

# FIITJEE - JEE (Main)

## PHYSICS, CHEMISTRY & MATHEMATICS

BATCHES: NWCM123D1R,D1W & PANINI123-D1\_PT1

### PHASE TEST – I

Q.P. CODE:

Time Allotted: 3 Hours

Maximum Marks: 300

- Do not open this Test Booklet until you are asked to do so.
- Please read the instructions carefully. You are allotted 5 minutes specifically for this purpose.

### Important Instructions

**Caution: Question Paper CODE as given above MUST be correctly marked in the answer OMR sheet before attempting the paper. Wrong CODE or no CODE will give wrong results.**

#### A. General Instructions

1. Attempt ALL the questions. Answers have to be marked on the OMR sheets.
2. This question paper contains **Three Sections**.
3. **Section-I** is Physics, **Section-II** is Chemistry and **Section-III** is Mathematics.
4. Each **Section** is further divided into **Two Parts: Part-A & C** in the OMR. Part-B of OMR to be left unused
5. Rough spaces are provided for rough work inside the question paper. No additional sheets will be provided for rough work.
6. No candidate is allowed to carry any textual material, printed or written, bits of papers, clip boards, log tables, slide rule, calculator, cellular phones, pagers and electronic devices ext. except the Admit Card inside the examination hall / room.

#### B. Filling of OMR Sheet:

1. Ensure matching of OMR sheet with the Question paper before you start marking your answers on OMR sheet.
2. On the OMR sheet, darken the appropriate bubble with **Blue/Black Ball Point Pen** for each character of your Enrolment No. and write in ink your Name, Test Centre and other details at the designated places.
3. OMR sheet contains alphabets, numerals & special characters for marking answers.
4. **Do not fold or make any stray marks on the Answer Sheet.**

#### C. Marking Scheme for All Two Parts:

- (i) **Part-A (01-20)** – Contains Twenty (20) multiple choice objective questions which have four (4) options each and only one correct option. Each question carries **+4 marks** which will be awarded for every correct answer and **-1 mark** will be deducted for every incorrect answer.
- (ii) **Part-B (01-05)** contains five (05) Numerical based questions, the answer of which maybe positive or negative numbers or decimals (e.g. 6.25, 7.00, -0.33, -.30, 30.27, -127.30) and each question carries **+4 marks** for correct answer and **there will be no negative marking**.

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

Batch : \_\_\_\_\_ Date of Examination : \_\_\_\_\_

Enrolment Number : \_\_\_\_\_

# Physics

## PART – A

### Straight Objective Type

This part contains **20 multiple choice questions**. Each question has 4 choices (A), (B), (C) and (D), out of which **ONLY ONE** is correct.

1. Power applied to a particle varies with time as  $P = (3t^2 - 2t + 1)$  watt, where  $t$  is in second. Find the change in its kinetic energy between  $t = 2$  sec and  $t = 4$  sec.  
 (A) 32 J (B) 46 J  
 (C) 61 J (D) 100 J

1. **B**

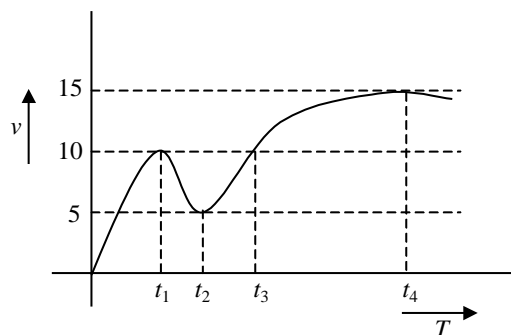
2. Velocity of particle moving along x-axis is given as  $v = (x^3 - x^2 + 2)$  m/sec. Find the acceleration of particle at  $x = 2$  meter.  
 (A) 48 m/s<sup>2</sup> (B) 16 m/s<sup>2</sup>  
 (C) 32 m/s<sup>2</sup> (D) 8 m/s<sup>2</sup>

2. **A**

3. If  $\vec{A} = 2\hat{i} + 3\hat{j} - \hat{k}$  and  $\vec{B} = -\hat{i} + 3\hat{j} + 4\hat{k}$ , then projection of  $\vec{A}$  on  $\vec{B}$  will be  
 (A)  $\frac{3}{\sqrt{13}}$  (B)  $\frac{3}{\sqrt{26}}$  (C)  $\sqrt{\frac{3}{26}}$  (D)  $\sqrt{\frac{3}{13}}$

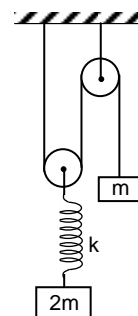
3. **B**

4. Velocity time graph of a particle undergoing rectilinear motion is plotted upto  $T = t_4$  as shown in the figure. Average acceleration of the particle is zero in the time interval between  
 (A) 0 and  $t_1$   
 (B)  $t_1$  and  $t_2$   
 (C)  $t_1$  and  $t_3$   
 (D)  $t_2$  and  $t_4$



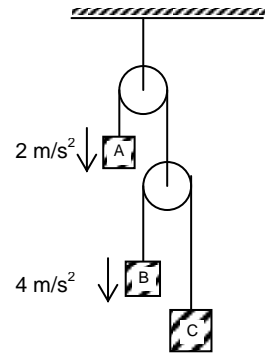
4. **C**

5. For a system in equilibrium as shown in figure elongation in spring will be  
 (A)  $\frac{mg}{k}$  (B)  $\frac{2mg}{k}$   
 (C)  $\frac{4mg}{k}$  (D)  $\frac{3mg}{k}$



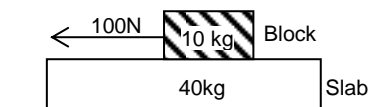
5. **B**

6. In the figure shown acceleration of blocks A and B are as shown.  
The acceleration of block C is  
(A)  $8 \text{ m/s}^2$  upward (B)  $4 \text{ m/s}^2$  upward  
(C)  $2 \text{ m/s}^2$  downward (D) zero



6. **A**
7. A boat which has a speed of  $5 \text{ km/h}$  in still water crosses a river of width  $1 \text{ km}$  along the shortest possible path in  $15 \text{ min}$ . The velocity of the river water in  $\text{km/h}$  is  
(A) 1 (B) 3  
(C) 4 (D)  $\sqrt{41}$
7. **B**
8. The magnitude of radius vector of a point varies with time as  $r = \beta t (1 - \alpha t)$  where  $\alpha$  and  $\beta$  are positive constant. The distance travelled by this body till its displacement becomes zero.  
(A)  $\frac{\beta}{\alpha}$  (B)  $\frac{\beta}{2\alpha}$   
(C)  $\alpha\beta$  (D)  $\frac{2\alpha}{\beta}$

8. **B**
9. A  $40 \text{ kg}$  slab rests on a frictionless floor. A  $10 \text{ kg}$  block rests on top of the slab. The static coefficient of friction between the block and the slab is  $0.70$  while the kinetic coefficient is  $0.50$ . The  $10 \text{ kg}$  block is acted upon by a horizontal force of  $100 \text{ N}$ , the resulting acceleration of the slab will be  
(A)  $1.00 \text{ m/s}^2$  (B)  $1.25 \text{ m/s}^2$   
(C)  $1.75 \text{ m/s}^2$  (D)  $2.00 \text{ m/s}^2$

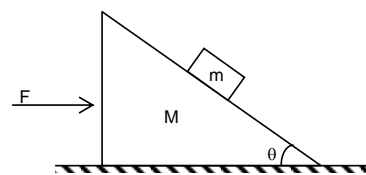


9. **B**
10. A particle is moving in a circle of radius  $\frac{2}{3} \text{ m}$  and mass of the particle is  $2 \text{ kg}$ . The kinetic energy of the particle depends on distance 'S' travelled by the particle as  $K.E. = 4S^4$ . The angle made by net acceleration with the radial acceleration when the particle rotate by  $60^\circ$ , is  
(A)  $\tan^{-1}\left(\frac{3}{\pi}\right)$  (B)  $\tan^{-1}\left(\frac{6}{\pi}\right)$   
(C)  $\tan^{-1}\left(\frac{1}{\pi}\right)$  (D)  $\tan^{-1}\left(\frac{4}{\pi}\right)$
10. **B**
11. A particle has an initial velocity of  $3\hat{i} + 4\hat{j}$  and an acceleration of  $0.4\hat{i} + 0.3\hat{j}$ . Its Speed after  $10 \text{ sec}$  is  
(A)  $10 \text{ m/s}$  (B)  $7 \text{ m/s}$  (C)  $7\sqrt{2} \text{ m/s}$  (D)  $8.5 \text{ m/s}$

11. **C**

12. All surfaces are smooth, then calculate the value of  $F$  for which the block remains stationary w.r.t wedge.

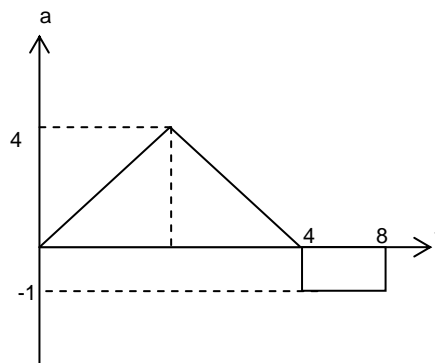
- (A)  $Mg \tan \theta$
- (B)  $(M+m)g \tan \theta$
- (C)  $Mg \cot \theta$
- (D)  $(M+m)g \cot \theta$



12. **B**

13. The acceleration time graph of a particle is shown in the figure. What is the velocity of particle at  $t = 8$ sec, if initial velocity of particle is  $3\text{m/s}$

- (A)  $4 \text{ m/s}$
- (B)  $5 \text{ m/s}$
- (C)  $6 \text{ m/s}$
- (D)  $7 \text{ m/s}$



13. **D**

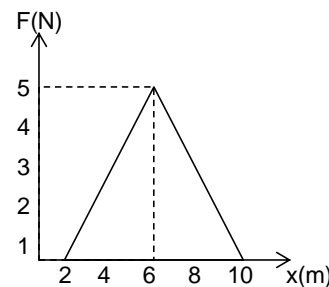
14. If a unit vector is represented by  $0.5\hat{i} + 0.8\hat{j} + c\hat{k}$ , then the value of 'c' is

- (A) 1
- (B)  $\sqrt{0.11}$
- (C)  $\sqrt{0.01}$
- (D)  $\sqrt{0.39}$

14. **B**

15. A force shown in the  $F - x$  graph is applied to a  $2 \text{ kg}$  block horizontally as shown in the figure. The change in kinetic energy is

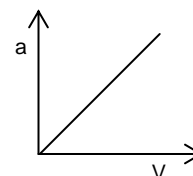
- (A)  $15 \text{ J}$
- (B)  $20 \text{ J}$
- (C)  $25 \text{ J}$
- (D)  $30 \text{ J}$



15. **C**

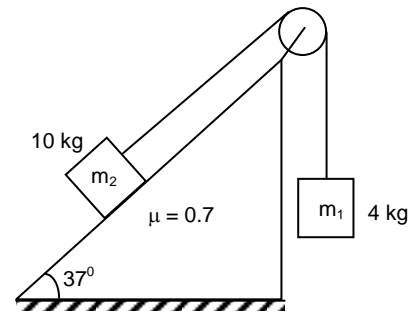
16. The acceleration-velocity graph of a particle moving in a straight line is as shown in figure. Then slope of velocity-displacement graph

- (A) increases linearly
- (B) decreases linearly
- (C) is constant
- (D) increases parabolically



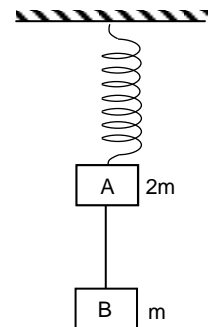
16. **C**

17. For the arrangement shown in figure, net contact force applied by incline plane on block of mass  $m_2$  will be  
 (A) 80 N (B)  $20\sqrt{17}$  N  
 (C) 20 N (D) 100 N



17. **B**
18. A particle of mass 2kg is moving under the influence of a force which always acts towards the centre and whose potential energy is given by  $v_r = 2r^3$  J. If the body is moving in a circular orbit of radius 5m then its mechanical energy will be  
 (A) 625 J (B) 5 J  
 (C) 250 J (D) none of these
18. **A**
19. A particle of mass  $m$  describes a circle of radius  $r$ . The centripetal acceleration of the particle is  $\frac{4}{r^2}$ . What will be the linear momentum of particle  
 (A)  $\frac{2m}{r}$  (B)  $\frac{2m}{\sqrt{r}}$  (C)  $\frac{4m}{\sqrt{r}}$  (D)  $\frac{4m}{r}$

19. **B**
20. Two blocks A and B of masses  $2m$  and  $m$  respectively, are connected by a massless and inextensible string. The whole system is suspended by a massless spring as shown in the figure and they are in equilibrium. The magnitude of acceleration of A and B, immediately after the string is cut are respectively,  
 (A)  $g, \frac{g}{2}$  (B)  $\frac{g}{2}, g$   
 (C)  $g, g$  (D)  $\frac{g}{2}, \frac{g}{2}$



20. **B**

**PART-B**  
**Numerical Type**

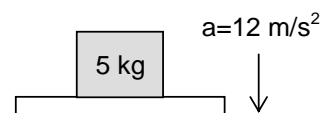
1. An object is displaced from point A(1m, 2m, 3m) to a point B(2m, 3m, 4m) under a constant force  $\vec{F} = (2\hat{i} + 3\hat{j} + 4\hat{k})$  N. Find the work done by this force in this process. (in joule)

1. **9**

2. A balloon is ascending vertically with an acceleration of  $0.2 \text{ m/s}^2$ . Two stones are dropped from it at an interval of 1 sec. Find the distance in m between them 1.3 sec after the first stone is released. (use  $g = 9.8 \text{ m/s}^2$ )

2. **8**

3. Velocity time equation of a particle moving in a straight line is  $V = t^2 - 5t + 6$ . The distance travelled by the particle in the time interval from  $t = 0$  to  $t = 4$  sec
3. **5.67**  
Range: 5.65 – 5.70
4. A person walking at the rate of 3km/hour, the rain appears to fall vertically when he increase his to speed 6 km/hr it appears to meet him at angle of  $45^\circ$  with vertical. The speed of rain is (km/hr) ( $\sqrt{2} = 1.41$ )
4. **4.23**  
Range: 4.20 – 4.25
5. A block 5 kg is kept on the floor of an elevator at rest. As the elevator starts descending with an acceleration of  $12 \text{ m/s}^2$ , (Taking  $g = 10 \text{ m/s}^2$ ) the displacement of the block during the first 0.2 sec.
5. **0.20**  
Range: 0.19 – 0.21



# Chemistry

## PART – A

### Straight Objective Type

This part contains **20 multiple choice questions**. Each question has 4 choices (A), (B), (C) and (D), out of which **ONLY ONE** is correct.

- How many moles of oxygen atom is present in 90 g of water?  
 (A)  $5 \times 6.023 \times 10^{23}$  (B) 10  
 (C) 5 (D)  $6.023 \times 10^{22}$
- C**
- Which of the following electron transition in hydrogen atom emits radiation of largest wavelength?  
 (A)  $n = 3 \rightarrow n = 1$  (B)  $n = 4 \rightarrow n = 3$   
 (C)  $n = 4 \rightarrow n = 1$  (D)  $n = 3 \rightarrow n = 2$
- B**
- The energy change of which of the following transformation is called ionization energy of a metal M?  
 (A)  $M(s) \longrightarrow M^+(g) + e^-$  (B)  $M(s) + e^- \longrightarrow M^-(g)$   
 (C)  $M(g) \longrightarrow M^+(g) + e^-$  (D)  $M(g) + e^- \longrightarrow M^-(g)$
- C**
- Which of the following relationship explains particle and wave nature of materials?  
 (A)  $E = \frac{hc}{\lambda}$  (B)  $\lambda = \frac{h}{p}$   
 (C)  $mur = \frac{nh}{2\pi}$  (D)  $\frac{1}{\lambda} = Rz^2 \left[ \frac{1}{n_1^2} - \frac{1}{n_2^2} \right]$
- B**
- P, Q, R, S, T, U  
 Above elements are present in a period of the periodic table without any gap between them. If the dipositive ion of R contains 24 electrons. What is the atomic number of T?  
 (A) 22 (B) 26  
 (C) 28 (D) 24
- C**
- What is the shape of  $CCl_4$  molecule?  
 (A) Triangular planar (B) Octahedral  
 (C) Tetrahedral (D) Pyramidal
- C**

7. **0.1 mole of atoms of an element weigh 2.4 g. What is the atomic mass of the element?**  
 (A) 2.4 (B) 24  
 (C) 240 (D) 20.4
7. **B**
8. Which of the following molecule contains maximum number of molecular orbitals which are occupied with electrons?  
 (A) N<sub>2</sub> (B) O<sub>2</sub>  
 (C) F<sub>2</sub> (D) Li<sub>2</sub>
8. **C**
9. How much magnesium can be dissolved in 400 mL of 0.5 M HCl solution according to the following reaction.  

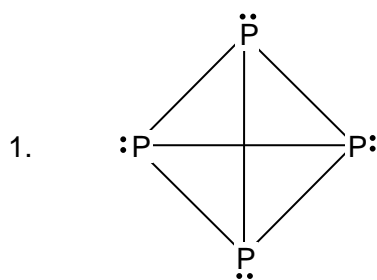
$$\text{Mg} + 2\text{HCl} \longrightarrow \text{MgCl}_2 + \text{H}_2$$
  
 (A) 2.4 mole (B) 2.4 g  
 (C) 0.2 mole (D) 0.2 g
9. **B**
10. Under which of the following conditions a gas is most likely to show positive deviation from ideal behaviour?  
 (A) 240°C, 20 atm (B) 100°C, 10 atm  
 (C) 120°C, 10 atm (D) 500°C, 20 atm
10. **B**
11. Which of the following is the smallest atom of it's group as well as period in the modern periodic table?  
 (A) Li (B) F  
 (C) Ne (D) Cl
11. **B**
12. Which quantum number has the highest value for the valence electron of magnesium?  
 (A) Principal quantum number (B) Azimuthal quantum number  
 (C) Magnetic quantum number (D) Spin quantum number
12. **A**
13. According to Bohr's theory, the radius of orbits of H or H-like species is expressed as  

$$r_n \propto \frac{n^2}{Z}$$
  
 or,  $r_n = K \times \frac{n^2}{Z}$   
 The constant K is given as:  
 (A)  $\frac{h^2}{2\pi^2 m e^4}$  (B)  $\frac{h^2}{4\pi^2 m e^2}$   
 (C)  $\frac{2\pi^2 m e^4}{h^2}$  (D)  $\frac{4\pi^2 m e^2}{h^2}$
13. **B**



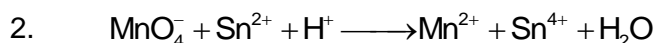
14. Phosphorus undergoes  $sp^3d$  hybridization in a series of its compounds containing F and Cl atoms. Choose the correct statement.  
 (A) The dipole moment of  $PF_2Cl_3$  is higher than that of  $PF_3Cl_2$   
 (B) Phosphorus displays maximum electronegativity in  $PF_2Cl_3$  as compared to other compounds like  $PF_3Cl_2$ ,  $PF_4Cl$  etc.  
 (C) The crystal structure of  $PCl_2F_3$  contains  $[PCl_4]^+$  and  $[PF_6]^-$   
 (D) The bond angle  $\angle ClPCl$  in  $PFCl_4$  is  $180^\circ$
14. **C**
15. **What is the oxidation number of carbon in  $CH_2Cl_2$ ? (Electronegativity order:  $Cl > C > H$ )**  
 (A) +2 (B) -2  
 (C) +4 (D) None of these
15. **D**
16. How many maximum number of electrons of an atom will have the following set of quantum numbers?  
 $n = 4, \ell = 0, 1, 2, m = 0, \pm 1, s = +\frac{1}{2}$   
 (A) 18 (B) 7  
 (C) 14 (D) 9
16. **B**
17. What will be the molarity of 36.5 mass % solution of HCl? The density of the solution is 0.8 g/mL at a certain temperature.  
 (A) 0.008 M (B) 0.8 M  
 (C) 8 M (D) 80 M
17. **C**
18. Atoms having which of the following outermost electronic configuration has the highest value of electron affinity?  
 (A)  $ns^2np^3$  (B)  $ns^2np^2$   
 (C)  $(n+1)s^2(n+1)p^2$  (D)  $ns^2np^1$
18. **B**
19. The R.M.S velocity of a monoatomic gas was  $x$  m/s at  $T$  Kelvin. When the temperature is reduced to half of its original value, the atoms dimerise to molecules. What will be the new R.M.S velocity in m/s unit?  
 (A)  $\frac{x}{4}$  (B)  $\frac{x}{2}$   
 (C)  $\frac{x}{\sqrt{2}}$  (D)  $4x$
19. **B**
20. **Which of the following atomic orbital contains maximum number of radial nodes?**  
 (A) 4s (B) 4p  
 (C) 4d (D) 4f
20. **A**

**PART-B**  
**Numerical Type**



If the ratio of the percentage of s-orbital character to the percentage of p-orbital character in a P – P bond in the above figure, is expressed as  $x : y$ , the value of  $(x + y)$  will be

1. 4



How many moles of  $\text{Sn}^{2+}$  can be completely oxidized by two moles of  $\text{MnO}_4^-$  ions according to above reaction?

2. 5

3. The R.M.S velocity of  $\text{CH}_4$  at 200 K is equal to the most probable velocity of an unknown gas at 75 K. What is the vapour density of the unknown gas?  
[Assume the gases display ideal behaviour]

3. 2

4. **What is the bond order of  $\text{O}_2^+$  ion?**

4. **2.5**

5. What volume in litre of 0.8 M solution, is required for titration of an aqueous solution, containing 40 g NaOH and one mole  $\text{Na}_2\text{CO}_3$  in presence of methyl orange indicator?

5. 3.75

---

*Space For Rough Work*

# Mathematics

## PART – A

### Straight Objective Type

This part contains **20 multiple choice questions**. Each question has 4 choices (A), (B), (C) and (D), out of which **ONLY ONE** is correct.

1. If  $x > 5$  and  $|x| < 10$ , then  $x$  must belong to the interval  
 (A)  $(-10, 5)$  (B)  $(-10, -5)$   
 (C)  $(5, 10)$  (D)  $(5, 8)$
1. C
2.  $\int \frac{\sin^2 x}{1 + \cos x} dx =$   
 (A)  $x + \sin x + c$  (B)  $x - \sin x + c$   
 (C)  $-x + \sin x + c$  (D)  $2x - \sin x + c$
2. B
3. The Equation of line passing through  $(1,3)$  and  $y$ -intercepts is three times the  $x$ -intercepts is  
 (A)  $3x - y = 6$  (B)  $3x + y = 6$   
 (C)  $2x + 17y = 15$  (D)  $2x - 17y = 15$
3. B
4. Orthocentre of the triangle whose circumcentre and centroid are  $(0, 0)$  and  $(1, 1)$  is  
 (A)  $(3, 3)$  (B)  $(2, 2)$   
 (C)  $\left(\frac{3}{2}, \frac{3}{2}\right)$  (D) none of these
4. A
5. The value of  $\sin 10^\circ \sin 30^\circ \sin 50^\circ \sin 70^\circ$  is  
 (A)  $\frac{1}{36}$  (B)  $\frac{1}{32}$   
 (C)  $\frac{1}{18}$  (D)  $\frac{1}{16}$
5. D
6. Lines  $ax + by + c = 0$  where  $3a + 2b + 4c = 0$   $a, b, c \in \mathbb{R}$  are concurrent at the point.  
 (A)  $(3, 2)$  (B)  $(2, 4)$   
 (C)  $(3, 4)$  (D)  $\left(\frac{3}{4}, \frac{1}{2}\right)$
6. D

7. If  $2x + y = 1$  intersects  $3x^2 + 4xy - 4x + 1 = 0$  at A and B then  $\angle AOB =$ .
- (A)  $\frac{\pi}{4}$  (B)  $\frac{\pi}{3}$   
 (C)  $\frac{\pi}{2}$  (D) none of these
7. C
8. The number of solutions of  $2\log(2x) = \log(4x - 15)$  is
- (A) 1 (B) 2  
 (C) 3 (D) 0
8. D
9. If  $y = (1 + x^{1/4})(1 + x^{1/2})(1 - x^{1/4})$  then  $\frac{dy}{dx} =$
- (A) 1 (B) -1  
 (C) x (D)  $\sqrt{x}$
9. B
10. How many values of x will satisfy  $||x + 3| - 4| - 6| = 5$
- (A) 4 (B) 6  
 (C) 8 (D) 5
10. B
11. The total number of real solution of  $x^2 + 5|x| + 6 = 0$  will be
- (A) 4 (B) 2  
 (C) 1 (D) 0
11. D
12. The value of x for which  $\frac{1}{3-x} > 1$
- (A)  $(-\infty, -3)$  (B)  $(2, \infty)$   
 (C)  $(2, 3)$  (D) None of these
12. C
13. If  $\log_4 5 = a$  and  $\log_5 6 = b$ , then  $\log_3 2 =$
- (A)  $\frac{1}{2a+1}$  (B)  $\frac{1}{2b+1}$   
 (C)  $2ab+1$  (D)  $\frac{1}{2ab-1}$
13. D

14. If radius of  $x^2 + y^2 - 18x + 12y + k = 0$  be 11 then k is  
 (A) -4 (B)  $\sqrt{5}$   
 (C) 3 (D) none of these
14. A
15. The equation of the circle passing through the points (2, 0) and (0, 4) and having the minimum possible radius is  
 (A)  $x^2 + y^2 + x + y = 3$  (B)  $x^2 + y^2 - 2x - 4y = 0$   
 (C)  $x^2 + y^2 - 7x - y + 8 = 0$  (D) none of these
15. B
16. If largest value of x satisfying  $(\log_2 x)(\log_3 x) = \log_3 x^3 + \log_2 x^2 - 6$  is p, then  $\sqrt{p}$  is  
 (A) 1 (B) 2  
 (C) 3 (D) 4
16. C
17. The extremities of the diagonal of a rectangle are (-4, 4) and (6, -1). A circle circumscribes the rectangle and cuts intercept of length AB on the y - axis. The length of AB is  
 (A) 12 (B) 11  
 (C) 13 (D) 14
17. B
18. The locus of the point such that the tangents drawn from it to the circle  $x^2 + y^2 - 6x - 8y = 0$  are perpendicular to each other, is  
 (A)  $x^2 + y^2 - 6x - 8y - 25 = 0$  (B)  $x^2 + y^2 + 6x - 8y - 5 = 0$   
 (C)  $x^2 + y^2 - 6x + 8y - 5 = 0$  (D)  $x^2 + y^2 - 6x - 8y + 25 = 0$
18. A
19. If  $\tan(\alpha + \beta) = \frac{5}{12}$  and  $\cot(\alpha - \beta) = \frac{4}{3}$ , then  $\tan 2\beta$  is equal to  
 (A)  $-\frac{16}{63}$  (B)  $\frac{12}{35}$   
 (C)  $-\frac{9}{28}$  (D) none of these
19. A
20. If the equation  $\frac{K(x+1)^2}{3} + \frac{(y+2)^2}{4} = 1$  represents a circle, then K is equal to  
 (A)  $\frac{3}{4}$  (B) 1  
 (C)  $\frac{4}{3}$  (D) 12
20. A

**PART-B**  
**Numerical Type**

1. The value of k for which the line  $2x + 3y + 4 + k(6x - y + 11) = 0$  is parallel to the y-axis is  
1. 3
2. The value of 'n' such that  $\log_n(3^{2013}) = 671$  equals to  
2. 27
3. If  $\operatorname{cosec} \theta - \cot \theta = \frac{1}{3}$  then  $\cos \theta$  is  
3. 0.8
4. Area of triangle formed by (1,2), (3,4) and (5,8) is  
4. 2
5. If ABCD is a rhombus whose equation of diagonal BD is  $4x + 3y + 2 = 0$  and vertex A is (3, 2), then equation of diagonal AC is  $ax + by + c = 0$  where  $|a + b + c|$  equals to  
5. 2

# FIITJEE INTERNAL TEST

BATCHES:

PHYSICS, CHEMISTRY & MATHEMATICS

JEE MAIN-PHASE-I

Paper Code

ANSWER KEY

SECTION – I

(PHYSICS)

PART – A

PART – B

JEEM

(CHEMISTRY)

PART – A

PART – B

SECTION – III  
(MATHEMATICS)

PART – A

PART – B