LEAP SAMPLE TEST PAPER (IX STD)

Time : 1 hrs. **Maximum Marks : 120**

Name : _____ Roll No. : _____

NOTE:
1. There are 4 Sections **(1) Physics - 7 Q. (2) Chemistry - 7 Q. (3) Mathematics – 8 Q. (4) Biology – 8 Q**
2. Each section consists of MCQ with 4 options out of which only one option is correct.
3. There is negative marking scheme for **(4R-1W)** means that for correct answer 4 marks will be awarded & for wrong answer 1 mark will be deducted.
4. No mark will be awarded or deducted for unanswered question.

PHYSICS

NOTE: There are 7 questions in this part.

7 × 4 = 28 Marks (4R – 1W)

CHOOSE THE CORRECT OPTION:

Q.1) Choose the wrong statement.

(A) Retardation is a vector quantity

(B) Acceleration due to gravity is a vector quantity

(C) Average speed is a vector quantity

(D) Displacement is a vector quantity

Q.2) Which of the following class of forces is different from others?

(A) Magnetic force (B) Electrical force

(C) Gravitational force (D) Stretching of a spring

Q.3) A body of mass 5 kg undergoes a change in speed from 72 to 0.72 km/h. The momentum of the body would

(A) Increase by 99 kg m/s (B) Decrease by 99 kg m/s

(C) Increase by 101 kg m/s (D) Decrease by 101 kg m/s

Q.4) The increase in velocity of a freely falling body in 1 sec is

(A) $9.8 m/s^2$ (B) $9.8 m/s$ (C) $-9.8 m/s^2$ (D) $-9.8 m/s$

Q.5) Which of the following is not possible?

(A) An object moving in certain direction with acceleration in perpendicular direction

(B) A object moving with constant acceleration but zero velocity.

(C) A object moving with variable speed & uniform velocity.

(D) None of above

Q.6) The area of circle of diameter 28 cm is :

(A) 661 cm^2 (B) 616 cm^2 (C) 996 cm^2 (D) None of these

Q.7) 10 dm^3 of a gas is equal to

(A) $10^{-2}m^3$ (B) 10^2m^3 (C) $10^{-3}m^3$ (D) 10^3m^3

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CHEMISTRY

NOTE: There are 7 questions in this part.

7 × 4 = 28 Marks (4R – 1W)

CHOOSE THE CORRECT OPTION:

Q.8) Mg^{2+} is isoelectronic with _____.

(i) Ca^{2+} (ii) Na^+ (iii) Zn^{2+} (iv) Al^{3+}

(A) (i) & (ii) (B) (ii) & (iii) (C) (ii) & (iv) (D) (iii) & (iv)

Q.9) When a student put some copper turnings in a colorless solution, he observed that the solution gradually turned blue. The solution is most likely to be

(A) Ferrous sulphate solution. (B) Magnesium nitrate solution

(C) Silver nitrate solution (D) Copper sulphate solution.

Q.10) What is the mass of 12.044×10^{23} number of O_2 molecules?

(A) 8g (B) 16g (C) 32g (D) 64g

Q.11) 10 ml of a solution of NaOH is found to be completely neutralised by 8 ml of a given solution of HCl. If we take 20 ml of the same solution of NaOH, the amount of HCl solution (the same solution as before) required to neutralize it will be

(A) 4 ml (B) 8 ml (C) 12 ml (D) 16 ml

Q.12) 'X' and 'Y' are the two atomic species:-

	X	Y
Number of Proton	8	8
Number of Neutron	8	10

Select the correct statement about 'X' and 'Y'.

(A) 'X' and 'Y' are isobars

(B) 'X' and 'Y' have different chemical properties

(C) 'X' and 'Y' have different physical properties.

(D) 'X' and 'Y' are the atoms of different elements.

Q.13) In Thomson's Atomic Model the electrons are

(A) stationary (B) revolving (C) rotating (D) none of these

Q.14) Rust formation is an example of

(A) Chemical combination reaction (B) Chemical decomposition reaction

(C) Chemical displacement reaction (D) Chemical double decomposition reaction

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MATHEMATICS

NOTE: There are 8 questions in this part.

8 × 4 = 32 Marks (4R – 1W)

CHOOSE THE CORRECT OPTION:

Q.15) $\frac{1}{\sqrt{9}-\sqrt{8}}$ is equal to

(A) $\frac{1}{2}(3-2\sqrt{2})$ (B) $3+2\sqrt{2}$ (C) $3-2\sqrt{2}$ (D) $\frac{1}{3+2\sqrt{2}}$

Q.16) If $x^{51}+51$ is divided by $x+1$ the remainder is

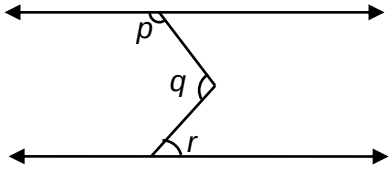
(A) 50 (B) 0 (C) 1 (D) 49

Q.17) If the perpendicular distance of a point '*P*' from the *x*-axis is 5- units and foot of the perpendicular lies on the negative direction of *x*-axis, then the point '*P*' has,

(A) *x* coordinate = – 5 (B) *y* coordinate = 5 only

(C) *y* coordinate = – 5 (D) *y* coordinate = 5 or – 5

Q.18) In the figure *AB* || *CD*, then the value of *p* + *q* – *r* = _____



(A) 80° (B) 180° (C) 100° (D) 360°

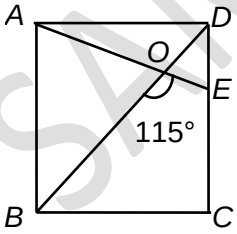
Q.19) The graph of the linear equation $2x+3y=6$ cut the y – axis at the point.

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

Q.20) Two sides of a triangle are of lengths 5*cm* and 1.5*cm.* The length of the third side of triangle can not be

(A) 3.6 *cm* (B) 4.1 *cm* (C) 3.8 *cm* (D) 3.4 *cm*

Q.21) $\square ABCD$ is a square $\angle BOE = 115°$, find $\angle OED$.



(A) 40° (B) 55° (C) 70° (D) 65°

Q.22) The expression $(x+y)^{-1}(x^{-1}+y^{-1})$ is equivalent to

(A) 1 (B) $(xy)^{-1}$ (C) x^y (D) $xy^{-1}+x^{-1}y$

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BIOLOGY

NOTE: There are 8 questions in this part.

8 × 4 = 32 Marks (4R – 1W)

CHOOSE THE CORRECT OPTION:

Q.23) Which of the following plant tissue shows the pectin deposition on cell wall?

(A) Collenchyma (B) Parenchyma (C) Sclerenchyma (D) Chlorenchyma

Q.24) Pine and Deodar are the examples of

(A) gymnosperm (B) Pteridophyta (C) thallophyta (D) bryophyta

Q.25) Which of the following is mismatch?

(A) Leprosy – bacterial infection

(B) Gonorrhea – viral infection

(C) Malaria – protozoan infection

(D) Elephantiasis – nematode infection

Q.26) Assertion (A): People entering into the burning place die due to suffocation.

Reasons (R): Smoke contains large amount of Carbon monoxide, a toxic gas.

(A) (A) is correct and (R) is wrong (B) (R) explains (A)

(C) (R) does not explain (A) (D) (A) is wrong but (R) is correct.

Q.27) Antibodies are complex

(A) lipoproteins (B) Steroids (C) prostaglandins (D) globulin proteins

Q.28) Which of the following diseases is NOT caused by a eukaryotic organism ?

(A) Malaria (B) Cholera

(C) African Sleeping Sickness (D) Information insufficient

Q.29) Nucleic acid present in virus is

(A) Single Stranded DNA (B) Double Stranded DNA

(C) RNA (D) All of these

Q.30) CHIPKO ANDOLAN was started by

(A) S.L.Bahuguna (B) Amrita Bishnoi (C) Maheshwari (D) Medha Patkar

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LEAP SAMPLE ANSWER KEY (IX STD)

1	C	16	A
2	D	17	D
3	B	18	B
4	B	19	C
5	C	20	D
6	B	21	C
7	A	22	B
8	C	23	A
9	C	24	A
10	D	25	B
11	D	26	B
12	C	27	D
13	A	28	B
14	A	29	D
15	B	30	A

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