



IGNITE

SAMPLE TEST PAPER

ACADEMIC SESSION : 2017-18
CLASS - IX



Time : 1½ Hr.

Date : 29-04-2017

Maximum Marks : 100

GENERAL INSTRUCTIONS

1. In Mathematics, Physics, Chemistry, Biology each question carry 2(two) marks and in Social Science and Mental Ability each question carry 1 (one) mark.
2. Blank papers, clip boards, log tables, slide rule, calculators, mobile or any other electronic gadgets in any form is not allowed.
3. Write your Name and Roll No. in the space provided in the bottom of this booklet.
4. Before answering the paper, fill up the required details in the blank space provided in the answer sheet.
5. Do not forget to mention your roll number neatly and clearly in the blank space provided in the answer sheet.
6. There is 1/4 negative marking for each wrong answer. So attempt each question carefully.
7. No rough sheets will be provided by the invigilators. All the rough work is to be done in the blank space provided in the question paper.
8. In case of any dispute, the answer filled in the OMR sheet available with the institute shall be final.
9. Post exam Answer Key will be declared. Correction in Answer Key will be accepted till next 36 hours after which no correction will be entertained.



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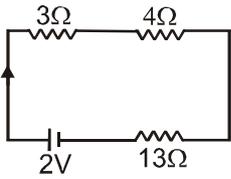
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1. Twelve years hence a man will be four times as he was twelve years ago, then his present age is
 (A) 20 years (B) 25 years
 (C) 28 years (D) 30 years
2. If $2^x - 2^{x-1} = 4$ then x^x is equal to
 (A) 1 (B) 27
 (C) 8 (D) None
3. Which rational number is exactly in middle between the two rational numbers $\frac{1}{3}$ & $\frac{1}{2}$
 (A) $\frac{5}{12}$ (B) $\frac{5}{6}$
 (C) $\frac{1}{12}$ (D) $\frac{3}{5}$
4. Simplify : $\frac{\sqrt{\sqrt{81} + \sqrt{256} + 39}}{\sqrt{\sqrt{169} - \sqrt{49} - 2}}$
 (A) 6 (B) 8
 (C) 4 (D) 2
5. If $a^x = b$, $b^y = c$ and $c^z = a$, then the value of xyz is :
 (A) 0 (B) 1
 (C) $x + y + z$ (D) abc
6. The 5% of any sum equal to 15% of Rs. 600 . The sum will be -
 (A) Rs. 1500 (B) Rs. 1200
 (C) Rs. 1000 (D) Rs. 1800
7. A certain sum of money doubles itself at a compound interest in 10 years. It becomes eight times in :
 (A) 20 years (B) 30 years
 (C) 15 years (D) 13 years
8. A, B and C can complete a work, working alone in 10, 15 and 20 days respectively. If all of them work together to complete the work, what fraction of the work would have done by B ?
 (A) $\frac{4}{13}$ (B) $\frac{1}{2}$
 (C) $\frac{1}{3}$ (D) $\frac{6}{13}$
9. Toffees are bought at the rate of 4 for a rupee. To gain 60% they must be sold at :
 (A) 2.5 for a rupee (B) 5 for a rupee
 (C) 6 for a rupee (D) 8 for a rupee
10. The mean weight of a class of 34 students is 46.5 kg. If weight of the teacher is included, the mean weight rises by 500 gm. Then the weight of the teacher is –
 (A) 175 kg. (B) 62 kg.
 (C) 64 kg. (D) 72 kg.
11. Focal length of a convex lens is 100 cm, its power will be :
 (A) –10 D (B) – 1 D
 (C) +1 D (D) 0.1 D
12. Which of the following is not a unit of force ?
 (A) Dyne (B) Newton
 (C) Joule (D) Kg m/s^2

Space For Rough Work

13. The lens which produces small, erect, virtual image :
 (A) concave lens (B) plano convex
 (C) convex lens (D) none of these
14. How many newtons are equal to 1 dyne ?
 (A) 10^4 (B) 10^5
 (C) 10^{-5} (D) 10^3
15. If a wave completes 24 cycles in 10s, then the frequency of the wave is :
 (A) 30 Hz (B) 2.4 Hz
 (C) 24 Hz (D) 12 Hz
16. A calorimeter full of hot water is hang in vacuum. It will cool by :
 (A) convection (B) radiation
 (C) conduction (D) Not cool at all
17. How many electrons are there in one coulomb charge ?
 (A) 6.25×10^6 (B) 6.25×10^{18}
 (C) 6.25×10^9 (D) 6.25×10^{15}
18. The planet closest to the sun is :
 (A) mars (B) Jupiter
 (C) mercury (D) earth
19. Match the following :
 (1) Conductor (a) plastic
 (2) Charge at rest (b) current electricity
 (3) Moving charge (c) electrostatics
 (4) Insulator (d) copper
 (A) (1) → (c), (2) → (d), (3) → (b), (4) → (a)
 (B) (1) → (d), (2) → (c), (3) → (a), (4) → (b)
 (C) (1) → (c), (2) → (d), (3) → (b), (4) → (a)
 (D) (1) → (d), (2) → (c), (3) → (b), (4) → (a)
20. In the given circuit below, the potential drop across 4 ohm resistor is :

 (A) 2.6 V (B) 1.2 V
 (C) 0.4 V (D) 9.6 V
21. Which hydride among the following is called hydrolith ?
 (A) NaH (B) KH
 (C) CaH_2 (D) MgH_2
22. In the reaction $2\text{Al} + \text{Cr}_2\text{O}_3 \longrightarrow 2\text{Cr} + \text{Al}_2\text{O}_3$, oxidising agent is -
 (A) Al (B) Cr_2O_3
 (C) Cr (D) Al_2O_3
23. Which of the following is a monomer of PVC ?
 (A) Ethylene
 (B) Tetrafluoro ethylene
 (C) Chloroethane
 (D) None of the above
24. Which of the following metal has been used for building boats because it has resistance to corrosion by sea water ?
 (A) Cu (B) Ni
 (C) W (D) Ti
25. When iron is heated with chlorine gas, the product of the reaction is-
 (A) FeCl_2 (B) Fe_3Cl_4
 (C) FeCl_3
 (D) No reaction takes place

Space For Rough Work

26. Which of the following is not a product of petroleum refining ?
 (A) Toluene (B) Gasoline
 (C) Kerosene oil (D) Diesel oil
27. When magnesium ribbon is heated in presence of oxygen then a white powder is formed. White powder is -
 (A) magnesium phosphate
 (B) magnesium oxide
 (C) magnesium carbonate
 (D) Both (B) and (C)
28. In destructive distillation of wood, wood is heated-
 (A) in the absence of air.
 (B) in the limited supply of air.
 (C) in the excess supply of air.
 (D) none of these
29. Which of the following substances is used in refining of petroleum ?
 (A) NaCl (B) NaOH
 (C) Na₂CO₃ (D) NaHCO₃
30. The element which does not get oxidized when heated in air, is -
 (A) iron (B) gold
 (C) calcium (D) magnesium
31. The finger like structures present in mitochondria are called as :
 (A) Grana (B) Microvilli
 (C) Villi (D) Cristae
32. Ribosomes are made up of :
 (A) Fat and proteins
 (B) Proteins and RNA
 (C) Lipids and proteins
 (D) Proteins and DNA
33. Acrosome is made up of :
 (A) Mitochondria (B) Centrioles
 (C) Golgi bodies (D) Ribosomes
34. What is the function of Testes ?
 (A) Produce sperm
 (B) Produce male hormone - testosterone
 (C) Both A & B
 (D) None of these
35. Bacterial genome is called :
 (A) Nucleus (B) Nucleolus
 (C) Nucleoid (D) None
36. Locate the malarial parasite :
 (A) Entamoeba (B) Trypanosoma
 (C) Paramoecium (D) Plasmodium
37. Viral envelope is made up of :
 (A) Proteins (B) Lipids
 (C) Carbohydrates (D) All of the above
38. The general formula for carbohydrate is
 (A) C_nH_{2n}O_{n-1}
 (B) C_nH_{2n}O_n
 (C) both of them are correct
 (D) none of them is correct
39. The high yielding dwarf variety of wheat developed by Dr. M.S. Swaminathan was :
 (A) Hira – moti
 (B) C 306
 (C) Sharbati sonara
 (D) Arjun
40. Food for cattle including more fibre content is called as :
 (A) Roughage
 (B) Concentrate
 (C) Both of above
 (D) None of the above

Space For Rough Work

41. The Horse latitudes are -
 (A) The regions lying between 5°N and 5°S
 (B) The regions of low atmospheric pressure
 (C) The regions of calm and light variable winds
 (D) The regions of moist air and unstable weather conditions
42. Which Edible crops do not need more water :
 (A) Rice (B) Wheat
 (C) Millet (D) Oilseeds
43. Physical capital includes the items :
 (A) Raw material and money
 (B) Tools, Machines & Building
 (C) Air, Water & Gas
 (D) All the above
44. Which of the following crop's production increased in India by Green Revolution :
 (A) Mustard & Groundnut
 (B) Sugarcane and Sunflower
 (C) Wheat and Rice
 (D) Tea and Coffee
45. A government is federal or unitary on the basis of relation between the :
 (A) Three organs of government
 (B) Centre and States
 (C) Legislature and the Executive
 (D) Constitution and the States
46. The part of the Constitution that reflects the mind and ideals of the framers is :
 (A) Directive Principles
 (B) Fundamental Rights
 (C) Preamble
 (D) Citizenship
47. Population composition means
 (A) population structure.
 (B) population density.
 (C) population distribution.
 (D) population growth.
48. Who was the founder of Congress ?
 (A) A.O. Hume (B) W. C Bannerjee
 (C) Lala Lajpat Rai (D) Litten
49. Most of the year, the weather in Chennai is
 (A) hot and humid.
 (B) cold and pleasant.
 (C) humid with heavy downpour.
 (D) hot and cold.
50. The sun shines vertically over the equator on :
 (A) March 21 (B) December 22
 (C) June 21 (D) all days
- Directions : (51 to 53) Find the missing terms :**
51. 18, 35, 69, 137, ?
 (A) 270 (B) 273
 (C) 271 (D) 272
52. 1 BR, 2 EO, 6 HL, 15 KI, ?
 (A) 22 NF (B) 31 NF
 (C) 31 NE (D) 28 NF
53.

7	11	49
12	8	54
15	4	?

 (A) 36 (B) 7
 (C) 25 (D) 0

Space For Rough Work

54. If **THRASH** is coded as **UGSZTG** how will **HEAD** be written in that code?
 (A) IECD (B) GDZC
 (C) IDBC (D) GDBC

55. If in the word **MANORANJAN** the first letter is interchanged with the last letter, the second letter is interchanged with the ninth letter and so on, which letter would come after the letter which is fourth from your left in the newly formed word.
 (A) R (B) A
 (C) N (D) J

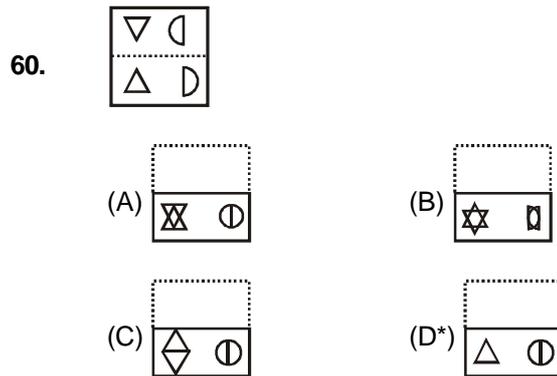
56. If $A + B$ means A is the brother of B, $A - B$ means A is the father of B, $A \times B$ means A is the wife of B, then $P \times R - S + T$ means
 (A) P is the mother of T.
 (B) T is the sister of P.
 (C) R is the grand father of T.
 (D) T and R are sisters.

Direction : (57) In the following question choose the missing word in place of sign ? On the basis of the relationship between the words given on the left side of sign ::

57. Pakistan : Rupees : : Italy: ?
 (A) Rupees (B) Taka
 (C) Yen (D) Lira
58. If ' $20 - 10$ ' means 200, ' $8 \div 4$ ' means 12, ' 6×2 ' means 4 and ' $12 + 3$ ' means 4, then
 $100 - 10 \times 1000 \div 1000 + 100 \times 10 = ?$
 (A) 1090 (B) 0
 (C) 1900 (D) 20

59. If the sixth day of a month is fourth day after Sunday then which day of the week will be on 19th day of that month -
 (A) Friday (B) Wednesday
 (C) Saturday (D) Tuesday

Direction : (60) A square transparent sheet with a pattern is given in figure X. Find out from amongst the alternatives as to how the pattern would appear when the transparent sheet is folded at the dotted line.



Space For Rough Work

CLASS - IX (ANSWER KEY)

Ques	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Ans.	A	B	A	C	B	D	B	A	A	C	C	C	A	B	B
Ques	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
Ans.	B	B	C	D	C	C	B	D	D	C	A	B	A	B	B
Ques	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
Ans.	D	B	C	C	C	D	A	B	C	A	C	C	B	C	B
Ques	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
Ans.	C	A	A	A	A	B	B	D	C	B	A	D	B	B	D