FIITJEE INTERNAL TEST

SECOND YEAR 2018-20

JEE MAINS

REVISION-2 PART TEST - 3

Time: 3 hours **Maximum Marks: 300**

INSTRUCTIONS: **03rd May 2020**

Instructions to the Candidates

A. General

1. This booklet is your Question Paper containing 75 questions.
2. Blank papers, clipboards, log tables, slide rules, calculators, cellular phones, pagers and electronic gadgets in any form are not allowed to be carried inside the examination hall.
3. Fill in the boxes provided for Name and Enrolment No.
4. The answer sheet, a machine-readable Objective Response (ORS), is provided separately.
5. DO NOT TAMPER WITH / MULTILATE THE ORS OR THE BOOKLET.

B. Filling in the OMR:

6. The instructions for the OMR sheet are given on the OMR itself.

C. Question paper format:

7. The question paper consists of **3 parts (Mathematics, Physics and Chemistry)**. Each part consists of **two sections**.
8. **Section I** contains **20 Multiple Choice questions**. Each question has four choices (A), (B), (C) and (D) out of which **ONE** is correct.
9. **Section II** contains **5 questions**. Each question is numerical value. For each question, enter the correct numerical value (in decimal notation, truncated/rounded-off to second decimal place.

   (e.g. 6.25, 7.00, - 0.33, - .30, 30.27, - 127.30)
10. **Q.No. 21-25, 46-50, 71-75** are Numerical based questions with answer is of the type xxxx.xx. Suppose your answer is 25.3 (example-1) you need to write answer as 0025.30, if your answer is only 1 (example-2) then you have bubble like 0001.00 and bubble accordingly including zero's and dot.

D. Marking Scheme

11. For each question in **Section I**, you will be awarded **4 marks** if you darken ALL the bubble(s) corresponding to the correct answer(s) **ONLY**. In all other cases **zero (0) marks** will be awarded. **–1 negative marks** will be awarded for incorrect answers in this section.
12. For each question in **Section II**, you will be awarded **4 marks** if you darken the bubble corresponding to the correct answer **ONLY.** In all other cases **zero (0) marks** will be awarded. **No negative marks** will be awarded for incorrect answers in this section.

Don't write / mark your answers in this question booklet.

If you mark the answers in question booklet, you will not be allowed to continue the exam.

NAME: ☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

ENROLLMENT NO.: ☐☐☐☐☐☐☐☐☐☐

MATHEMATICS

Single Correct Answer Type

1. If $\left(1+x+x^2\right)^n = a_0 + a_1x + a_2x^2 + ... + a_{2n}x^{2n}$, then $\begin{vmatrix} a_{n-3} & a_{n-1} & a_{n+1} \\ a_{n-6} & a_{n-3} & a_{n+3} \\ a_{n-14} & a_{n-7} & a_{n+7} \end{vmatrix}$ is

(A) 0 (B) 1 (C) 2 (D) None

2. If x is an imaginary number satisfying the equation $x^6 = 2x^3 - 1$, then the value of the summation $\sum_{r=1}^{50}\left(x^r + x^{2r}\right)^3$ is

(A) 49 (B) 94 (C) 100 (D) 256

3. The number of irrational terms in the expansion of $\left(2^{1/7} + 5^{1/4}\right)^{91}$ is

(A) 92 (B) 11 (C) 7 (D) 85

4. Given $\left(1-2x+5x^2-10x^3\right)\left(1+x\right)^n = 1 + a_1x + a_2x^2 + ...$ and that $a_1^2 = 2a_2$, then the value of n is

(A) 2 (B) 3 (C) 4 (D) 6

5. The value of $^{40}C_{31} + \sum_{r=0}^{10} {}^{40+r}C_{10+r}$ is equal to

(A) $^{51}C_1$ (B) $2^{50}C_2$ (C) $2^{45}C_{15}$ (D) None of these

6. How many different signals can be given using any number of flags from 6 flags of different colours?

(A) 878 (B) 720 (C) 1857 (D) 1956

7. There are 3 sections in a question paper each containing 5 questions. A candidate has to solve only 5 questions, choosing at least one question from each section. In how many ways can he make his choice ?

(A) $^{15}C_5$ (B) $^{3}C_1 \times {}^{12}C_4$ (C) 2250 (D) None

8. How many different words can be formed by using all the letters of the world 'ALLAHABAD' such that vowels occupy the even positions, is

(A) 20 (B) 40 (C) 60 (D) 80

9. Three numbers are chosen from 1 to 30. The probability that they are not consecutive is

(A) $\frac{1}{145}$ (B) $\frac{144}{145}$ (C) $\frac{3}{145}$ (D) None of these

10. A sum of money is rounded off to the nearest rupee. The probability that round off error is at least ten paise is

(A) $\frac{1}{10}$ (B) $\frac{9}{100}$ (C) $\frac{81}{100}$ (D) $\frac{4}{5}$

11. A 2 x 2 square matrix is written down at random using the numbers -1, 1 as elements. The probability that the matrix is non-singular is

(A) $\frac{1}{2}$ (B) $\frac{1}{4}$ (C) $\frac{1}{3}$ (D) $\frac{3}{8}$

12. A die is rolled thrice, the probability of getting a larger number each time than the previous number is
(A) $\frac{1}{36}$ (B) $\frac{5}{54}$ (C) $\frac{5}{216}$ (D) $\frac{15}{216}$

13. A random variable X takes the values 0, 1, 2, 3 and its mean is 1.3. If P(X=3) = 2P(X=1) and P(X=2) = 0.3, then P(X=0) is
(A) 0.1 (B) 0.2 (C) 0.3 (D) 0.4

14. The probability that an event A happens in one trial of an experiment is 0.4. Three independent trials of the experiment are formed. The probability that the event A happens at least once is
(A) 0.784 (B) 0.216 (C) 0.6 (D) None of these

15. In eight throws of a die 1 or 3 is considered a success. The standard deviation of success is
(A) 1/3 (B) 2/3 (C) 1 (D) 4/3

16. A die is tossed 5 times. Getting an even number is considered a success. The variance of distribution of success is
(A) 4/5 (B) 3/5 (C) 5/4 (D) 1/4

17. The area of the triangle formed by the origin, the point P(x, y) and its reflection in x- axis is
(A) xy (B) $|xy|$ (C) $2|xy|$ (D) $\frac{1}{2}|xy|$

18. If the straight line ax + by + c = 0 makes a triangle of constant area with the coordinate axes, then
(A) a, b, c are in G. P. (B) a, c, b are in G. P. (C) b, a, c are G. P. (D) c, a, b are in G. P.

19. A line is passing through the origin and is perpendicular to two given lines 2x + y + 6 = 0 and 4x + 2y - 9 = 0. The ratio in which the origin divides this line is
(A) 1 : 2 (B) 2 : 3 (C) 4 : 3 (D) 5 : 4

20. P(2, 4) is translated through a distance $3\sqrt{2}$ units measured parallel to the line $y-x-1=0$ in the direction of decreasing ordinates to reach at Q. If R is the image of Q with respect to the line $y-x-1=0$, then the coordinates of R are
(A) (–1, 1) (B) (5, 5) (C) (1, 1) (D) (0, 0)

Numerical Based

21. If the number of distinct terms in the expansion of $(1+x)^{100}\left(1+x^2-x\right)^{100}$ is k, then k - 200 is

22. The number of divisors of 10800 which are divisible by 15 is

23. A bag contains 10 white and 15 black balls. If two balls are drawn in succession without replacement, the probability that the first is white and second is blac is p/q, where p and q are co-prime. The value of p + q is

24. India plays two matches each with West Indies and Australia. In any match, the probabilitites of India getting 0, 1, and 2 points are 0.45, 0.05, and 0.50 respectively. Assuming that the outcomes are independent, the probability of India getting at least 7 points is p/q, where p and q are co-prime. Then p + q is

25. The co-ordinate axes are rotated about the origin O in anti-clockwise direction through an angle $60°$. If p and q are the intercepts made on the new axes by a straight line whose equation referred to the original axes is x + y = 1, then $\frac{1}{p^2}+\frac{1}{q^2}$ is

PHYSICS

Single Correct Answer Type

26. Two identical thin rings each of radius R are coaxially placed at a distance R. If the rings have a uniform mass distribution and each has mass m_1 and m_2 respectively, then the work done in moving a mass m from centre of one ring to that of the other is :

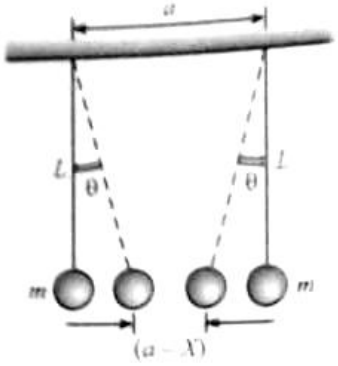
(A) Zero

(B) $\frac{Gm(m_1-m_2)(\sqrt{2}-1)}{\sqrt{2}R}$

(C) $\frac{Gm\sqrt{2}(m_1+m_2)}{R}$

(D) $\frac{Gmm_1(\sqrt{2}+1)}{m_2R}$

27. Two small balls of mass m each are suspended side by side by two equal threads of length L. If the distance between the upper ends of the threads be a, the angle θ, that the threads will make with the vertical due to attraction between the balls is



(A) $\tan^{-1}\frac{(a-X)g}{mG}$

(B) $\tan^{-1}\frac{mG}{(a-X)^2 g}$

(C) $\tan^{-1}\frac{(a-X)^2 g}{mG}$

(D) $\tan^{-1}\frac{(a^2-X^2)g}{mG}$

28. A satellite of mass m orbits the earth in an elliptical orbit having aphelion distance r_a and perihelion distance r_p. The period of the orbit is T. The semi-major and semi-minor axes of the ellipse are $\frac{r_a+r_p}{2}$ and $\sqrt{r_p r_a}$ respectively. The angular momentum of the satellite is :

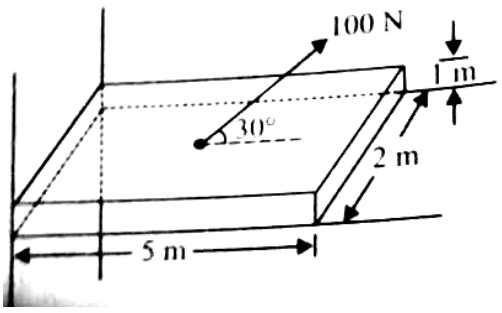
(A) $\frac{m\pi(r_a+r_p)\sqrt{r_a r_p}}{T}$

(B) $\frac{2m\pi(r_a+r_p)\sqrt{r_a r_p}}{T}$

(C) $\frac{m\pi(r_a+r_p)\sqrt{r_a r_p}}{2T}$

(D) $\frac{m\pi(r_a+r_p)\sqrt{r_a r_p}}{4T}$

29. Find out longitudinal stress and tangential stress on a fixed block



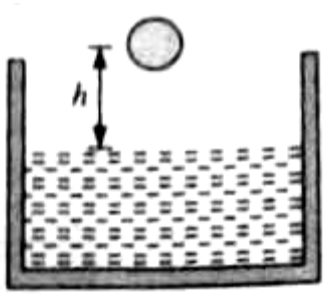
(A) $\overset{\sigma}{L} = 5\ N/m^2;\ \overset{\sigma}{T} = 5\sqrt{3}\ N/m^2$

(B) $\overset{\sigma}{L} = 5\sqrt{3}\ N/m^2;\ \overset{\sigma}{T} = 5N/m^2$

(C) Data sufficient

(D) None

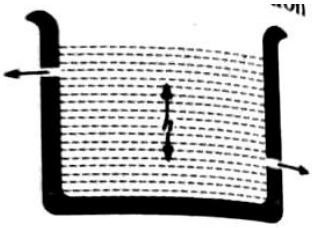
30. A ball of radius r and density ρ falls freely under gravity through a distance h before entering water. Velocity of ball does not change even on entering water. If viscosity of water is η, the value of h is given by



(A) $\frac{2}{9}r^2\left(\frac{1-\rho}{\eta}\right)g$ (B) $\frac{2}{81}r^2\left(\frac{\rho-1}{\eta}\right)g$

(C) $\frac{2}{81}r^4\left(\frac{\rho-1}{\eta}\right)^2 g$ (D) None

31. There are two identical small holes of area of cross-section a on the opposite sides of a tank containing a liquid of density ρ. The difference in height between the holes is h. Tank is resting on a smooth horizontal surface. Horizontal force which will has to be applied on the tank to keep it in equilibrium is

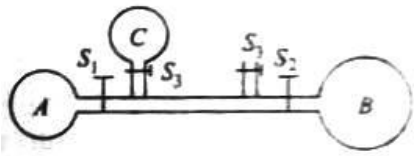


(A) $gh\rho a$ (B) $\frac{2gh}{\rho a}$ (C) $2\rho agh$ (D) $\frac{\rho gh}{a}$

32. A thin metal disc of radius r floats on water surface and bends the surface downwards along the perimeter making an angle θ with vertical edge of the disc. If the disc displaces a weight of water W and surface tension of water is T, then the weight of metal disc is

(A) $2\pi rT + W$ (B) $2\pi rT\cos\theta - W$ (C) $2\pi rT\cos\theta + W$ (D) $W - 2\pi rT\cos\theta$

33. The adjoining diagram shows three soap bubbles A, B and C prepared by blowing the capillary tube fitted with stop cocks, S_1, S_2 and S_3. with stop cock S closed and stop cocks S_1, S_2 and S_3 opened



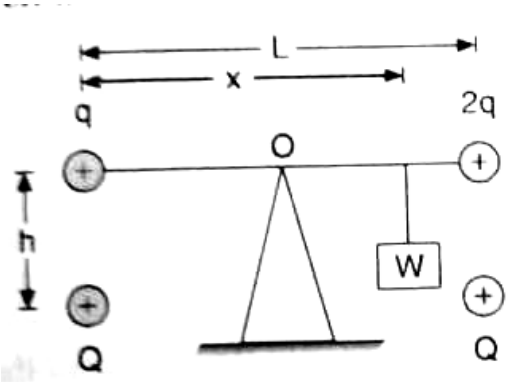
(A) B will start collapsing with volumes of A and C increasing

(B) C will start collapsing with volumes of A and B increasing

(C) C and A both will start collapsing with the volume of B increasing

(D) Volumes of A, B and C will become equal at equilibrium

34. An insulating long light rod of length L pivoted at its centre O and balanced with a weight W at a distance x from the left end as shown in figure. Charges q and 2q are fixed to the ends of the rod. Exactly below each of these charges at a distance h a positive charge Q is fixed. Then x is



(A) $\frac{QLq + \varepsilon_0^2 h^2 LW}{h^2 W}$ (B) $\frac{QLq + \varepsilon_0 h^2 LW}{\varepsilon_0 h^2 W}$

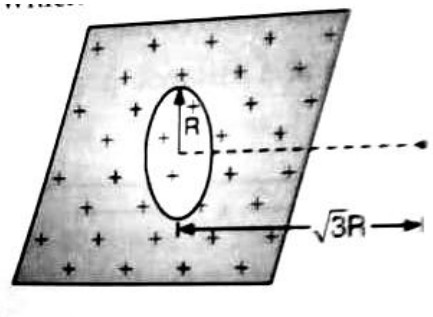
(C) $\frac{4QLq + \varepsilon_0 h^2 LW}{8\pi h^2 W}$ (D) $\frac{QLq + 4\pi\varepsilon_0 h^2 LW}{8\pi\varepsilon_0 h^2 W}$

35. A proton of mass m and accelerated by a potential difference V gets into a uniform electric field of a parallel plate capacitor parallel to plates of length l at midpoint of its separation between plates. The field strength in it varies with time as E = at, where a is a positive constant. Find the angle of deviation of the proton as it comes out of the capacitor. (Assume that it does not collide with any of the plates).

(A) $\theta = \tan^{-1}\left(\frac{al^2}{V}\sqrt{\frac{m}{8eV}}\right)$ (B) $\theta = \tan^{-1}\left(\frac{al^2}{2V}\sqrt{\frac{m}{eV}}\right)$

(C) $\theta = \tan^{-1}\left(\frac{al^2}{4V}\sqrt{\frac{m}{2eV}}\right)$ (D) $\theta = \tan^{-1}\left(\frac{al^2}{V}\sqrt{\frac{m}{2eV}}\right)$

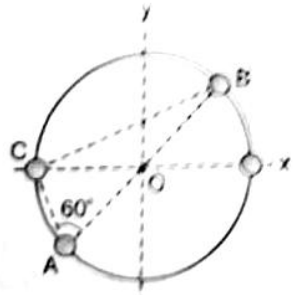
36. An infinite dielectric sheet having charge density σ has a hole of radius R in it. An electron is released on the axis of the hole at a distance $\sqrt{3}R$ from the centre. The speed with which it crosses the centre of the hole.



(A) $\sqrt{\frac{\sigma eR}{2m\varepsilon_0}}$ (B) $\sqrt{\frac{\sigma eR}{m\varepsilon_0}}$

(C) $\sqrt{\frac{2\sigma eR}{m\varepsilon_0}}$ (D) None of these

37. Consider a system of three charges $\frac{q}{3}, \frac{q}{3}$ and $-\frac{2q}{3}$ placed at points A, B and C, respectively, as shown in the figure. Take O to be the centre of the circle of radius R and angle $CAB = 60^0$



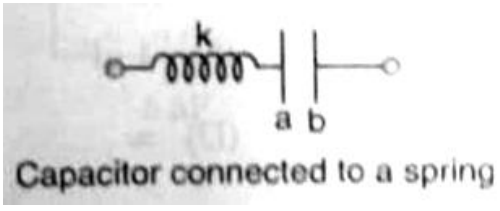
(A) The electric field at point O is $\frac{q}{8\pi\varepsilon_0 R^2}$ directed along the negative x-axis

(B) The potential energy of the system is zero

(C) The magnitude of the force between the charges at C and B is $\frac{q^2}{54\pi\varepsilon_0 R^2}$

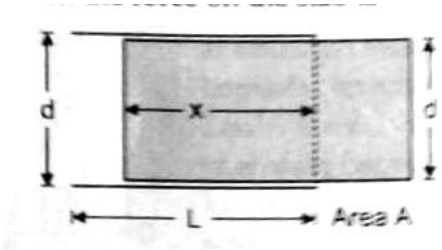
(D) The potential at point O is $\frac{q}{12\pi\varepsilon_0 R}$

38. Consider an air filled parallel plate capacitor with one plate connected to a spring having a force constant k, and another plate held fixed. The system rests on a frictionless table top. If the charges placed on plates a and b are +Q and –Q, respectively, the spring will have an expansion x, given by



(A) $\frac{Q^2}{kA\varepsilon_0}$ (B) $\frac{2Q^2}{kA\varepsilon_0}$ (C) $\frac{Q^2}{2kA\varepsilon_0}$ (D) None of these

39. In a capacitor with $C_1 = \frac{\varepsilon_1 A}{d}(\text{in vacuum})$ and a charge q, a dielectric slab of dielectric constant K is inserted. If the inserted length is x and the edge effects are ignored, then the force on the slab is



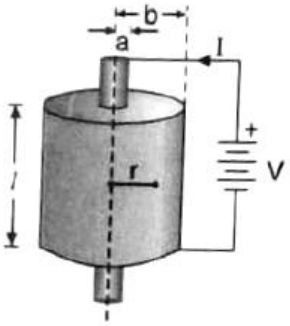
(A) attractive and equal to $\frac{1}{2}\frac{q}{C_1 L}(K-1)$

(B) repulsive and equal to $\frac{1}{2}\frac{q}{C_1 L}(K-1)$

(C) attractive and equal to $\frac{1}{2}\frac{q^2}{C_1 L}\times\frac{K-1}{\left(1+\frac{x}{L}(K-1)\right)^2}$

(D) repulsive and equal to $\frac{1}{2}\frac{q^2}{C_1 L}\times\frac{K-1}{\left(1+\frac{x}{L}(K-1)\right)^2}$

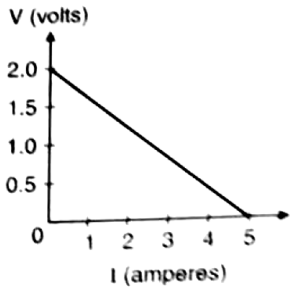
40. A metal rod of radius a is concentric with a metal cylindrical shell of radius b and length ℓ. The space between rod and cylinder is tightly packed with a high resistance material of resistivity ρ. A battery having a terminal voltage V is connected across the combination as shown. Neglect resistance of rod and cylinder. If I is the total current in the circuit then,



(A) $I = \frac{\ell V}{\rho}$ (B) $I = \frac{2\pi\ell V}{\rho(\ln b - \ln a)}$

(C) $I = \frac{4\pi\ell V}{\rho(\ln b - \ln a)}$ (D) $I = \frac{\ell V}{4\pi\rho(\ln b - \ln a)}$

41. For a cell, the graph between the potential difference (V) across the terminals of the cell and the current (I) drawn from the cell is shown in the figure. The e.m.f. and the internal resistance of the cell are



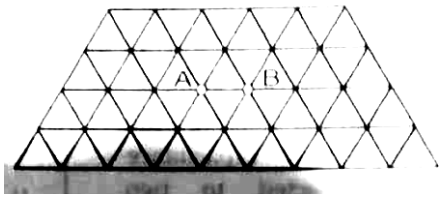
(A) 2V,0.5Ω (B) 2V,0.4Ω

(C) $>$ 2V,0.5Ω (D) $>$ 2V,0.4Ω

42. A rod of length L has charge distributed on it such that linear charge density $\lambda = kx$, k is a constant and x is the distance of a point from the end of the rod where no charge exists. The rod has a mass m and the mass distribution is uniform. The rod is now rotated about an axis passing through the end of the rod where no charge exists and this axis is perpendicular to the length of the rod. If I is the equivalent current then,

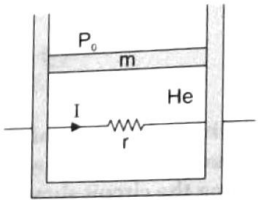
(A) $I = \frac{kL^2\omega}{\pi}$ (B) $I = nkL\omega$ (C) $I = \frac{kL^2\omega}{4\pi}$ (D) I = zero

43. There is an infinite wire grid with cells in the form of equilateral triangles. The resistance of each wire between neighbouring joint connections is R_0. The net resistance of the whole grid between the points A and B as shown is



(A) R_0 (B) $\frac{R_0}{2}$ (C) $\frac{R_0}{3}$ (D) $\frac{R_0}{4}$

44. A resistance coil of resistance r connected to an external battery, is placed inside an adiabatic cylinder fitted with a frictionless piston of mass m and same area A. Initially cylinder contains one mole of ideal gas He. A current I flows through the coil such that temperature of gas varies as $T = T_0 + at + bt^2$, keeping pressure constant with time t. Atmospheric pressure above piston is P_0. Find



(A) $\sqrt{\frac{5R}{2r}(2br+a)}$ (B) $\sqrt{\frac{2r}{5R}(2br+a)}$ (C) $\sqrt{\frac{5R}{2r}(2b+ar)}$ (D) None

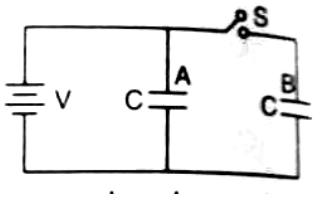
45. A copper wire of length l and radius r is nickel-plated till its final radius is 2r. If the resistivites of the copper and nickel are ρ_c and ρ_N, then the equivalent resistance of wire is

(A) $\frac{\rho_c l}{\pi r^2}$ (B) $\frac{\rho_N l}{4\pi r^2}$ (C) $\frac{l}{\pi r^2\left[\frac{1}{\rho_c}+\frac{3}{\rho_N}\right]}$ (D) $\frac{l}{\pi r^2}\left(\rho_c+\frac{\rho_N}{3}\right)$

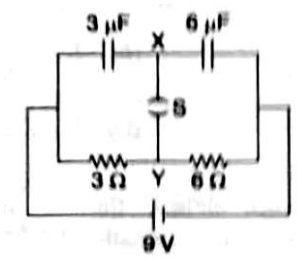
Numerical Based

46. A pan with set of weights is attached with a light spring. When disturbed, the mass-spring system oscillates with a time period of 0.6 s. When some additional weights are added, then time period is 0.7 s. The extension caused by the additional weights is approximately given by (in cm)

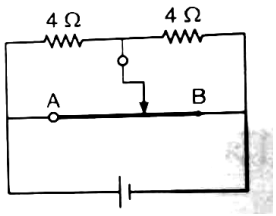
48. The figure shows two identical parallel plate capacitors connected to a battery with switch S closed. The switch is now opened and the free space between the plates of the capacitors is filled with a dielectric of constant 3. The ratio of the total energy stored in both capacitors before and after the introduction of the dielectric is



48. A circuit is connected as shown in the figure with the switch S open. When the switch is closed, the total amount of charge that flows from Y to X is (in μC)



49. The wire AB of a meter bridge changes linearly from radius r to 2r from left end to right end. Where should the free end of the galvanometer be connected on AB so that the deflection in the galvanometer is zero?



50. An artificial satellite is describing an equatorial orbit at 3600 km above the earth's surface. Calculate is period of revolution? Take earth radius 6400 km. (in hrs)

CHEMISTRY

Single Correct Answer Type:

51. The correct order of second ionisation potential of carbon, nitrogen, oxygen and fluorine is
(A) C > N > O > F (B) O > N > F > C (C) O > F > N > C (D) F > O > N > C

52. The electron affinity of nitrogen is lower than that of carbon because _____
(A) Atomic radius of nitrogen is lower than that of carbon
(B) Effective nuclear charge in carbon is greater
(C) Addition of an electron in nitrogen gives $2P^4$ configuration
(D) Nitrogen is gaseous element

53. Which of the following is V-shaped _____
(A) S_3^{-2} (B) I_3^- (C) N_3^- (D) None

54. Increasing order of percentage of P-character of the hybrid orbitals of the central atoms: ClO_2^-, CS_2, $SnCl_2$
(A) $CS_2 > SnCl_2 > ClO_2^-$ (B) $CS_2 < SnCl_2 < ClO_2^-$
(C) $SnCl_2 < CS_2 < ClO_2^-$ (D) $ClO_2^- < CS_2 < SnCl_2$

55. The colour of iodine solution is discharged by shaking it with aq. Solution of _____
(A) H_2SO_4 (B) Na_2S (C) Na_2SO_4 (D) $Na_2S_2O_3$

56. Sodium burns in dry air to give
(A) Na_2O (B) Na_2O_2 (C) NaO_2 (D) Na_3N

57. Going down to II_A group, following properties doesn't decrease
(A) Solubility of sulphates in H_2O (B) Hydration energy
(C) Thermal stability of carbonates (D) Ionic radius in water

58. An aqueous solution of BCl_3 is
(A) Weak acid (B) Weak base (C) Neutral (D) Strong base

59. When steam is passed through red hot coke
(A) CO_2 and H_2 are obtained (B) CO and N_2 are formed
(C) CO and H_2 are obtained (D) No reaction

60. The radius of an orbit of hydrogen atom is 0.85 nm. Then velocity of electron in this orbit _____ m/sec
(A) 5.45×10^5 (B) 6.85×10^6 (C) 5.45×10^6 (D) 5.45×10^8

61. The difference in the value of $(n+\ell)$ for 19^{th} electron of Cr and 21^{st} electron of Sc is _____
(A) 3 (B) 2 (C) 1 (D) 0

62. Which of the following is incorrect about NaCl structure
(A) Nearest neighbours of Na^+ ion is 6 (B) Na^+ ion makes fcc lattice
(C) Cl^- ion makes fcc lattice (D) There are 8 next nearest neighbours of Na^+ ions

63. $LiBH_4$ crystallises in an orthorhombic system with 4 molecules per unit cell. The unit cell dimensions are $a=6.8A°$, $b=4.4A°$ and $c=7.2A°$. If molar mass is 21.76, then density of crystal is _____
(A) $0.6708\ g/cm^3$ (B) $1.6708\ gm/cm^3$ (C) $2.6708\ gm/cm^3$ (D) None of these

64. Ferrous oxide (FeO) is experimentally found to have the formula $Fe_{0.93}O$. Then percentage of Fe^{+3} ions is _____ %
(A) 15.54 (B) 18.6 (C) 21.4 (D) 36.8

65. The molecule having one unpaired electron is
(A) NO (B) CO (C) $CN^{\ominus}$ (D) O_2

66. Which of the following resonating structures of N_2O is the most contributing _____
(A) $N\equiv N-O$ (B) $N-N\equiv O$ (C) $N=N-O$ (D) $N-N=O$

67. Hydrogen is not obtained when zinc reacts with
(A) Cold water (B) Hot NaOH solution (C) Conc.H_2SO_4 (D) Dilute HCl

68. The volume of oxygen liberated from 0.68 gm of H_2O_2 is _____
(A) 112 ml (B) 224 ml (C) 56 ml (D) 336 ml

69. Aluminium hydroxide is soluble in excess of NaOH forming the ion
(A) AlO_2^{+3} (B) AlO_2^{-3} (C) AlO_2^- (D) AlO_3^-

70. In diborane, the $H-B-H$ angles are nearly
(A) $60°, 120°$ (B) $97°, 120°$ (C) $95°, 150°$ (D) $120°, 180°$

Numerical Based:

71. If NaCl is doped with 10^{-3} mol% of $SrCl_2$, the number of cation vacancies is $x\times10^{18}\ mol^{-1}$. Then x is ____

72. CsBr has B.C.C. structure with edge length $4.3A°$. The shortest inter ionic distance in between Cs^+ and Br^- is _____ $A°$.

73. Radius of two different orbits in a H like sample is 4R and 16 R respectively, the ratio of frequency of revolution of electron in these two orbits is equal to _____

74. The V.D. of a mixture containing NO_2 and N_2O_4 is 38.3 at $33°\ C$. The number of moles of NO_2 if 100 g of N_2O_4 was taken initially is _____

75. A metal crystallizes in two cubic lattices i.e., FCC and B.C.C., whose unit cell lengths are $3.5\ A°$ and $3.0\ A°$ respectively. Then ratio of their densities is equal to _____

❖ *Wish You all the Best* ❖