

FOUNDATION COURSE

CLASS X

PAPER : 6

Max. Marks. : 100

P_{RP} C_S M_A B_G

Time : 2 hrs.

TOPICS COVERED:

PHYSICS : Magnetic Effect of Current.

CHEMISTRY : Acid, Base and Salt

MATHS : Arithmetic Progression

BIOLOGY : CNS, PNS, Spiral and Cranial nerves, sympathetic and parasympathetic nervous system

GENERAL INSTRUCTIONS :

1. Paper consist of **4 Section** each for **Physics, Chemistry, Maths** and **Biology**. Answers for each question should be given in the space provided in the question paper itself.
2. Each section contains 13 questions, all questions are compulsory.
3. Question 1 - 5 are **objective type questions** of 1 Mark each.
4. Question 6 - 7 consist of 1 Marks each.
5. Question 8 - 9 consist of 2 Marks each.
6. Question 10 - 12 consist of 3 Marks.
7. Question 13 consist of 5 Marks.

	Physics	Chemistry	Maths	Biology
Marks				
Total				

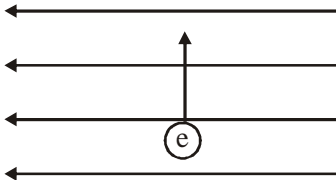
Name of the Student : _____

Centre : _____

Invigilator's Signature : _____

PHYSICS

1. SI unit of magnetic field is
(a) Weber (b) Tesla (c) Ampere (d) Coulomb [1]
2. On which rule electric motor works ?
(a) Fleming left hand rule
(b) Fleming right hand rule
(c) Right hand thumb rule
(d) None of these [1]
3. Electric generator works on which rule ?
(a) Fleming left hand rule (b) Fleming right hand rule
(c) Right hand thumb rule (d) None of these [1]
4. Magnetic field is in horizontal direction what will be the direction of force acting on moving electron



Magnetic Field ←

(a) Upwards (b) Downwards (c) Towards north (d) Towards south [1]
5. Two protons moving in same direction will exert
(a) Attractive force (b) Repulsive force
(c) No force on each other (d) Force perpendicular to the plane of motion [1]
6. What is electric generator ? On what principle does it work ? [1]

7. State right hand thumb rule ? [1]

8. Draw magnetic field lines due to solenoid ? [2]

9. What is the shape of magnetic field lines due to current carrying straight long wire ? [2]
10. (i) What is the use of earth wire ? [3]
(ii) Give reason why magnetic field lines never intersect each other ?
11. Explain the concept of working of electric bell ? [3]
12. Draw the diagram of house hold electric circuits ? [3]

13. What is electro magnetic induction. Explain the working of electric generator ?

[5]

9. Write short note of pH ? [2]
10. What is paster of paris ? Write its two uses. [3]
11. Exaplain one preparation method of NaOH ? [3]
12. Write short note on bleaching powder ? [3]

13. Give the formula of the following :

[5]

- (a) Brine
- (b) Gypsum
- (c) Slaked lime
- (d) Milk of magnesia
- (e) Plaster of paris

1. What is the common difference of the series 51, 48, 45, 42,.....
(a) 3 (b) -3 (c) 2 (d) 1 [1]
2. How many terms of the series 54, 51, 48,..... be taken so that their sum is 513?
(a) 34 (b) 54 (c) 21 (d) none of these [1]
3. 2, x , 7 are in A. P then the value of x be
(a) 4 (b) 4.5 (c) 5 (d) 3.5 [1]
4. What is the sum of the series $1 + 2 + 3 + \dots + 10$?
(a) 45 (b) 65 (c) 55 (d) 55.5 [1]
5. Find the 20th term of the series 5, 10, 15,.....
(a) 105 (b) 95 (c) 100 (d) None of these [1]
6. Find the sum of all 2 digits number divisible by 3. [1]
7. What is Arithmetic Progression? [1]
8. If 5th term and 8th term of an A.P be 20 & 32 respectively find 1st term and common difference. [2]

9. The 54th and 4th terms of an A.P are -61 and 64 . Find the 23rd term. [2]
10. Find the sum of all natural number between 250 and 1000 which are exactly divisible by 3 and 5. [3]
11. How many terms of the A.P 9, 17, 25,.....must be taken to give a sum of 636? [3]
12. Which term of the A.P 121, 117, 113, is its first negative terms. [3]

13. The sum of the third and the seventh terms of an A.P in 6 and their product is 8. Find sum of first sixteen terms of the A. P. [5]

BIOLOGY

1. Rate of heart beat and breathing movements of human body are controlled by
(a) Medulla oblongata (b) Cerebrum (c) Diencephalon (d) Vermis [1]
2. The centre for sense of smell in brain is -
(a) Olfactory lobes (b) Midbrain (c) Cerebellum (d) Cerebrum [1]
3. Autonomous nervous system controls
(a) Voluntary activities (b) Involuntary activities
(c) Neither voluntary and involuntary activities (d) Both voluntary and non-voluntary activities [1]
4. Which one of the following is spinal nerve –
(a) Trigeminal (b) Hypoglossal (c) Olfactory (d) None of these [1]
5. Which one is the region for visual reception -
(a) Frontal lobe (b) Temporal lobe (c) Occipital lobe (d) Parietal lobe [1]
6. What is electroencephalograph ? [1]

7. What are the constituents of central nervous system ? [1]

8. What do you understand by peripheral nervous system ? [2]

9. Explain spinal nerves. [2]

10. Differentiate between sympathetic system and parasympathetic system.

[3]

11. What is medulla oblongata ? Write down its function.

[3]

12. Differentiate between cerebrum and cerebellum ?

[3]

13. (a) Draw the structure of human brain. [2]
- (b) Write down the function of [3]
- (i) Fore brain (ii) Spinal cord