

# FIITJEE Admission Test

for students presently in **Class 10 (Paper 2)**

Time: 3 Hours (2:00 pm – 5:00 pm)

**CODE: 1011-2**

Maximum Marks: 234

## Instructions:

Caution: Class, Paper, Code as given above **MUST** be correctly marked on the answer OMR sheet before attempting the paper. Wrong Class, Paper or Code will give wrong results.

- You are advised to devote 60 Minutes on Section-I, 60 Minutes on Section-II and 60 Minutes on Section-III.**
- This Question paper consists of 3 sections. Marking scheme is given in table below:

Section	Subject	Question no.	Marking Scheme for each question	
			Correct answer	Wrong answer
SECTION – I	PHYSICS (PART-A)	1 to 10	+3	–1
	CHEMISTRY (PART-B)	11 to 20	+3	–1
	MATHEMATICS (PART-C)	21 to 30	+3	–1
SECTION – II	PHYSICS (PART-A)	31 to 36	+3	–1
	CHEMISTRY (PART-B)	37 to 42	+3	–1
	MATHEMATICS (PART-C)	43 to 48	+3	–1
	PHYSICS (PART-D)	49 to 50	+3	0
	CHEMISTRY (PART-E)	51 to 52	+3	0
	MATHEMATICS (PART-F)	53 to 54	+3	0
SECTION – III	PHYSICS (PART-A)	55 to 59	+3	0
	CHEMISTRY (PART-B)	60 to 64	+3	0
	MATHEMATICS (PART-C)	65 to 69	+3	0
	PHYSICS (PART-D)	70 to 72	+3	0
	CHEMISTRY (PART-E)	73 to 75	+3	0
	MATHEMATICS (PART-F)	76 to 78	+3	0

- Answers have to be marked on the OMR sheet. The Question Paper contains blank spaces for your rough work. No additional sheets will be provided for rough work.
- Blank papers, clip boards, log tables, slide rule, calculator, cellular phones, pagers and electronic devices, in any form, are not allowed.
- Before attempting paper writes your OMR Answer Sheet No., Registration Number, Name and Test Centre** in the space provided below.
- See method of marking of bubbles at the back of cover page for question no. 49 to 54 and 70 to 78.**

**Note:** Please check this Question Paper contains all **78** questions in serial order. If not so, exchange for the correct Question Paper.

**OMR Answer Sheet No. :** \_\_\_\_\_

**Registration Number :** \_\_\_\_\_

**Name of the Candidate :** \_\_\_\_\_

**Test Centre :** \_\_\_\_\_

For questions **49 to 54 and 70 to 78**

Numerical based questions single digit answer 0 to 9

**Example 1:**

If answer is 6.

Correct method:

① ② ③ ④ ⑤ ● ⑦ ⑧ ⑨

**Example 2:**

If answer is 2.

Correct method:

① ● ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

SAMPLE PAPER

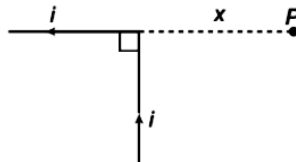
## Recommended Time: 60 Minutes for Section – I

### Section – I

## PHYSICS – (PART – A)

*This part contains 10 Multiple Choice Questions number 1 to 10. Each question has 4 choices (A), (B), (C) and (D), out of which ONLY ONE is correct.*

1. In a given time of 10 s, 40 electrons pass from right to left. In the same interval of time 40 protons also pass from left to right. The average value of current is  
 (A)  $1.28 \times 10^{-18}$  A (B)  $2.28 \times 10^{-18}$  A  
 (C)  $3.38 \times 10^{-18}$  A (D)  $4.48 \times 10^{-18}$  A
2. A wire has a resistance R. What will be its resistance if it is stretched to double its length?  
 (A) R (B) 2 R  
 (C) 3 R (D) 4 R
3. Determine the magnetic field at point P located a distance x from the corner of an infinitely long wire bent at right angle as shown in figure. The wire carries a steady current i.



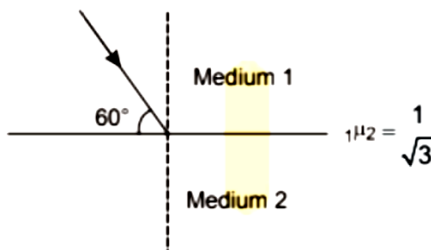
- (A)  $\frac{\mu_0 i}{4\pi x}$  (B)  $\frac{\mu_0 i}{2\pi x}$   
 (C)  $\frac{\mu_0 i}{\pi x}$  (D)  $\frac{\mu_0 i}{6\pi x}$
4. An electron moving in a circular orbit of radius R with frequency f. The magnetic field at the centre of the orbit is  
 (A)  $\frac{\mu_0 e f}{2\pi R}$  (B)  $\frac{\mu_0 e f}{2R}$   
 (C)  $\frac{\mu_0 e f^2}{2R}$  (D) zero

---

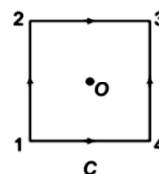
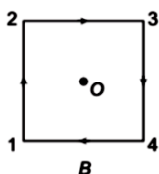
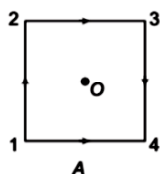
*Space for Rough Work*

5. An object is placed at a distance of 30 cm from a concave mirror of focal length 20 cm. Find image distance  
 (A) – 60 cm (B) + 60 cm  
 (C) – 30 cm (D) + 30 cm

6. Consider the figure shown below and find out the angle of refraction:



- (A)  $0^\circ$  (B)  $30^\circ$   
 (C)  $45^\circ$  (D)  $60^\circ$
7. The radius of a circular wire is 0.5 m and the current is 10 amp. What is the magnitude of magnetic field at the centre of the circular wire?  
 (A)  $12.57 \times 10^{-6}$  T (B)  $12.57 \times 10^{-5}$  T  
 (C)  $12.57 \times 10^{-4}$  T (D)  $12.57 \times 10^{-3}$  T
8. A straight wire of diameter 0.5 mm carrying a current 2 A is replaced by another wire of diameter 1 mm carrying the same current. The strength of magnetic field at a distance 2 m away from the centre is  
 (A) half of the previous value (B) twice of the previous value  
 (C) unchanged (D) quarter of its previous value
9. Two long straight wires, each carrying a current  $I$  in opposite directions are separated by a distance  $R$ . The magnetic induction at a point mid-away between the wires is  
 (A) zero (B)  $\frac{\mu_0 I}{\pi R}$   
 (C)  $\frac{2\mu_0 I}{\pi R}$  (D)  $\frac{\mu_0 I}{4\pi R}$
10. The figure shows three identical current carrying square loops A, B and C. Identify the correct statement related to magnetic field  $B$  at the centre  $O$  of the square loop. Current in each wire is  $I$ .



- (A)  $B$  is zero in all cases (B)  $B$  is zero only in case of C  
 (C)  $B$  is non-zero in all cases (D)  $B$  is non-zero only in case of B

Space for Rough Work

## CHEMISTRY – (PART – B)

This part contains **10 Multiple Choice Questions** number **11 to 20**. Each question has 4 choices (A), (B), (C) and (D), out of which **ONLY ONE** is correct.

11. Which has the maximum atomic radius-  
 (A) Al (B) Si  
 (C) P (D) Mg
12. Which of the following reactions represents thermite welding process involved in the repairing of broken railway tracks?  
 (A)  $\text{Al} + \text{Fe}_2\text{O}_3 \rightarrow \text{Al}_2\text{O}_3 + \text{Fe}$  (B)  $\text{Al}_2\text{O}_3 + \text{Cr} \rightarrow \text{Cr}_2\text{O}_3 + \text{Al}$   
 (C)  $\text{Al}_2\text{O}_3 + \text{Fe} \rightarrow \text{Fe}_2\text{O}_3 + \text{Al}$  (D)  $\text{C} + \text{Fe}_2\text{O}_3 \rightarrow \text{CO} + \text{Fe}$
13. Which among the following metal form passive layer with steam?  
 (A) Cu (B) Al  
 (C) Zn (D) Fe
14. Noble gases were included in Mendeleev's periodic table in the –  
 (A) 1<sup>st</sup> group (B) 7<sup>th</sup> group  
 (C) 8<sup>th</sup> group (D) none of these
15. The elements with atomic numbers 2, 10, 18, 36, 54 and 86 are all-  
 (A) halogens (B) noble gases  
 (C) noble metals (D) light metals
16. Which of the following elements has the least nonmetallic character-  
 (A) fluorine (B) chlorine  
 (C) bromine (D) iodine
17. Eka – aluminium and eka –silicon are known as:  
 (A) gallium and germanium (B) aluminum and silicon  
 (C) iron and sulphur (D) proton and silicon
18. Alkaline earth metals form ion of the formula:  
 (A)  $\text{M}^+$  (B)  $\text{M}^{+2}$   
 (C)  $\text{M}^{+4}$  (D)  $\text{M}^{+3}$
19. Which one of the following belongs to representative group of elements in the periodic table  
 (A) Lanthanum (B) Iron  
 (C) Chromium (D) Aluminium
20. In the following equation  

$$a\text{Zn} + b\text{H}_2\text{SO}_4 \longrightarrow c\text{ZnSO}_4 + d\text{H}_2$$
 a, b, c, d can have the values  
 (A) 1, 2, 2, 1 (B) 1, 1, 1, 1  
 (C) 1, 1, 1, 2 (D) 2, 1, 1, 2

*Space for Rough Work*

## MATHEMATICS – (PART – C)

This part contains **10 Multiple Choice Questions** number **21 to 30**. Each question has 4 choices (A), (B), (C) and (D), out of which **ONLY ONE** is correct.

21. Minimum value of  $x^2 - 2x + 3$  is  
 (A) 1 (B) 2 (C) 3 (D) 4
22. If  $\sin x = \frac{1}{2}$ , then  $\cos x$  can be?  
 (A)  $\frac{1}{2}$  (B)  $\frac{1}{\sqrt{2}}$  (C)  $-\frac{1}{\sqrt{2}}$  (D)  $-\frac{\sqrt{3}}{2}$
23. If coordinates of midpoints of sides of triangle are (0, 2), (3, 6), (7, 3). Find area of triangle ?  
 (A) 11 unit<sup>2</sup> (B) 12 unit<sup>2</sup> (C) 50 unit<sup>2</sup> (D) 13 unit<sup>2</sup>
24. A ray of light emerging from point A(3, 2), strikes on x-axis at P( $\alpha$ , 0) and reflected ray passes through point B(8, 4). Find  $\alpha$  ?  
 (A)  $\frac{14}{3}$  (B) 7 (C) 5 (D) 6
25. Find the remainder when  $(79)^6$  is divided by 11.  
 (A) 3 (B) 6 (C) 9 (D) 12
26. a and b, when divided by 7 and 6 respectively, leaves remainders p and q respectively. What is the maximum value of p + q ?  
 (A) 5 (B) 6 (C) 12 (D) 11
27. A point E is chosen at random from within square ABCD. What is the probability that  $\triangle ABE$  is obtuse?  
 (A)  $\frac{\pi}{8}$  (B)  $\frac{\pi}{4}$  (C)  $\frac{\pi}{16}$  (D)  $\frac{3\pi}{16}$
28. A and B throw a dice. The probability that A's throw is not greater than B's is  
 (A)  $\frac{5}{12}$  (B)  $\frac{7}{12}$  (C)  $\frac{1}{6}$  (D)  $\frac{1}{2}$
29. Given that one of the zeroes of the cubic polynomial  $ax^3 + bx^2 + cx + d$  is zero, the product of the other two zeroes is  
 (A)  $-\frac{c}{a}$  (B)  $\frac{c}{a}$  (C) 0 (D) 3
30. If  $\sin \theta_1 + \sin \theta_2 + \sin \theta_3 = 3$  then  $\cos \theta_1 + \cos \theta_2 + \cos \theta_3$  is :  
 (A) 1 (B) 0 (C) 3 (D) 2

**Space for Rough Work**

## Recommended Time: 60 Minutes for Section – II

### Section – II

## PHYSICS – (PART – A)

*This part contains 6 Multiple Choice Questions number 31 to 36. Each question has 4 choices (A), (B), (C) and (D), out of which ONLY ONE is correct.*

31. A constant current of 4 A passes through a wire for 8 s. Find total charge flowing through that wire in the given time interval.  
 (A) 8 C (B) 16 C  
 (C) 32 C (D) 64 C
32. An object is placed at a distance of 40 cm from a convex mirror of focal length 40 cm. Find image position  
 (A) – 20 cm (B) + 20 cm  
 (C) – 40 cm (D) + 40 cm
33. Find net force on the equilateral loop of side 4 m carrying a current of 2 A kept in a uniform magnetic field of 2 T as shown in figure.
- 
- (A) 16 N (B) 32 N  
 (C) 64 N (D) 128 N
34. An object is 30.0 cm from a spherical mirror, along the central axis. The absolute value of lateral magnification is  $\frac{1}{2}$ . The image produced is inverted. Focal length of the mirror is  
 (A) – 10 cm (B) + 10 cm  
 (C) – 20 cm (D) + 20 cm
35. Critical angle of light passing from glass to air is least for  
 (A) red (B) green  
 (C) yellow (D) violet
36. When light enters from air to water, then its  
 (A) frequency increases and speed decreases  
 (B) frequency is same, but the wavelength is smaller in water than in air  
 (C) frequency is same but the wavelength in water is greater than in air  
 (D) frequency decreases and wavelength is smaller in water than in air

**Space for Rough Work**

## CHEMISTRY – (PART – B)

This part contains 6 Multiple Choice Questions number 37 to 42. Each question has 4 choices (A), (B), (C) and (D), out of which **ONLY ONE** is correct.

37. Which of the following reaction is not a redox reaction  
(A)  $\text{Cu} + \text{I}_2 \longrightarrow \text{CuI}_2$  (B)  $\text{Fe} + \text{S} \longrightarrow \text{FeS}$   
(C)  $\text{MnO}_2 + 4\text{HCl} \longrightarrow \text{MnCl}_2 + 2\text{H}_2\text{O} + \text{Cl}_2$  (D)  $\text{CaCO}_3 \longrightarrow \text{CaO} + \text{CO}_2$
38. Which of the following metals evolve hydrogen gas when treated with sodium hydroxide solution?  
(A) Aluminium (B) Zinc  
(C) Both (A) & (B) (D) None of these
39. Which of the following non-metal is lustrous?  
(A) Sulphur (B) Oxygen  
(C) Nitrogen (D) Iodine
40. Most acidic oxide is  
(A)  $\text{Al}_2\text{O}_3$  (B)  $\text{MgO}$   
(C)  $\text{Na}_2\text{O}$  (D)  $\text{CaO}$
41. Without looking at the periodic table, select the elements of IIIA group of the periodic table (atomic numbers are given)  
(A) 3, 11, 19, 37 (B) 5, 13, 21, 39  
(C) 7, 15, 31, 49 (D) 5, 13, 31, 49
42. Chemical used for making photographic film is  
(A) Sodium iodide (B) Silver bromide  
(C) Potassium iodide (D) Copper chloride

*Space for Rough Work*



## MATHEMATICS – (PART – C)

This part contains **6 Multiple Choice Questions** number **43 to 48**. Each question has 4 choices (A), (B), (C) and (D), out of which **ONLY ONE** is correct.

43. In  $\triangle ABC$ , points P and Q are on sides AB and AC such that  $PQ \parallel BC$ . If PQ divides  $\triangle ABC$  in two equal areas, then find AP:PB ?  
 (A)  $\sqrt{2} + 1$                       (B)  $\sqrt{2} - 1$                       (C)  $\sqrt{2} : 1$                       (D)  $3 - 2\sqrt{2}$
44. Among first 100 natural number, a number is selected at random. Find probability that selected number has odd number of factors?  
 (A)  $\frac{1}{10}$                                   (B)  $\frac{3}{25}$                                   (C)  $\frac{13}{100}$                                   (D)  $\frac{11}{100}$
45. In  $\triangle ABC$ , point D is on AC such that  $\angle ABC = \angle BDC$ , if  $BC = 9$  cm,  $BD = 8$  cm,  $BA = 12$  cm find AD ?  
 (A) 7 cm                                  (B) 6 cm                                  (C) 6.5 cm                                  (D) 7.5 cm
46. If  $\alpha, \beta, r, s$  are roots of  $x^4 - x^3 + x^2 + x + 3 = 0$ , Find value of  $(1+\alpha)(1+\beta)(1+r)(1+s)$  ?  
 (A) 4    (B) 5    (C) 6    (D) 8
47. Find ratio in which line joining of points A(-7, -1) and B(8, 2) is divided by  $x + y = 2$  ?  
 (A) 5 : 4                                  (B) 4 : 3                                  (C) 3 : 2                                  (D) 6 : 5
48. In a throw of three unbiased dice, find probability of sum of number obtained is 5 ?  
 (A)  $\frac{1}{36}$     (B)  $\frac{1}{108}$     (C)  $\frac{1}{72}$     (D)  $\frac{5}{216}$

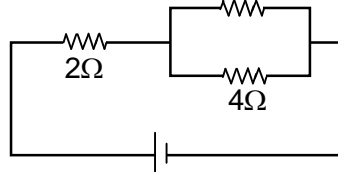
---

**Space for Rough Work**

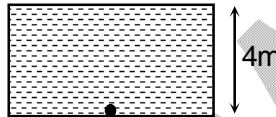
**PHYSICS – (PART – D)**

**This part contains 2 Numerical Based Questions number 49 to 50. Each question has Single Digit Answer 0 to 9.**

49. For the circuit given below, if electrical power across  $2\Omega$  resistance is  $10\text{ K}$ , find  $K$ .



50. Figure shows a tank in which water is filled upto height  $4\text{ m}$ . A marble is placed at bottom of the tank. What is apparent depth of the marble if seen from above. Refractive index of water is  $\frac{4}{3}$



Space for Rough Work

## CHEMISTRY – (PART – E)

*This part contains 2 Numerical Based Questions number 51 to 52. Each question has Single Digit Answer 0 to 9.*

51. Calculate the pH of a solution of a 0.05 M dibasic acid assuming 100% ionization.
52. Electronegativity of Fluorine rounded off to nearest integer is

---

*Space for Rough Work*

SAMPLE PAPER

## MATHEMATICS – (PART – F)

*This part contains 2 Numerical Based Questions number 53 to 54. Each question has Single Digit Answer 0 to 9.*

53. What is the unit's digit of  $142^{111} \times 169^{178} - 273^{141}$  ?

54. The remainder when  $\frac{1! + 2! + 3! + \dots + 99!}{15}$

---

*Space for Rough Work*

SAMPLE PAPER

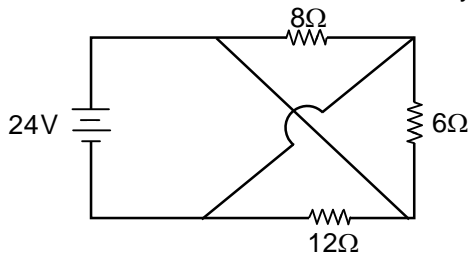
## Recommended Time: 60 Minutes for Section – III

### Section – III

## PHYSICS – (PART – A)

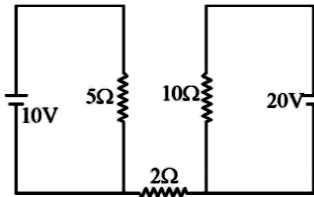
This part contains 5 Multiple Choice Questions number 55 to 59. Each question has 4 choices (A), (B), (C) and (D), out of which **ONLY ONE** is correct.

55. The total current drawn from the battery is



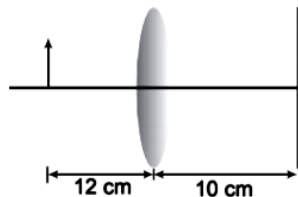
- (A) 3 A  
(B) 45 A  
(C) 6 A  
(D) 9 A

56. Find out the value of current through  $2\ \Omega$  resistance for the given circuit



- (A) 5 A  
(B) 2 A  
(C) zero  
(D) 4 A

57. An object, a convex lens of focal length 20 cm and a plane mirror are arranged as shown in the figure. How far behind the mirror is the second image formed?

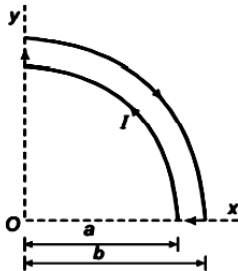


- (A) 30 cm  
(B) 20 cm  
(C) 40 cm  
(D) 50 cm

*Space for Rough Work*

58. A spherical mirror forms an erect image three times the size of the object. If the distance between the object and the image is 80 cm, the nature and the focal length of the mirror are  
 (A) concave, 30 cm (B) convex, 30 cm  
 (C) concave, 15 cm (D) convex, 15 cm

59. The figure shows a wire frame in xy-plane carrying a current  $I$ . The magnetic field at the point O is



(A)  $\frac{\mu_0 I}{8} \left[ \frac{1}{a} - \frac{1}{b} \right] \hat{k}$

(B)  $\frac{\mu_0 I}{8} \left[ \frac{1}{b} - \frac{1}{a} \right] \hat{k}$

(C)  $\frac{\mu_0 I}{4} \left[ \frac{1}{a} - \frac{1}{b} \right] \hat{k}$

(D)  $\frac{\mu_0 I}{4} \left[ \frac{1}{b} - \frac{1}{a} \right] \hat{k}$

---

Space for Rough Work

SAMPLE PAPER

## CHEMISTRY – (PART – B)

This part contains 5 Multiple Choice Questions number 60 to 64. Each question has 4 choices (A), (B), (C) and (D), out of which **ONLY ONE** is correct.

60. The products of Solvay process is/are  
(A)  $\text{NaHCO}_3$  (B)  $\text{K}_2\text{CO}_3$   
(C)  $\text{CaO}$  (D) All of these
61.  $\text{Na}^+$  is smaller than  $\text{Na}$  – atom because  
(A) nucleus in each case contains different nucleons  
(B) sodium atom has an electron lesser than sodium ion  
(C) sodium atom has 11 electrons and sodium ion has 10 electrons  
(D) the force of attraction is less in  $\text{Na}^+$  than in  $\text{Na}$ -atom
62. Stronger reducing agent among the following is  
(A)  $\text{F}^-$  (B)  $\text{Cl}^-$   
(C)  $\text{Br}^-$  (D)  $\text{I}^-$
63. Which of the following methods is not used for preparing a salt?  
(A) reaction between an acid and a base (B) action of acid on metals  
(C) action of acid on metal oxides (D) dissolution of acids in water.
64. Which of the following base is used as antacid to neutralize stomach acidity?  
(A)  $\text{Mg}(\text{OH})_2$  (B)  $\text{KOH}$   
(C)  $\text{Ca}(\text{OH})_2$  (D)  $\text{NaOH}$

---

*Space for Rough Work*

**MATHEMATICS – (PART – C)**

This part contains 5 Multiple Choice Questions number 65 to 69. Each question has 4 choices (A), (B), (C) and (D), out of which **ONLY ONE** is correct.

65. If  $x^{2013} + \frac{1}{x^{2013}} = 2$ , Find  $x^{2022} + \frac{1}{x^{2022}}$  ?  
(A) 0 (B) 1 (C) 2 (D) 4
66. The number of solutions in positive integers of  $2x + 3y = 763$  is  
(A) 125 (B) 126 (C) 127 (D) 128
67. The circumcentre of a triangle whose vertices are  $(-2, -3)$ ,  $(-1, 0)$  and  $(7, -6)$  is  
(A)  $(-3, 3)$  (B)  $(3, -3)$  (C)  $(-3, -3)$  (D) none of these
68.  $\sqrt{3 - 2\sqrt{2}}$  is equal to  
(A)  $\sqrt{2} - 1$  (B)  $1 - \sqrt{2}$   
(C)  $\pm(\sqrt{2} - 1)$  (D) None of these
69. If one of the zeroes of the quadratic polynomial  $(k - 1)x^2 + kx + 1$  is  $-3$ , then the value of  $k$  is  
(A)  $4/3$  (B)  $-4/3$  (C)  $2/3$  (D)  $-2/3$

---

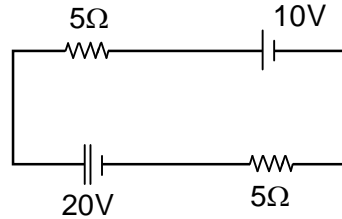
Space for Rough Work



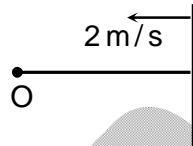
## PHYSICS – (PART – D)

This part contains 3 Numerical Based Questions number 70 to 72. Each question has Single Digit Answer 0 to 9.

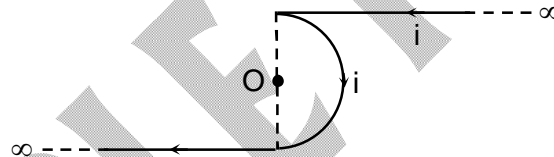
70. Current flowing in the circuit is



71. An object O is placed at rest in front of a plane mirror. If the plane mirror moves towards stationary object with speed of 2 m/s, what will be the speed of image as seen by object.



72. In the figure shown, a wire carrying current is bent to form two semi-infinite wires and one semi-circular loop as shown.



If magnetic field at O due to the semi-circular portion is 7T, find magnitude of net magnetic field at O due to all the current.

---

*Space for Rough Work*

## CHEMISTRY – (PART – E)

*This part contains 3 Numerical Based Questions number 73 to 75. Each question has Single Digit Answer 0 to 9.*

73. What is the pH of solution made by mixing equal volumes of 0.1 N-H<sub>2</sub>SO<sub>4</sub>, 0.1 N-HNO<sub>3</sub>, 0.1 N-HCl?
74. The pH of 0.00001 M-NaOH solution is ( $\log 2 = 0.3$ )
75. What would be the period number for element Galium?

---

*Space for Rough Work*

SAMPLE PAPER

## MATHEMATICS – (PART – F)

**This part contains 3 Numerical Based Questions number 76 to 78. Each question has Single Digit Answer 0 to 9.**

76. Find remainder when  $3^{128}$  is divided by 13 ?
77. If  $\alpha, \beta, r$  are roots of  $x^3 - 3x + 1 = 0$ , find value of  $(\alpha + \beta)^3 + (\beta + r)^3 + (r + \alpha)^3$  ?
78. Find the length of the perpendicular from the point (3, -2) to the straight line  $12x - 5y + 6 = 0$  :

**Space for Rough Work**

SAMPLE PAPER

# FIITJEE Admission Test

for students presently in **Class 10 (Paper 2)**

## SAMPLE PAPER ANSWER KEY

1.	A	2.	D	3.	A	4.	B
5.	A	6.	D	7.	A	8.	C
9.	C	10.	B	11.	D	12.	A
13.	B	14.	D	15.	B	16.	D
17.	A	18.	B	19.	D	20.	B
21.	B	22.	D	23.	C	24.	A
25.	C	26.	D	27.	A	28.	B
29.	B	30.	B	31.	C	32.	B
33.	B	34.	A	35.	D	36.	B
37.	D	38.	C	39.	D	40.	A
41.	D	42.	B	43.	A	44.	A
45.	D	46.	B	47.	A	48.	A
49.	5	50.	3	51.	1	52.	4
53.	5	54.	3	55.	D	56.	C
57.	C	58.	A	59.	A	60.	A
61.	C	62.	D	63.	D	64.	A
65.	C	66.	C	67.	B	68.	A
69.	A	70.	3	71.	4	72.	7
73.	1	74.	9	75.	4	76.	9
77.	3	78.	4				