SUCCESS
TALENT REWARD TEST

Time Alloted : 90 Min.   Maximum Marks : 180

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

:: INSTRUCTIONS ::

01. This booklet is your question paper, contains 50 questions.

02. There are five parts in the question paper A, B, C, D and E consisting of Mathematics, Physics, Chemistry, Biology & Challenger Section having 10 questions in each part.

03. Each question in section A, B, C & D is of 3 marks & for section E of 6 marks.

*04. **There is no negative marking in any case.***

05. There is only one correct response for each question. Filling up more than one response in any question will be treated as wrong response.

*06. Use Blue /Black Ball Point Pen only for writing particulars/ marking responses on the Answer sheet. **Use of pencil is strictly prohibited.***

07. No candidate is allowed to carry any textual material, printed or written bits of papers, pager, mobile phone, any electronic device, etc. except the Hall Ticket inside the examination hall/ room.

08. On completion of the test, the candidate must hand over the Answer Sheet to the invigilator, on duty in the Room/Hall.

Your Name : --------------------------------------   **Registration No. :** ☐☐☐☐☐☐

QUESTION PAPER CODE - 09100A

(You must write this code on your OMR Sheet)

Dear student ....
Ready for the test ? Take a deep breath and relax. Don't forget to read the questions very carefully. Some questions that look tough, will be quite easy after you have read them properly. Do not spend too much time on any question. Go to the next question and later come back to the ones you felt were tough. Be cool, give your best and have fun.

Good luck!

(Section-'A' (Maths)

1. Solution of equation $x + 3y = 7$ is :
   (a) (1, 2)   (b) (0, 7/3)
   (c) (7, 0)   (d) All

2. How many balls each of radius 1 cm can be made by melting a ball whose radius is 4 cm :
   (a) 32   (b) 64
   (c) 136   (d) 45

3. Find the surface area of a sphere whose radius is 14 cm :
   (a) 1386 cm^2 (b) 394.24 cm^2
   (c) 2464 cm^2 (d) 5221 cm^2

4. Find the perimeter of a protector whose base length is 14 cm :
   (a) 36 cm   (b) 108 cm
   (c) 88 cm   (d) N.O.T.

5. The mean of certain number is 10. If each number is increased by 2 then new mean is :
   (a) 8   (b) 10
   (c) 12   (d) 20

6. Suppose ABCD is a parrallelogram. $AE \perp DC$ and $CF \perp AD$. If AB= 16 cm, AE = 8 cm and CF = 10 cm then find AD :
   (a) 7 cm   (b) 12.8 cm
   (c) 8 cm   (d) 12 cm

7. The angles of a quadrilateral are in the ratio 3:5:9:13, then the largest angle is :
   (a) 36^0 (b) 60^0
   (c) 108^0 (d) 156^0

8. A circle with centre C(o, r) having length of radius 5cm. If a chord of this circle is 6 cm then find the distance of chord from the centre of circle :
   (a) 7 cm   (b) 4 cm   (c) 11 cm   (d) N.O.T.

9. Every rectangle is a quadrilateral :
   (a) True   (b) False
   (c) Nothing can be said   (d) N.O.T.

10. If two dies are thrown simaltencously then probability of getting doublet is :
    (a) $\dfrac{1}{36}$ (b) $\dfrac{1}{6}$
    (c) $\dfrac{2}{7}$ (d) $\dfrac{1}{52}$

(Section-'B' (Physics)

11. Find work done by a body if with the force of 10N body displace by 20m and angle between force and displacement is 90^0 :
    (a) 50 J   (b) 100 J
    (c) 200 J   (d) None

12. A student while verifying the laws of reflection of sound measure the angle between the incident and reflected sound have is 110^0. The angle of reflexion is :
    (a) 110^0 (b) 55^0 (c) 27^0 (d) 70^0

13. The frequency of a source of sound is 100HZ. How many times does it vibrate in a minute :
    (a) 3000   (b) 6000   (c) 12000   (d) 18000

14. How many compressions and rarefactions make one wave?
    (a) 1C and 1R   (b) 1C and 2R
    (c) 2C and 1R   (d) 2C and 2R

15. An object weights 10N in air. When it is fully immersed in a liquid, it weights only 8N. The weight of liquid displaced by the object is :

(a) 14N   (b) 18N   (c) 12N   (d) None

16. The physical quantity that will remain unchanged after reflection of a sound wave is :

(a) Velocity   (b) Wavelength

(c) Frequency   (d) All of the above

17. Which of the following produced sound in tabla :

(a) Stretched membrane   (b) Stretened string

(c) Air Column   (d) All

18. 1 Kilo joule is equal to :

(a) 10 J   (b) 10^3J   (c) 12^2J   (d) 10^4J

19. From which medium sound travel faster at a particular temperature :

(a) Air   (b) Water

(c) Iron   (d) Glass

20. When a body is fully immersed in a liquid, it undergoes an apparent :

(a) Loss in its mass   (b) Loss in its volume

(c) Loss in its weight

(d) There is no loss in any respect

(Section-'C' (Chemistry)

21. Calculate the number of molecules of sulphur(S_8) present in 16 gm of solid Sulphur. (Atomic Mass of S=32) :

(a) 6.022×10^{23} (b) 256×10^{23}

(c) 3.76×10^{22} (d) 8.76×10^{23}

22. Ratio by mass of Oxygen & hydrogen in H_2O is :

(a) 1:2   (b)2:1   (c) 1:1   (d) None

23. An atom having twice the number of electron in L shell to that of K shell. Then atomic number of this atom is :

(a) 2   (b) 4   (c) 6   (d) 8

24. Atomicity of SO_4^{--} is :

(a) 2   (b) 5   (c) 3   (d) None

25. What is the number of valence electron in an atom of element having atomic number 16 :

(a) 2   (b) 4   (c) 6   (d) 8

26. What is the mass of 0.2 mole of Oxygen atoms :

(a) 3.2 gm   (b) 9 gm

(c) 18 gm   (d) 16 cm

27. The number of neutron present in the nucleus of hydrogen is :

(a) 0   (b) 1   (c) 2   (d) All

28. Hydrogen & Oxygen combined in the ratio of 1:8 by mass to form water. What mass of oxygen gas would be required to react completely with 3 gm of hydrogen gas :

(a) 24   (b) 48   (c) 12   (d) 6

29. Formula of Hydrogen oxide is :

(a) HCl   (b) H_2SO_4

(c) H_2CO_3 (d) None

30. Formula of hydrogen sulphide is :

(a) H_2SO_4 (b) $CaCO_3$

(c) $Ca(OH)_2$ (d) None

(Section-'D' (Biology)

31. Which one of these lack well-defined nucleus :

(a) Blue-green algae   (b) Algae

(c) Diatoms   (d) Yeast

32. Hydrophobia is an another name of :

(a) Cholera   (b) Rabies

(c) Diarrhoea   (d) N.O.T.

::Space for Rough Work::

33. Aedes mosquito is a vector of :
    (a) Denghe   (b) Cholera
    (c) Diarrhoea   (d) None
34. Ectothermy refers to :
    (a) Warm blooded   (b) Cold-blooded
    (c) No vabcular system (d) True vascular system
35. Leishmaniasis is spread by bite of :
    (a) Mosquito   (b) Dog
    (c) Butterfly   (d) Sandfly
36. Whooping cough can be prevented through vaccination with :
    (a) DDT   (b) BGP
    (c) Hepatitis-B   (d) N.O.T.
37. Entirely cartilaginous skeleton is present in :
    (a) Sharks   (b) Rohu
    (c) Tuna   (d) N.O.T.
38. In which group of animals, coelom is filled with blood:
    (a) Arthropoda   (b) Nematoda
    (c) Annelida   (d) Echinodermata
39. The word coelenterata means :
    (a) Hollow gut   (b) Segmented worms
    (c) Soft bodied   (d) Roundworms
40. Peptic ulcers is caused by bacterium :
    (a) Helicobacter pylori   (b) Mycobacterium
    (c) Clostridium botulinum (d) Escherichia Coli

(Section-'E' (Challenger)

41. The area of three adjacent faces of a cuboid are x, y & z. If its volume is V, then find its volume.

    (a) xyz   (b) $\sqrt{xyz}$

    (c) $\sqrt{x+y+z}$ (d) xy + yz + z x

42. If d_1 & d_2 be the diameter of two concentric circle such that $d_1 < d_2$ and C_1 be the chord of larger cirle which is tangent to the smaller circle, then which of the following is true :

    (a) $d_1^2 + d_2^2 = c_1^2$ (b) $d_1^2 + c_1^2 = d_2^2$

    (c) $d_1^2 - d_2^2 = c_1^2$ (d) $c_1^2 + d_1^2 = d_2^2$

43. If momentum of a system decrease by 50% then percentage decreases in kinetic energy is :
    (a) 25%   (b) 50%
    (c) 75%   (d) None
44. Density of ice is less than water due to
    (a) High electronegativity of O
    (b) Polar bonding
    (c) Hydrogen bonding
    (d) Tetrtendra arrangement
45. Equation of x-axis is :
    (a) y = 0 (b) x = 0   (c) xy = 0 (d) x+y = 0
46. Volume of cube having side length 5 cm is :
    (a) 25 cm³ (b) 125 cm   (c) 50 cm (d) 125 cm³
47. Two car of unequal masses use similar tyres. It they are moving at the same initial speed, the maximum stopping distance :
    (a) is smaller for the havier car
    (b) is smaller for the lighter car
    (c) is same for the both   (d) None
48. If radius of circle is double then its circumference
    (a) Become double   (b) remain same
    (c) Become triple   (d) None
49. A parallelogram, the measure of whose adjcent sides are 25 cm and 42 cm, has one diagonal 38 cm. Find its, altitude on the side 42 cm.

    (a) $\frac{48}{7} cm$ (b) $\frac{48\sqrt{3}}{7} cm$ (c) $\frac{\sqrt{3}}{7} cm$ (d) $\frac{\sqrt{3}}{48} cm$

50. Which of the following is the king of lab :
    (a) HCl   (b) H_2S
    (c) H_2CO_3 (d) None

The End

Notice

S.T.R.T. Result on 10th Mar. 2017 At 3:00 PM

* *Receive the Result Card & Scholarship Terms & Conditions on 10th -Mar.-2017 after 3:00 PM & before 6:00PM*

* For Result Phone Calls Facilities NOT Available.