in a row facing East. Mohit is to the left of Sameer, Tushar and Samrath. Sameer, Tushar and Samrath are to the left of Aman. Samrath is between Sameer and Tushar. If Tushar is fourth from the left, then how far is Sameer from the right?

- (a) First
(b) Second
(c) Third
(d) Fourth

For Rough Work

