FIITJEE MOCK TEST-2

MOCK TEST–2 (Additional) Code:100383.1

ANSWERS, HINTS & SOLUTIONS

MOCK TEST

(Main)

Q. No.	PHYSICS	CHEMISTRY	MATHEMATICS
1.	**B**	**A**	**B**
2.	**D**	**A**	**C**
3.	**B**	**B**	**B**
4.	**C**	**D**	**C**
5.	**B**	**B**	**D**
6.	**A**	**C**	**C**
7.	**A**	**A**	**B**
8.	**A**	**D**	**D**
9.	**A**	**A**	**B**
10.	**D**	**A**	**C**
11.	**C**	**B**	**D**
12.	**C**	**B**	**D**
13.	**C**	**B**	**A**
14.	**A**	**A**	**B**
15.	**C**	**D**	**B**
16.	**A**	**A**	**A**
17.	**B**	**A**	**D**
18.	**B**	**B**	**C**
19.	**B**	**D**	**A**
20.	**D**	**D**	**B**
21.	**C**	**A**	**B**
22.	**D**	**A**	**A**
23.	**C**	**B**	**D**
24.	**A**	**A**	**C**
25.	**A**	**B**	**B**
26.	**A**	**C**	**C**
27.	**B**	**B**	**D**
28.	**B**	**C**	**D**
29.	**D**	**A**	**C**
30.	**A**	**C**	**D**

Physics

PART – I

SECTION – A

1. Respective equation of motion are given by

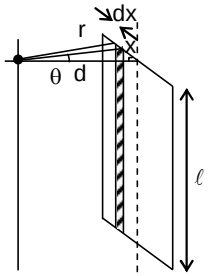
$v_1 = v_0 - \mu gt$, $v_2 = \frac{\mu gt}{4}$

finally v_1 and v_2 will be same.

2. Both m and 2m will come down with same acceleration without friction

3. Just after elastic collision velocity of A will be $- v_0$

4. Consider a strip as shown in figure.



$E = \frac{\lambda}{2\pi\varepsilon_0 r}$

Where $r = \frac{d}{\cos\theta}$

$\therefore d\phi = \frac{\lambda}{2\pi\varepsilon_0 r}\ell d \times \cos\theta$

Also $x = d \tan\theta$

$\Rightarrow dx = \sec^2\theta\, d\theta$

$\Rightarrow d\phi = \frac{\lambda\cos\theta}{2\pi\varepsilon_0\left(\frac{d}{\cos\theta}\right)} \times d\sec^2 d\theta \therefore \ell = \frac{\lambda\ell}{2\pi\varepsilon_0} d\theta$

$\therefore \phi_2 = \int_{-\alpha}^{\alpha} \frac{\lambda\ell}{2\pi\varepsilon_0} d\theta = \frac{\lambda\ell(2\alpha)}{2\pi\varepsilon_0}$ where $\tan\alpha = \frac{b}{2d}$

$= \frac{\lambda\ell}{\pi\varepsilon_0}\tan^{-1}\left(\frac{b}{2d}\right)$

5. At origin no mass present hence g = 0. for any circular path in yz plane cavity A and B are symmetrically located, hence potential will be same
$\Rightarrow$ Field at (2, 0, 0) is superposition of two fields: fields due to negative mass enclosed in cavity A and field due to positive mass enclosed in a sphere of radius 2 m, as there two masses are different hence field can't be zero.

6. Option (A)
NOT ((A AND B) OR (NOT A))

$= \overline{\left((A \bullet B) + (\overline{A})\right)} = \overline{(A \bullet B)} \bullet (\overline{\overline{A}}) = (\overline{A} + \overline{B}) \bullet A = A \bullet \overline{B}$, which matches with the given truth table.

Option (B)
(A OR B) AND B
$(A + B) \bullet B = A \bullet B + B = (A + 1) \bullet B = B$

Option (C)
NOT ((A AND B) OR B)
$\overline{(A \bullet B + B)} = \overline{(A + 1))} \bullet B = \overline{B}$

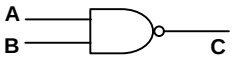
Option (D)

NOT (A AND B) ≡ (A NAND B)

$\overline{(A \bullet B)} = \overline{A} + \overline{B}$

NAND and NOR gates are known as universal gates because all other gates can be expressed ion terms of them (either NAND or NOR).

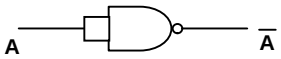
NAND GATE:



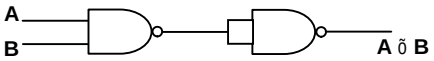
A	B	$\overline{A \cdot B}$
0	0	1
0	1	1
1	0	1
1	1	0

Standard gates in terms of NAND

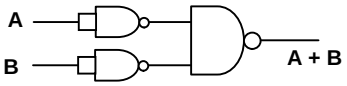
NOT GATE:



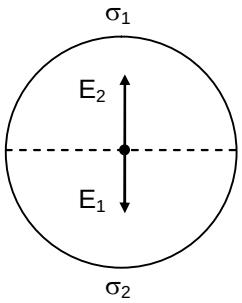
AND GATE:



OR GATE:



7. $E_{net} = E_1 - E_2 = \frac{\sigma_1}{4\varepsilon_0} - \frac{\sigma_2}{4\varepsilon_0}$



8. evB = eE

$E = Bv = \frac{B\omega\ell}{2}$

9. $\vec{a} \cdot \vec{B} = 0$

$\Rightarrow \left(x\hat{i} + 2\hat{j} - 6\hat{k}\right)\left(2\hat{i} + 2\hat{j} + \hat{k}\right) = 0$

$\Rightarrow 2x + 4 - 6 = 0$

$\Rightarrow x = 1$

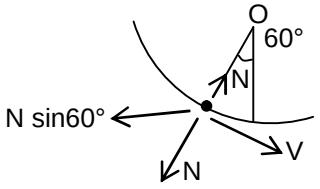
10. If v be speed ab then

$mgh = \frac{1}{2}mv^2$

$\Rightarrow v^2 = 2gh = 2gr \cos 60° = gr$

If N be the force applied by surface on ball, then

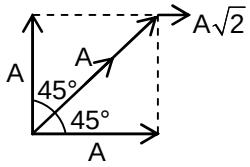
$N - mg\cos 60° = \frac{mv^2}{r}$



$$N = \frac{mv^2}{r} + \frac{mg}{2}$$

$$= mg + \frac{mg}{2} = \frac{3}{2}mg = \frac{3}{2} \times 1 \times 10 = 15 \text{ N}$$

11. As shown in figure



Resultant amplitude = $A\sqrt{2} + A$

$= A(\sqrt{2}+1)$ at 45° from first SHM

Total energy = $\frac{1}{2}m\omega^2\left[A\left(\sqrt{2}+1\right)^2\right]$

$$= 8\left(3+2\sqrt{2}\right) \times \frac{1}{2}m\omega^2A^2$$

$= \left(3+2\sqrt{2}\right) \times$ energy of one SHM

12. If R is the radius of the tank and r that of the hole, then

$$-\pi R^2 \frac{dh}{dt} = \pi r^2 \sqrt{2gh}$$

$$\frac{t_1}{t_2} = \frac{\int_h^{h/2} \frac{dh}{\sqrt{h}}}{\int_{h/2}^{0} \frac{dh}{\sqrt{h}}} = \frac{\frac{\sqrt{h}}{2} - \sqrt{h}}{0 - \sqrt{\frac{h}{2}}} = \sqrt{2} - 1$$

13. the Doppler formula holds for non collinear motion if v_S and v_O are taken to be the resolved components along the line of sight.

$$v_0 = v_t \sin 45° = \frac{30}{\sqrt{2}} \text{ m/s}$$

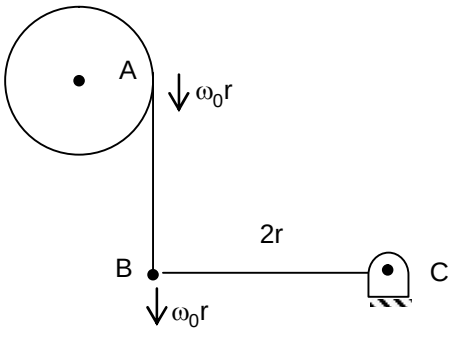
$$v_s = v_t \sin 45° = \frac{30}{\sqrt{2}} \text{ m/s}$$

$$\therefore\ f' = f_0\left[\frac{v - v_0}{v - v_S}\right] = 200 \text{ Hz}$$

14. $F_{net} = ma$
$= mg$

15. AB rod has only $V_{CM} = \omega_0 r$; $\omega = 0$

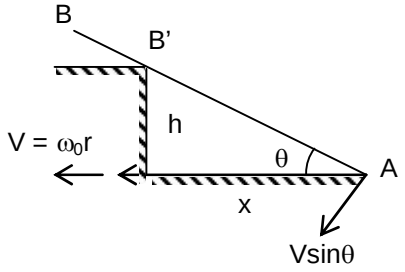
BC rod has $\omega_{BC} = \frac{\omega_0 r}{2r} = \frac{\omega_0}{2}$



16. For maximum intensity
$[\mu t - t] = \lambda$
$\Rightarrow\ t = 2\lambda$

17. $\omega_{AB} = \dfrac{V\sin\theta}{AB} = \dfrac{\omega_0 rh}{\left(h^2+x^2\right)^{1/2}\left(h^2+x^2\right)^{1/2}}$

$= \dfrac{\omega_0 rh}{h^2+x^2}$



18. Two impulse acts on ball friction impulse and normal impulse N.

I = 0 – m–v) [for board]

$\Rightarrow$ I = mv

Also for ball, we have (in y-axis)

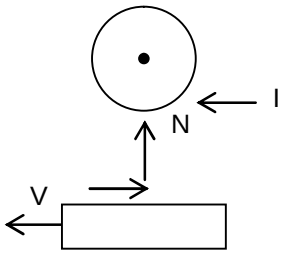
$N = m\dfrac{v}{2} - m(-v) = \dfrac{3}{2}mv$

But any time

$I = \mu N$

$\Rightarrow mv = \mu\dfrac{3}{2}mv$

$\Rightarrow \mu = \dfrac{2}{3}$



19. Initial energy = $\dfrac{1}{2}CV^2 + \dfrac{1}{2}2C(4V)^2 = \dfrac{33}{2}CV^2$

Also total change = CV + 2C $\times$ 4V = 9 CV = q

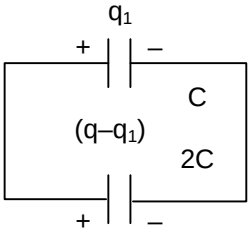
If after connection q_1 appears on C

$\Rightarrow \dfrac{q_1}{C} = \dfrac{q-q_1}{2C}$

$\Rightarrow 3q_1 = q$ ww

$\Rightarrow$

$\Rightarrow$ Final energy = $\dfrac{1}{2}\dfrac{(3CV)^2}{C} + \dfrac{1}{2}\dfrac{(6CV)^2}{2C} = \dfrac{27CV^2}{2}$



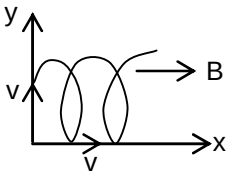
20. Resulting motion is helical with T = $\dfrac{2\pi}{B_0\alpha}$

At t = $\dfrac{\pi}{B_0\alpha}$; i.e. $\dfrac{1}{2}$ time period

$x = v \times \dfrac{\pi}{B_0\alpha} = \dfrac{v_0\pi}{B_0\alpha}$

y = 0

z = –2 $\times$ radius = $\dfrac{-2v_0}{B\alpha}$



21. $i = \dfrac{e}{T}$

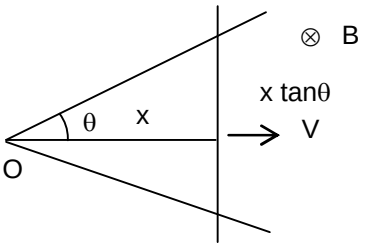
Now $T^2 \propto r^3$ and $r \propto n^2 \Rightarrow T \propto n^3$

$\therefore \quad i \propto \dfrac{1}{n^3}$

$\therefore$ the current will increase 8 times.

22. From theory of MCG

23. Let wire is at x distance from O at any time

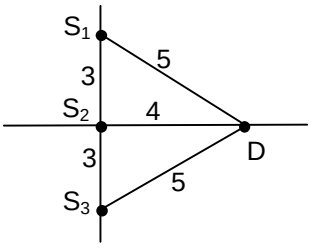


$$\Rightarrow \phi = \frac{1}{2} \times x \times (2x\tan\theta) \times B = Bx^2\tan\theta$$

$$\varepsilon = \frac{d\phi}{dt} = B\tan\theta 2x\frac{dx}{dt} = 2B\tan\theta vx$$

$$i = \frac{2B\tan\theta v_x}{(2x\tan\theta)k} = \frac{Bv}{k}$$

24. For resultant intensity same as source, path different between sources at (0,3) and (0,0) must be $\lambda/2$ same for (0, -3) and (0, 0).



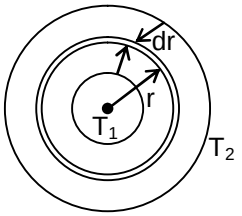
so, $\lambda/2 = 5 - 4 = 1$

$\Rightarrow \lambda = 2m$

$$f = \frac{v}{\lambda} = 150 \text{ Hz}$$

25. $$f_{max} = f\left(\frac{v_s - 0}{v_s - v}\right) = 2f \Rightarrow v = \frac{v_s}{2}$$

26. Let T_1 and T_2 be temperature at inner and outer surface in steady condition



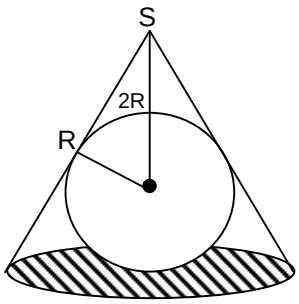
$$P = \frac{d\theta}{dt} = -\frac{K4\pi r^2}{dr}dT$$

$$\Rightarrow \int_{R_1}^{R_2}\frac{dr}{r^2} = -\frac{4\pi k}{P}\int_{T_1}^{T_2}dT$$

$$\frac{R_2 - R_1}{R_1R_2} = \frac{4\pi k}{P}(T_1 - T_2)$$

Thickness $(R_2 - R_1) = \frac{4\pi k}{P}T \times R^2$ [$\because R_1R_2 = R^2$]

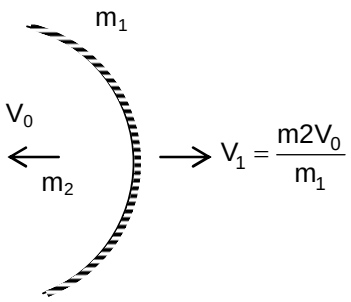
27. Area = $\pi(\sqrt{3}\,R)^2 = 3\pi R^2$



28. From COM

$m_2v_0 = m_1v_1$

$\Rightarrow v_1 = \frac{m_2}{m_1}v_0$



From mirror formula

$\frac{1}{v}+\frac{1}{u}=\frac{1}{f}$

$\Rightarrow -\frac{1}{v^2}\frac{dv}{dt}-\frac{1}{u^2}\frac{dU}{dt}=0$

$v_{imag/mirror} = -\left(\frac{v^2}{u^2}\right)\times \text{velocity}_{ob/mirror}$

At the time of fringe v = U ($\therefore$ bullet in at pole) $\Rightarrow \frac{v}{u}=1$

$\therefore (v_{imag} - v_{mirror}) = -v_{object} + v_{mirror}$

$v_{image} = 2v_{mirror} - v_{oejct}$

$= 2\frac{m_2}{m_1}v_0 - (-v_0) = \frac{2m_2}{m_1}v_0 + v_0$

Separation speed = $\frac{2m_2v_0}{m_1} + v_0 + v_0 = 2\left(1+\frac{m_2}{m_1}\right)v_0 \Rightarrow B$

29. $\lambda = \frac{hC}{eV}$ $\lambda_B > \lambda_A \Rightarrow v_B < v_A$

Also

$\frac{1}{\lambda_k} = (z-1)^2\left[\frac{1}{1^2}-\frac{1}{2^2}\right] = \frac{3}{4}(z-1)^2$

So, $(k\alpha)_B < (k_\alpha)_A$

$\Rightarrow z_B > z_A$

30. Frequency of revolution in n^{th} orbit is

$f_n = \frac{\omega_n}{2\pi} = \frac{v_n}{2\pi r_n}$

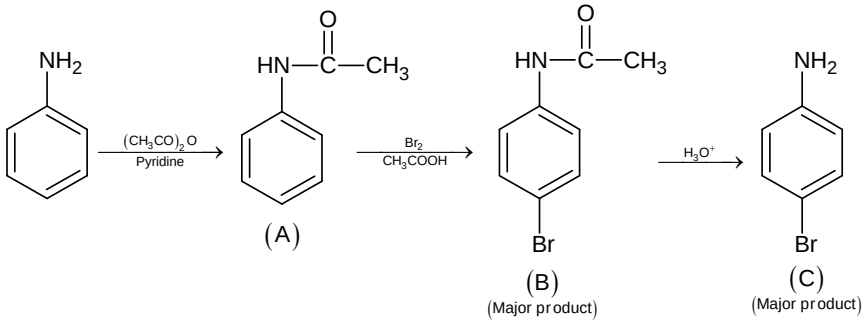
$\therefore f(2) = \frac{2.18\times10^6\times\frac{z}{n}}{2\pi\times0.528\times10^{-10}\times\frac{n^2}{2}}$

No of revolution mode in 10^{-8} sec = $\frac{2.18\times10^6\times z^2\times10^{-8}}{2\pi\times0.5\times10^{-10}\times n^3} = 8.2\times10^6$

Chemistry

PART – II

SECTION – A

1. 

(A) (B) (Major product) (C) (Major product)

$$2NH_4OH + H_2SO_4 \longrightarrow (NH_4)_2SO_4 + 2H_2O$$

2. initial (m.mole) 1 0.4

final (m.mole) 0.2 0 0.4

Resulting solution is a basic buffer.

$$pOH = 4.76 + \log\frac{0.8}{0.2}$$

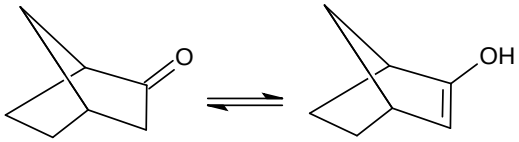
$$pOH = 4.76 + 0.6020 = 5.362$$

pH = 14 – 5.362 = 8.638

3. $NH_4NO_3 \xrightarrow{Heat} N_2O + 2H_2O$

4. The carbohydrate (A) is lactose.

5. $Sc_2(Si_2O_7)$ is a pyrosilicate. Silicates containing $(Si_2O_7)^{6-}$ ion are pyrosilicates.

6. 

7. Equanil is an antidepressant.

8. $CaCO_3(s) \rightleftharpoons CaO(s) + CO_2(g)$

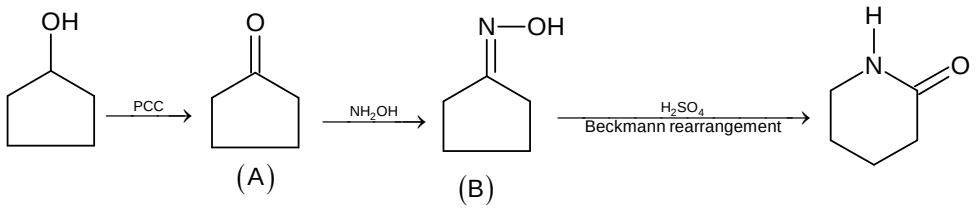
Number of moles of CO_2 at equilibrium $= \frac{22 \times 40}{44 \times 100} = 0.2$

$$K_P = P_{CO_2} = \frac{nRT}{V} = \frac{0.2 \times 0.0821 \times 1000}{10}$$

= 1.642 atm

9. $Mg_2C_3 + 2H_2O \longrightarrow 2Mg(OH)_2 + CH_3C \equiv CH$

10. $N(SiH_3)_3$ is less basic than $N(CH_3)_3$.

11. 

12. $CH_3 - C \equiv CH \xrightarrow[(ii)\,H_2O_2/OH^-]{(i)\,BH_3-THF} CH_3 - CH = CH - OH \xrightarrow{\text{Tautomerism}} CH_3 - CH_2 - CHO$

13. Coagulation power of $[Fe(CN)_6]^{4-}$ is highest.

14. Mole fraction of B in vapour phase = $Y_B = 0.8$
Mole fraction B in liquid phase = $X_B = 0.2$

$$Y_B = \frac{P_B^o X_B}{P}$$

$$P_B^o = \frac{Y_B P}{X_B} = \frac{0.8 \times 200}{0.2} = 800 \text{ mm}$$

15. The reaction $FeS + Cu_2O \longrightarrow FeO + Cu_2S$ does not take place in Bessemer converter.

16. $POCl_3 + 3H_2O \longrightarrow H_3PO_4 + 3HCl$

17. $6NaOH + 3Cl_2 \longrightarrow 5NaCl + NaClO_3 + 3H_2O$

18. $$\Delta S = \frac{\Delta H_{vap}}{T_b}$$

$$T_b = \frac{30 \times 1000}{75} = 400 \text{ K}$$

19. $$\frac{\text{IE of } He^+}{\text{IE of } Li^{2+}} = \frac{4}{9}$$

$$\text{IE of } Li^{2+} = 19.6 \times 10^{-18} \times \frac{9}{4}$$

$= 4.41 \times 10^{-17}$ J atm^{-1}
Energy of 1st stationary state of $Li^{2+} = 4.41 \times 10^{-17}$ J atm^{-1}

20. Cumulene with even number of cumulated double bond can not exhibit geometrical isomerism.

21. $\Delta G^o = -nFE_{cell}^o$

$$E_{cell}^o = -\frac{\Delta G^0}{nF}$$

$$= \frac{-(-2800 \times 1000)}{26 \times 96500}$$

= 1.11 V

22. $NaBH_4$ does not reduce esters.

23. Nitriles are selectively reduced by DIBAL-H.

24. $3HgCl_2 + 2PH_3 \longrightarrow Hg_3P_2 + 6HCl$

$3CuSO_4 + 2PH_3 \longrightarrow Cu_3P_2 + 3H_2SO_4$

$P_4 + 8SOCl_2 \longrightarrow 4PCl_3 + 4SO_2 + 2S_2Cl_2$

25. Neoprene is a polymer of chloroprene.

26. $n = \frac{90}{45} = 2$

$P_A = \frac{P_A^0}{2^2} = \frac{200}{4} = 50\,mm$

	$A(g) \longrightarrow$	$2B(g)$	$+C(s)$
Initial	200mm	0	0
After 90 min	50 mm	300mm	0

Total pressure after 90 min = 300 + 50 = 350 mm.

27. Alkoxymercuration – demercuration reaction.

28. $\rho = \frac{Z \times M}{a^3 \times N_A}$

$M = \frac{8 \times \left(3 \times 10^{-8}\right)^3 \times N_A}{1}$

Number of atom in 216 g $= \frac{216 \times N_A}{8\left(3 \times 10^{-8}\right)^3 \times N_A} = 10^{24}$

Number of unit cell in 216 g $= = \frac{10^{24}}{Z} = \frac{10^{24}}{1} = 10^{24}$

29. Number of moles of HCl $= \frac{25 \times 0.01}{1000} = 20 \times 10^{-5}$

Number of moles of $Ba(OH)_2 = \frac{50 \times 0.01}{1000} = 50 \times 10^{-3}$

Number of moles of $\overline{O}H = 2 \times 50 \times 10^{-5} = 10^{-3}$

Heat liberated = $13.7 \times 20 \times 10^{-5}$ kcal

$= 274 \times 10^{-5}$ kcal

$= 2.74$ cal.

30. $[CO(NH_3)_6]^{3+}$ is an inner orbital complex.

Mathematics

PART – III

SECTION – A

1. The plane will be angle bisector of the given planes
$\Rightarrow \left(\frac{x+2y+2z-10}{3}\right) = \pm\left(\frac{2x-y-2z-9}{3}\right)$

2. For OA + OB = k, $k \in \left(4, 2\sqrt{5}\right)$ there will be two straight lines and for $k = 2\sqrt{5}$, there will be only one line and that will be passing through the centre of the circle

3. $t_n = 2^{n+1} - 2n - 1$

4. Projection = $\left|\frac{\left(2\vec{a}+3\vec{b}+4\left(\vec{a}\times\vec{b}\right)\right)\cdot\left(\vec{a}\times\vec{b}\right)}{\left|\vec{a}\times\vec{b}\right|}\right| = 4\left|\vec{a}\times\vec{b}\right| = 8\sqrt{2}$

5. Variance = $\frac{\sum_{r=1}^{n}\left(\bar{x}-x_r\right)^2}{n}$
$\Rightarrow$ New variance = 1

7. Let top point of pole be P, then BP cot 30º = AB and BP cot 60º = BC and $AB^2 + BC^2 = AC^2$
$\Rightarrow$ BP = 3

8. m = n = 0
$\Rightarrow$ m + n = 0

9. (2, –2) lies on the axis of parabola and its distance from vertex of parabola is half of latus rectum
$\Rightarrow$ Only one normal is possible

10. Required cases = 16, total cases = 36
Required probability = $\frac{4}{9}$

11. For $x \in [0, \pi]$, f(x) will be dis-continuous at infinite points
$\Rightarrow$ f(x) is non-differentiable at infinite points

12. Equation of line is $\sqrt{5}x - y - 21 = 0$

13. $\frac{dy}{e^y} = (e^x + e^{-x})dx \Rightarrow -e^{-y} = e^x - e^{-x} + c \Rightarrow e^{-y} = e^{-x} - e^x + c$

15. $(r_1-3)^2 + (r_2-3)^2 + (r_3-3)^2 = 0$
$\Rightarrow \Delta ABC$ is equilateral
$\Rightarrow$ Area = $3\sqrt{3}$

17. $\tan^{-1}\left(\frac{m^4+m^2+2}{2m}\right) = \frac{\pi}{2} - \tan^{-1}\left(\frac{2m}{m^4+m^2+2}\right)$
$\Rightarrow \sum_{m=1}^{\infty}\tan^{-1}\left(\frac{m^4+m^2+2}{2m}\right) = \sum_{m=1}^{\infty}\left(\frac{\pi}{2}\right) - \frac{\pi}{4}$ = infinite

18. $a = -1,\ b = 0,\ c = \frac{5}{2}$
$\Rightarrow 2a + 3b + 4c = 8$

19. $f(a) = \frac{3a^2}{16}$
$\Rightarrow f(4) = 3$

20. $x^5 - 1 = (x - 1)(x - \alpha_1)(x - \alpha_2)(x - \alpha_3)(x - \alpha_4)$
Put $x = i$ and i^3
$\Rightarrow \left(\frac{i-\alpha_1}{i+\alpha_1}\right)\left(\frac{i-\alpha_2}{i+\alpha_2}\right)\left(\frac{i-\alpha_3}{i+\alpha_3}\right)\left(\frac{i-\alpha_4}{i+\alpha_4}\right) = \frac{(i^5-1)}{(i-1)}\frac{(i^3-1)}{(i^{15}-1)} = 1$

22. Equation of Asymptotes is $3x^2 - 3y^2 + 8xy - 16x + 12y + 4 + k = 0$
$\Rightarrow$ Angle between Asymptotes is 90^o
$\Rightarrow$ Eccentricity is $\sqrt{2}$

23. $\left(\sqrt{5}+\sqrt{3}\right)^{1001} = \sum_{r=0}^{1001} {}^{1001}C_r\,(5)^{\frac{1001-r}{2}}(3)^{\frac{r}{2}}$
$\Rightarrow$ Number of rational terms = 0

24. $|A| = a + d - 1$

25. Let $I = \int_{-1}^{1} x\ln\left(1^x + 2^x + 3^x + 6^x\right)dx$
$\Rightarrow I = -I + 2\int_{-1}^{1} x\ln(6)dx$
$\Rightarrow I = \frac{\ln 6}{3}$

26. $f(x) = x^2 - x + 2$
$\Rightarrow \int_{-2}^{2} f(x)dx = \frac{40}{3}$

27. $y = \cos^{-1}\left(\frac{\sqrt{x}-1}{\sqrt{x}+1}\right) + \sin^{-1}\left(\frac{\sqrt{x}-1}{\sqrt{x}+1}\right) = \frac{\pi}{2} \Rightarrow \frac{dy}{dx} = 0$

28. Director circle of the circle $2x^2 + 2y^2 - 12x - 16y + 25 = 0$ passes through origin
$\Rightarrow$ Angle between tangents is 90^o

29. $f(x) = 4 \Rightarrow x = 0, 1, 2$
$\Rightarrow f(f(x)) = 4 \Rightarrow f(x) = 0, 1, 2$

30. $f(0) = 3$
$\Rightarrow f'(0)\cdot g'(3) = 1$
$\Rightarrow g'(3) = -\frac{1}{4}$

FIITJEE MOCK TEST-2

MOCK TEST–2 (Additional) Code:100383.2

ANSWERS, HINTS & SOLUTIONS
MOCK TEST
(Main)

Q. No.	PHYSICS	CHEMISTRY	MATHEMATICS
1.	**A**	**C**	**C**
2.	**A**	**A**	**B**
3.	**A**	**D**	**D**
4.	**A**	**A**	**B**
5.	**D**	**A**	**C**
6.	**C**	**B**	**D**
7.	**C**	**B**	**D**
8.	**C**	**B**	**A**
9.	**A**	**A**	**B**
10.	**C**	**D**	**B**
11.	**A**	**A**	**A**
12.	**B**	**A**	**D**
13.	**B**	**B**	**C**
14.	**B**	**D**	**A**
15.	**D**	**D**	**B**
16.	**C**	**A**	**B**
17.	**D**	**A**	**A**
18.	**C**	**B**	**D**
19.	**A**	**A**	**C**
20.	**A**	**B**	**B**
21.	**A**	**C**	**C**
22.	**B**	**B**	**D**
23.	**B**	**C**	**D**
24.	**D**	**A**	**C**
25.	**A**	**C**	**D**
26.	**B**	**A**	**B**
27.	**D**	**A**	**C**
28.	**B**	**B**	**B**
29.	**C**	**D**	**C**
30.	**B**	**B**	**D**

FIITJEE MOCK TEST-2

MOCK TEST–2 (Additional) Code:100383.3

ANSWERS, HINTS & SOLUTIONS

MOCK TEST

(Main)

Q. No.	PHYSICS	CHEMISTRY	MATHEMATICS
1.	**A**	**B**	**B**
2.	**A**	**C**	**C**
3.	**B**	**B**	**D**
4.	**B**	**C**	**D**
5.	**D**	**A**	**C**
6.	**A**	**C**	**D**
7.	**B**	**A**	**B**
8.	**D**	**A**	**C**
9.	**B**	**B**	**B**
10.	**C**	**D**	**C**
11.	**B**	**B**	**D**
12.	**A**	**C**	**C**
13.	**A**	**A**	**B**
14.	**A**	**D**	**D**
15.	**A**	**A**	**B**
16.	**D**	**A**	**C**
17.	**C**	**B**	**D**
18.	**C**	**B**	**D**
19.	**C**	**B**	**A**
20.	**A**	**A**	**B**
21.	**C**	**D**	**B**
22.	**A**	**A**	**A**
23.	**B**	**A**	**D**
24.	**B**	**B**	**C**
25.	**B**	**D**	**A**
26.	**D**	**D**	**B**
27.	**C**	**A**	**B**
28.	**D**	**A**	**A**
29.	**C**	**B**	**D**
30.	**A**	**A**	**C**

FIITJEE MOCK TEST-2

MOCK TEST–2 (Additional) Code:100383.4

ANSWERS, HINTS & SOLUTIONS
MOCK TEST
(Main)

Q. No.	PHYSICS	CHEMISTRY	MATHEMATICS
1.	**C**	**A**	**B**
2.	**D**	**A**	**A**
3.	**C**	**B**	**D**
4.	**A**	**A**	**C**
5.	**A**	**B**	**B**
6.	**A**	**C**	**C**
7.	**B**	**B**	**D**
8.	**B**	**C**	**D**
9.	**D**	**A**	**C**
10.	**A**	**C**	**D**
11.	**B**	**A**	**B**
12.	**D**	**A**	**C**
13.	**B**	**B**	**B**
14.	**C**	**D**	**C**
15.	**B**	**B**	**D**
16.	**A**	**C**	**C**
17.	**A**	**A**	**B**
18.	**A**	**D**	**D**
19.	**A**	**A**	**B**
20.	**D**	**A**	**C**
21.	**C**	**B**	**D**
22.	**C**	**B**	**D**
23.	**C**	**B**	**A**
24.	**A**	**A**	**B**
25.	**C**	**D**	**B**
26.	**A**	**A**	**A**
27.	**B**	**A**	**D**
28.	**B**	**B**	**C**
29.	**B**	**D**	**A**
30.	**D**	**D**	**B**