ADMISSION CUM SCHOLARSHIP TEST

SAMPLE TEST PAPER

(For Students Going to Class 9th IN 2024)

COURSE OFFERED : GENESIS

Time : 2 hours **Maximum Marks: 240**

DO NOT BREAK THE SEALS ON THIS BOOKLET, AWAIT INSTRUCTIONS FROM THE INVIGILATOR.

INSTRUCTIONS

(A) General :

1. This Question paper contains **FIVE** Parts (Physics, Chemistry, Mathematics, Biology & Mental) containing 60 questions in all.
2. This Question Paper contains 10 pages, other than the OMR.
3. The Question Paper has blank spaces at the bottom of each page for rough work.No additional sheets will be provided for rough work.
4. Blank papers, clip boards, log tables, slide rule, calculators, cellular phones, pagers and electronic gadgets, in any form, are **NOT** allowed.
5. This booklet also contains the **OMR** answer sheet (i.e., A machine gradable Response Sheet).

(B) Answering on the OMR:

6. Each question will have **4 choices** in both the Sections, out of which **only one choice is correct**.
7. Darken the bubble with **Ball Pen (Blue or Black) ONLY.**

(C) Filling – in Name and Registration No.

8. On the **OMR sheet**, write your Name and Registration No. in ink. Also, put your signature in the appropriate box in ink.

(D) Marking Scheme:

9. (a) For each question, you will be awarded **4 marks** if you have darkened only one bubble corresponding to the right answer.
   (b) In case you have not darkened any bubble, you will be awarded 0 mark for that question.
   (c) In all other cases, you will be awarded **–1 mark**.

SEAL

Name :.....

Registration No.: | | | | | | | | | | | | | | | |

PART-A : PHYSICS

1. Pressure on a body depends upon the :

(A) force applied (B) area

(C) both A and B (D) neither of two

2. The ratio of force and acceleration of a moving body is the measure of its:

(A) velocity (B) momentum (C) mass (D) impulse

3. Light is

(A) an electromagnetic radiation (B) a transverse wave

(C) massless (D) all of the above

4. The E.N.T. doctor uses a

(A) convex mirror (B) convex lens

(C) plane mirror (D) concave mirror

5. The material which does not conduct electric current is called

(A) insulator (B) solution (C) metal (D) electrocycle

6. If 10 C charge flows through a conductor in 2 s then the value of the current flowing through the conductor is :

(A) 5A (B) 2A (C) 3A (D) 1A

7. Lighting occurs due to

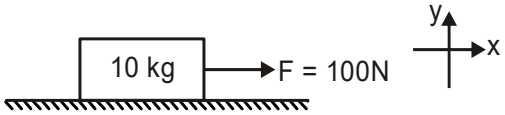
(A) rain (B) wind (C) humidity (D) electric discharge

8. Richter scale is developed by

(A) William Richard (B) Benjamin Franklin

(C) Benjamin Richter (D) Charles F Richter

9. Find acceleration of the body along x-axis if friction coefficient of the surface is $\mu = 0.1$



(A) 1 m/s^2 (B) 9 m/s^2 (C) 0 m/s^2 (D) 10 m/s^2

Space for rough work

10. A block slides down an inclined surface of inclination 30º with the horizontal. Starting from rest it covers 8m in the first two seconds. Find the coefficient of kinetic friction between the two.

(A) 0.11 (B) 0.22 (C) 0.33 (D) 0.44

11. Frequency of sound produced by a body is 10 Hz, then range is

(A) ultrasonic (B) infrasonic (C) audible (D) none of these

12. An object oscillates 50 times in one second. What should be its frequency?

(A) 0.2 Hz (B) 0.02 Hz (C) 0.002 Hz (D) 50 Hz

PART-B : CHEMISTRY

13. Why is polyester not suitable for summer wear?

(A) Polyester creases easily (B) Polyester does not absorb sweat.

(C) It is very soft and thin. (D) It does not dry easily.

14. Which of the following is correct about blended fabrics ?

(A) They are less expensive

(B) They have combined properties of each fibre.

(C) They are made by blending synthetic fibres with natural fibres.

(D) All of the above.

15. Which of these elements is used as an antiseptic in medicine?

(A) Carbon (B) Oxygen (C) Nitrogen (D) Iodine

16. Petroleum is found

(A) on the surface of the earth (B) in the atmosphere

(C) in arctic region (D) deep under the surface of the earth.

Space for rough work

17. While cooking, if the bottom of the vessel is getting black on the outside, it means that

(A) the food is not cooked completely

(B) the fuel is not burning completely

(C) the fuel has high calorific value

(D) the fuel is burning completely.

18. The strength of a material to withstand a weight without breaking is

(A) tensile strength (B) flexibility

(C) hardness (D) metallic strength.

19. Which of the following is a non-metal?

(A) Tungsten (B) Mercury (C) Graphite (D) Platinum

20. Gasoline is the name of

(A) crude oil (B) gaseous fraction of petroleum

(C) mixture of residue left (D) mixture of uncondensed oils.

21. Which part of the flame is hottest?

(A) X (B) Y (C) Z (D) W

Space for rough work

22. Rayon is different from synthetic fibres because

(A) it has silk like appearance (B) it is obtained from wood pulp

(C) it is obtained from petrochemicals (D) it is a strong fibre.

23. Aluminium is a type of metal that is used to make

(A) wires and bulb filaments (B) tanks and magnets

(C) drink cans, foils and aeroplanes (D) food containers and tooth fillings.

24. Which of the following is not a petroleum product?

(A) Petrol (B) Paraffin wax (C) Bees wax (D) Kerosene

PART-C : MATHEMATICS

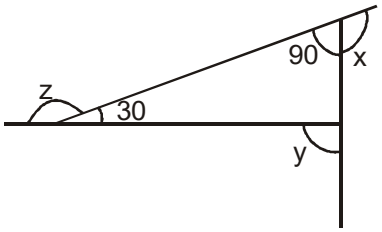
25. Find the value of $-\frac{2}{3}\times\frac{3}{5}+\frac{5}{2}-\frac{3}{5}\times\frac{1}{6}$

(A) 1 (B) 2 (C) 3 (D) 4

26. Find the value of y, if $\frac{3y+4}{2-6y}=\frac{-2}{5}$

(A) – 7 (B) – 8 (C) – 9 (D) – 10

27. Find the value of x + y + z, in the given figure



(A) 300 (B) 360 (C) 400 (D) 350

Space for rough work

28. Find the square root of the 2.56

(A) 1.4 (B) 1.6 (C) 2.6 (D) 3.6

29. The base of an isosceles Δ is $\frac{4}{3}$ cm. The perimeter of the Δ is $4\frac{2}{15}$ cm. What is the length of either of the remaining equal sides.

(A) $1\frac{2}{5}$ cm (B) $2\frac{2}{5}$ cm (C) $3\frac{2}{5}$ cm (D) $4\frac{2}{5}$ cm

30. A sum of Rs 2500 is invested for 2 years at 20% per annum, interest compounded half-yearly. Find the compound interest.

(A) Rs 3660.25 (B) Rs 1660.25 (C) Rs 1160.25 (D) Rs 1330

31. If $2x + \frac{y}{3} = 12$ and xy =30, then find $8x^3 + \frac{y^3}{27}$

(A) 1008 (B) 168 (C) 106 (D) None of these

32. A works 3 times as fast as B. If B can complete a work in 60 days, then in how many days can A and B together complete the same work?

(A) 20 (B) 12 (C) 15 (D) 30

33. If we divide 180 into two parts such that second part is 12 more than the twice of the first part, then the two parts are

(A) 56, 124 (B) 54, 126 (C) 52, 128 (D) 50, 130

34. 36 men can complete a piece of work in 18 days. In how many days will 27 men complete the same work?

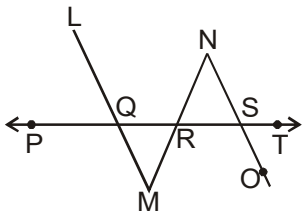
(A) 12 (B) 18 (C) 22 (D) 24

35. If $x = \sqrt{7} + 4$, then evaluate : $x^2 - 8x + 10$

(A) 0 (B) 2 (C) 1 (D) 3

Space for rough work

36. In the given figure, $\overline{LM} \parallel NO$, $\angle QMR = 50°$ and $\angle RSO = 110°$. Find $\angle MRQ$.



(A) 60° (B) 70° (C) 80° (D) 50°

PART-D : BIOLOGY

37. Sprinkler system used in crop irrigation is very advantageous. Give reason.

(A) It helps the fields to get water logged.

(B) It controls the water supply.

(C) It increases the evaporation of water.

(D) It decreases the fertility of soil.

38. Select an effective tool which can crush the big lumps of tilled soil so as to keep it ready for sowing seeds.

(A) Harrow (B) Leveller (C) Seed drill (D) Plough

39. Name the type of microorganism which cause tuberculosis.

(A) Fungi (B) Virus (C) Protozoa (D) Bacteria

40. What happens to stock of yeast inoculated grape juice after a week?

(A) Stock will decompose (B) Stock will ferment

(C) Stock will distill (D) Stock will oxidize

41. What does creation of wild life reserve and enforcement of laws of conservation promote ?

(A) Use of biocides (B) Preservation of species

(C) Use of biological control (D) Exploitation of species

Space for rough work

42. Which scheme of plantation would help in developing new forests ?

(A) Deforestation (B) Afforestation (C) Agroforestry (D) Social forestry

43. The egg of a hen is a

(A) organ (B) tissue (C) cell (D) organ system

44. Find the main difference between an onion peel cell and a human cheek cells.

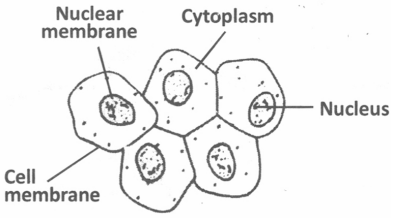
(A) Presence of mitochondria in onion peel cells only

(B) Presence of cell wall in onion peel cells only

(C) Absence of plasma membrane in cheek cells

(D) Absence of endoplasmic reticulum

45. Observe the cell given below and relate it to the correct option.



(A) It is a sperm cell

(B) It is a cheek cell

(C) It is a nerve cell

(D) It is a blood cell

46. What would fusion of male and female gametes result in ?

(A) An embryo (B) Foetus (C) Zygote (D) None of these

47. Find out the incorrect statements about cloning of 'Dolly'.

(A) Dolly was born on 14th February, 1988.

(B) Dolly was given birth by a finn Dorset sheep.

(C) Dolly was found to be absolutely identical to the Scottish blackface ewe.

(D) The nucleus of the mammary gland cell from the Finn Dorsett sheep was inserted into the egg of the Scottish blackface ewe whose nucleus had been removed.

48. Which of the following is a master gland ?

(A) Testes (B) Pituitary gland (C) Thyroid gland (D) Pancreas

Space for rough work

PART-E : MENTAL ABILITY

Find missing numbers :

49. 5, 7, 20, 21, 80, 63, ? 189

(A) 300 (B) 305 (C) 310 (D) 332

50. 7, 9, 13, 21, ?,

(A) 30 (B) 32 (C) 35 (D) 37

51. 2, 9, 28, 65, 126, ?

(A) 187 (B) 217 (C) 242 (D) 344

52. In a certain code '37' means 'which class' and '583' means 'caste and class', What is the code for 'caste' ?

(A) 3 (B) 7 (C) 8 (D) Either 5 or 8

53. 5, 30, 6, 42, 7, 56, ?

(A) 6 (B) 8 (C) 9 (D) 10

54. 161, 160, 152, ?, 115, 86 ?

(A) 127 (B) 137 (C) 140 (D) 142

55. 51, 44, 37, ?, 23

(A) 32 (B) 28 (C) 30 (D) 26

56.

	3	
4	12	5
	2	

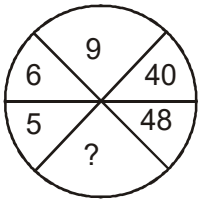
	6	
5	18	2
	3	

	2	
5	?	2
	8	

(A) 20 (B) 16 (C) 12 (D) 14

Space for rough work

57.



(A) 54 (B) 70 (C) 72 (D) 80

Find missing letters :

58. AZ, XB, CV, TD, ?

(A) PD (B) ER (C) RE (D) OQ

59. A, B, C. G, ?

(A) M (B) L (C) K (D) H

60. Y, W, U, S, Q, ??

(A) NJ (B) ML (C) JR (D) OM

Space for rough work

ANSWER KEYS

SAMPLE TEST PAPER

(For Students Going to Class 9th IN 2024)

COURSE OFFERED : GENESIS

PHYSICS

1.	(C)	2.	(C)	3.	(D)	4.	(D)	5.	(A)	6.	(A)
7.	(D)	8.	(D)	9.	(B)	10.	(A)	11.	(B)	12.	(D)

CHEMISTRY

13.	(B)	14.	(D)	15.	(D)	16.	(D)	17.	(B)	18.	(A)
19.	(C)	20.	(B)	21.	(A)	22.	(B)	23.	(C)	24.	(C)

MATHEMATICS

25.	(B)	26.	(B)	27.	(B)	28.	(B)	29.	(A)	30.	(C)
31.	(A)	32.	(C)	33.	(A)	34.	(D)	35.	(C)	36.	(A)

BIOLOGY

37.	(B)	38.	(B)	39.	(D)	40.	(B)	41.	(B)	42.	(B)
43.	(C)	44.	(B)	45.	(B)	46.	(C)	47.	(D)	48.	(B)

MENTAL ABILITY

49.	(D)	50.	(D)	51.	(B)	52.	(D)	53.	(B)	54.	(B)
55.	(C)	56.	(B)	57.	(C)	58.	(B)	59.	(C)	60.	(D)