



TEST PAPER

CLASS - 11

Time Allowed : *Two Hours*

Maximum Marks : **400**

INSTRUCTIONS

1. IMMEDIATELY AFTER THE COMMENCEMENT OF THE EXAMINATION, YOU SHOULD CHECK THAT THIS TEST BOOKLET **DOES NOT** HAVE ANY UNPRINTED OR TORN OR MISSING PAGES OR ITEMS, ETC. IF SO, GET IT REPLACED BY A COMPLETE TEST BOOKLET.
2. Please note that it is the candidate's responsibility to encode and fill in the Roll Number carefully and without any omission or discrepancy at the appropriate places in the OMR Answer Sheet. Any omission/discrepancy will render the Answer Sheet liable for rejection.
3. You have to enter your Roll Number on the Test Booklet in the Box provided alongside. **DO NOT** write *anything else* on the Test Booklet.
4. This Test Booklet contains **100** items (questions). **Part I - Mathematics, Science** and **Part II - General Awareness, English**. Each item comprises four responses (answers). You will select the response which you want to mark on the Answer Sheet. In case you feel that there is more than one correct response, mark the response which you consider the best. In any case, choose **ONLY ONE** response for each item.
5. You have to mark all your responses **ONLY** on the separate Answer Sheet provided. See directions in the Answer Sheet.
6. All items carry **four (4)** marks.
7. Before you proceed to mark in the Answer Sheet the response to various items in the Test Booklet, you have to fill in some particulars in the Answer Sheet as per instructions sent to you with your Admission Certificate.
8. After you have completed filling in all your responses on the Answer Sheet and the examination has concluded, you should hand over to the invigilator **only the Answer Sheet**. You are permitted to take away with you the Test Booklet.
9. Sheets for rough work are appended in the Test Booklet at the end.
10. **Penalty for wrong answers :**

THERE WILL BE PENALTY FOR WRONG ANSWERS MARKED BY A CANDIDATE IN THE OBJECTIVE TYPE QUESTION PAPERS.

- (i) There are four alternatives for the answer to every question. For each question for which a wrong answer has been given by the candidate, **one (1)** mark assigned to that question will be deducted as penalty.
- (ii) If a candidate gives more than one answer, it will be treated as a **wrong answer** even if one of the given answers happens to be correct and there will be same penalty as above to that question.
- (iii) If a question is left blank i.e., no answer is given by the candidate, there will be **no penalty** for that question.

DO NOT OPEN THIS TEST BOOKLET UNTIL YOU ARE ASKED TO DO SO

/;ku na%vunp'skka dk fglnh : iKUrj bl i qLrdk dsfi Nys i'B ij Nik gA

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PART - I

MATHEMATICS

1. If a, b, c are in Arithmetic Progression and one root of the equation $ax^2 + bx + c = 0$ is 2, then other root is:
- (a) $\frac{3}{4}$ (b) $-\frac{3}{4}$
 (c) $-\frac{5}{4}$ (d) $-\frac{5}{2}$
2. If $\sin^6 \theta + \cos^6 \theta + K \cos^2 2\theta = 1$, then k is equal to:
- (a) $\frac{1}{2} \tan^2 2\theta$ (b) $\frac{1}{4} \tan^2 2\theta$
 (c) $4 \cot^2 2\theta$ (d) $\frac{3}{4} \tan^2 2\theta$
3. If y is a function of x given by $a^{x+y} = a^x + a^y$, where ' a ' is a real constant ($a > 1$) then domain of $y(x)$ is:
- (a) $(0, +\infty)$ (b) $(-\infty, 0)$
 (c) $(-1, +\infty)$ (d) $(-\infty, 1)$
4. If $(K^2 + K - 2)x^2 + (K + 2)x < 1$ for all $x \in \mathbb{R}$, then K belongs to:
- (a) $(-2, 1)$ (b) $\left(-2, \frac{2}{5}\right)$
 (c) $\left(\frac{2}{5}, 1\right)$ (d) None of these
5. If x is an integer satisfying $x^2 - 6x + 5 \leq 0$ and $x^2 - 2x > 0$ then number of possible values of x is:
- (a) 3 (b) 4
 (c) 2 (d) infinite
6. If T_n denotes the n^{th} term of the series $2 + 3 + 6 + 11 + 18 + \dots$ then T_{50} is:
- (a) $49^2 - 1$ (b) $49^2 + 2$
 (c) $50^2 + 1$ (d) 49^2
7. The equation $|z + i| - |z - i| = k$ represents a hyperbola if:
- (a) $-2 < k < 2$ (b) $k > 2$
 (c) $0 < k < 2$ (d) None of these
1. ;fn a, b, c l ekurj Js kh ea gñ rFkk l ehdj.k $ax^2 + bx + c = 0$ dk , d ewy 2 gñ rksnlw jk ewy gksk%
 (a) $\frac{3}{4}$ (b) $-\frac{3}{4}$
 (c) $-\frac{5}{4}$ (d) $-\frac{5}{2}$
2. ;fn $\sin^6 \theta + \cos^6 \theta + K \cos^2 2\theta = 1$ rks k cjkj g%
 (a) $\frac{1}{2} \tan^2 2\theta$ (b) $\frac{1}{4} \tan^2 2\theta$
 (c) $4 \cot^2 2\theta$ (d) $\frac{3}{4} \tan^2 2\theta$
3. ;fn y, x dk Qyu gñ ftl s $a^{x+y} = a^x + a^y$ l s 0; Dr fd; k tkrk gñ tgk 'a' , d okLrfod vpj ($a > 1$) gñrc $y(x)$ dk çkUr gksk%
 (a) $(0, +\infty)$ (b) $(-\infty, 0)$
 (c) $(-1, +\infty)$ (d) $(-\infty, 1)$
4. ;fn $(K^2 + K - 2)x^2 + (K + 2)x < 1$ l Hkh $x \in \mathbb{R}$, rks K fd l l s l Ec) gksk%
 (a) $(-2, 1)$ (b) $\left(-2, \frac{2}{5}\right)$
 (c) $\left(\frac{2}{5}, 1\right)$ (d) bu ea l s dkbz ugha
5. ;fn x , d iwkkrd l ç; k gñ tks $x^2 - 6x + 5 \leq 0$, oa $x^2 - 2x > 0$ dks l arqV djrk gñrc x ds l Hkh l Hkkfor ekuka dh l ç; k gksk%
 (a) 3 (b) 4
 (c) 2 (d) vullr
6. ;fn T_n Js kh $2 + 3 + 6 + 11 + 18 + \dots$ ds noa in dks çnf'kr djrk gñrc T_{50} dk eku gksk%
 (a) $49^2 - 1$ (b) $49^2 + 2$
 (c) $50^2 + 1$ (d) 49^2
7. l ehdj.k $|z + i| - |z - i| = k$, d vfrijoy; dks çnf'kr djrk gñ ;fn%
 (a) $-2 < k < 2$ (b) $k > 2$
 (c) $0 < k < 2$ (d) bu ea l s dkbz ugha

8. 20 teachers of MKC either teach Mathematics or Statistics. 12 of them teach Mathematics while 4 teach both subjects. Then the number of teachers teaching only statistics is:

- (a) 12
- (b) 8
- (c) 16
- (d) 2

9. If the line $y - 1 = m(x - 1)$ cuts the circle $x^2 + y^2 = 4$ at two real points then the number of possible values of 'm' is:

- (a) 1
- (b) 2
- (c) Infinite
- (d) None of these

10. $\lim_{n \rightarrow \infty} (0.2)^{\log_{\sqrt{5}} \left(\frac{1}{4} + \frac{1}{8} + \frac{1}{16} + \dots \text{ to } n \text{ terms} \right)}$ is equal to:

- (a) 2
- (b) 4
- (c) 8
- (d) 0

11. $\lim_{x \rightarrow 0} \frac{3^x - 1}{\sqrt{x + 1} - 1}$ is equal to:

- (a) $\log_e 9$
- (b) $\log_e 3$
- (c) 0
- (d) 1

12. The number of ways in which a couple can sit around a table with 6 guests if the couple take consecutive seats is:

- (a) 1440
- (b) 720
- (c) 5040
- (d) none of these

13. The foci of the ellipse $12x^2 + 4y^2 + 24x - 16y + 25 = 0$ is:

- (a) (1, 2)
- (b) $\left(-1, 2 \pm \frac{1}{\sqrt{2}}\right)$
- (c) $\left(1, 2 \pm \frac{1}{\sqrt{3}}\right)$
- (d) None of these

14. Range of the expression $4 + 3x - x^2$ is:

- (a) $\left[-\infty, \frac{25}{4}\right]$
- (b) $\left[-\infty, \frac{3}{4}\right]$
- (c) $\left[\frac{25}{4}, +\infty\right)$
- (d) None of these

8. MKC ds 20 f'k{kd xf.kr vFkok I kf[; dh i <krS gA bueal s 12 xf.kr tcfD 4 nksuka fo"K; i <krS gA rks dOy I kf[; dh i <kus okys f'k{kdka dh I f[; k g%

- (a) 12
- (b) 8
- (c) 16
- (d) 2

9. ; fn js[kk $y - 1 = m(x - 1)$, oRr $x^2 + y^2 = 4$ dks nks okLrfod fclnq/kA ij dKvRh g\$ rc m ds I Hkh I Hkkfor ekuka dh I f[; k gksxh%

- (a) 1
- (b) 2
- (c) vuUr
- (d) bueal s dkbZ ugha

10. $\lim_{n \rightarrow \infty} (0.2)^{\log_{\sqrt{5}} \left(\frac{1}{4} + \frac{1}{8} + \frac{1}{16} + \dots \text{ to } n \text{ terms} \right)}$ cjkj g%

- (a) 2
- (b) 4
- (c) 8
- (d) 0

11. $\lim_{x \rightarrow 0} \frac{3^x - 1}{\sqrt{x + 1} - 1}$ cjkj g%

- (a) $\log_e 9$
- (b) $\log_e 3$
- (c) 0
- (d) 1

12. , d est dSpkjA vj\$ fdI h nEi fYk ds 6 egEkula ds I kfk cBus ds dOy fdrus rjhds g\$; fn nEi fYk Øelxr : i I scBrs gA

- (a) 1440
- (b) 720
- (c) 5040
- (d) bueal s dkbZ ugha

13. nh?kBRr $12x^2 + 4y^2 + 24x - 16y + 25 = 0$ dh ukfHk g%

- (a) (1, 2)
- (b) $\left(-1, 2 \pm \frac{1}{\sqrt{2}}\right)$
- (c) $\left(1, 2 \pm \frac{1}{\sqrt{3}}\right)$
- (d) bueal s dkbZ ugha

14. 0; atd $4 + 3x - x^2$ dk i jkl g%

- (a) $\left[-\infty, \frac{25}{4}\right]$
- (b) $\left[-\infty, \frac{3}{4}\right]$
- (c) $\left[\frac{25}{4}, +\infty\right)$
- (d) bueal s dkbZ ugha

15. The term independent of x in the expansion of

$$(1-x^2)\left(x+\frac{1}{x}\right)^{10} \text{ is:}$$

- (a) ${}^{11}C_5$ (b) ${}^{10}C_5$
(c) ${}^{11}C_4$ (d) none of these

16. In an examination of 9 papers a candidate has to pass in more papers than the number of papers in which he fails in order to be successful. The number of ways in which he can be unsuccessful is:

- (a) 255 (b) 256
(c) 193 (d) 319

17. In a club election the number of contestants is one more than the number of maximum candidates for which a voter can vote. If the total number of ways in which a voter can vote be 62, then the number of candidates is:

- (a) 7 (b) 5
(c) 6 (d) 9

18. The value of

$$\cos\frac{\pi}{11} + \cos\frac{3\pi}{11} + \cos\frac{5\pi}{11} + \cos\frac{7\pi}{11} + \cos\frac{9\pi}{11} \text{ is:}$$

- (a) 0 (b) 1
(c) $\frac{1}{2}$ (d) $\frac{1}{4}$

19. Equation of the circle which passes through the origin has its centre on the line $x+y=4$ and cuts the circle $x^2+y^2-4x+2y+4=0$ orthogonally is:

- (a) $x^2+y^2-4x-4y=0$
(b) $x^2+y^2-2x-6y=0$
(c) $x^2+y^2-6x-3y=0$
(d) None of these

20. In the centre of the triangle with vertices $A(-36, 7)$, $B(20, 7)$ and $C(0, -8)$ is:

- (a) (1, 2) (b) (-1, 0)
(c) (1, 0) (d) (1, 1)

$$15. (1-x^2)\left(x+\frac{1}{x}\right)^{10} \text{ ds } \text{çl kj ea } x \text{ l sLora} \text{ in g\%}$$

- (a) ${}^{11}C_5$ (b) ${}^{10}C_5$
(c) ${}^{11}C_4$ (d) buea l s dkkbz ugha

16. , d ijh{kk ea dgy 9 ç'u i = gA , d vhl; Fkhz dks l Qy gksus ds fy; s ml ds }kjk vl Qy gq ç'u i =ka dh vi {kk ikl gq ç'u i =ka dh l ; k T; knk gksuh pkfg; A vl Qy gksusdh dgy rjhkdka dh l ; k gksuh%

- (a) 255 (b) 256
(c) 193 (d) 319

17. , d Dyc ds pupko ea dgy çfrHkkfx; ka dh l ; k fdl h ernkrk }kjk pqs tkus okys mEehnokjka dh vf/kdre l ; k l s 1 T; knk gA ; fn ernkrk }kjk vvx&vyx çdkj l ser nusdh dgy l ; k 62 g\$ rks mEehnokjka dh dgy l ; k gksuh%

- (a) 7 (b) 5
(c) 6 (d) 9

$$18. \cos\frac{\pi}{11} + \cos\frac{3\pi}{11} + \cos\frac{5\pi}{11} + \cos\frac{7\pi}{11} + \cos\frac{9\pi}{11} \text{ dk eku g\%}$$

- (a) 0 (b) 1
(c) $\frac{1}{2}$ (d) $\frac{1}{4}$

19. ml oRr dk l ehdj.k Kkr dja tks ewy fclnq l s gkdj xqtjrk g\$Rfkk ml dk dñnz j\$kk $x+y=4$ ij flFkr g\$Rfkk oRr $x^2+y^2-4x+2y+4=0$ dks yEc dks kr% dKvrk g%

- (a) $x^2+y^2-4x-4y=0$
(b) $x^2+y^2-2x-6y=0$
(c) $x^2+y^2-6x-3y=0$
(d) buea l s dkkbz ugha

20. ml f=Hkqt dk vUr% dñnz D; k g\$ ftl ds 'kri'z $A(-36, 7)$, $B(20, 7)$ vlsj $C(0, -8)$ g%

- (a) (1, 2) (b) (-1, 0)
(c) (1, 0) (d) (1, 1)

21. In a class 100 students there are 70 boys whose average marks in a subject are 75. If the average marks of the complete class is 72, then the average marks of the girls is:
 (a) 73 (b) 68
 (c) 65 (d) 74
22. $\cos 170^\circ \cdot \cos 150^\circ \cdot \cos 130^\circ \cdot \cos 110^\circ$ is equal to:
 (a) $\frac{1}{16}$ (b) $\frac{3}{16}$
 (c) $\frac{5}{16}$ (d) $\frac{7}{16}$
23. If a vertex of triangle is (1, 1) and the mid point of two sides of a triangle through this vertex are (-1, 2) and (3, 2), then the centroid of the triangle is:
 (a) $\left(-\frac{1}{3}, \frac{7}{3}\right)$ (b) $\left(-1, \frac{7}{3}\right)$
 (c) $\left(\frac{1}{3}, \frac{7}{3}\right)$ (d) $\left(1, \frac{7}{3}\right)$
24. If the line $x - 1 = 0$ is the directrix of parabola $y^2 - kx + 8 = 0$, then one of the value of k is:
 (a) 4 (b) $\frac{1}{8}$
 (c) 8 (d) $\frac{1}{4}$
25. If $z = 1 + \cos \frac{\pi}{5} + i \sin \frac{\pi}{5}$ then the value of $\sin(\arg(z))$ is?
 (a) $\frac{\sqrt{10-2\sqrt{5}}}{4}$ (b) $\frac{\sqrt{5}-1}{4}$
 (c) $\frac{\sqrt{5}+1}{4}$ (d) None of these

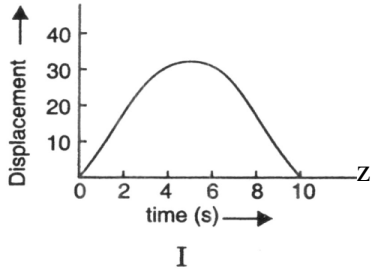
21. , d d{kk ea 100 Nk= gsfTI ea 70 yMds gsfItuds , d fo"K; ea vK r vrd 75 gA ; fn l i wK d{kk ds vK r vrd 72 gA rc yMfid; ka ds vK r vrd g%
 (a) 73 (b) 68
 (c) 65 (d) 74
22. $\cos 170^\circ \cdot \cos 150^\circ \cdot \cos 130^\circ \cdot \cos 110^\circ$ dk eku cjkj g%
 (a) $\frac{1}{16}$ (b) $\frac{3}{16}$
 (c) $\frac{5}{16}$ (d) $\frac{7}{16}$
23. ; fn fdl h f=Hkqt dk , d 'k"Kz (1, 1) gSrFkk bl 'k"Kz l s xqt jus okyh f=Hkqt dh nkska Hkqt kvka ds e/; fclnq (-1, 2) rFkk (3, 2) gS rc f=Hkqt dk dlnzd g%
 (a) $\left(-\frac{1}{3}, \frac{7}{3}\right)$ (b) $\left(-1, \frac{7}{3}\right)$
 (c) $\left(\frac{1}{3}, \frac{7}{3}\right)$ (d) $\left(1, \frac{7}{3}\right)$
24. ; fn j[kk $x - 1 = 0$] i joy; $y^2 - kx + 8 = 0$ dh fu; rk gSrksk dk , d eku g%
 (a) 4 (b) $\frac{1}{8}$
 (c) 8 (d) $\frac{1}{4}$
25. ; fn $z = 1 + \cos \frac{\pi}{5} + i \sin \frac{\pi}{5}$, rks $\sin(\arg(z))$ dk eku D; k g%
 (a) $\frac{\sqrt{10-2\sqrt{5}}}{4}$ (b) $\frac{\sqrt{5}-1}{4}$
 (c) $\frac{\sqrt{5}+1}{4}$ (d) buea l s dkbZ ugha

SCIENCE

26. Displacement of an oscillating particle is given by $y = A\sin(Bx + Ct + D)$. The dimensional formula of $[A B C D]$ will be:

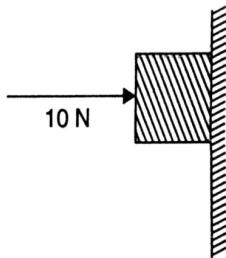
- (a) $[M^0L^{-1}T^0]$ (b) $[M^0L^0T^{-1}]$
- (c) $[M^0L^{-1}T^{-1}]$ (d) $[M^0L^0T^0]$

27. The displacement-time graph of a moving object is shown in the figure I. Which of the velocity-time graphs shown in the answer figure could represent the motion of the same body?



- (a)
- (b)
- (c)
- (d)

28. A horizontal force of 10 N is necessary to just hold a block stationary against a wall. The coefficient of friction between the block and the wall is 0.2. The weight of the block is:

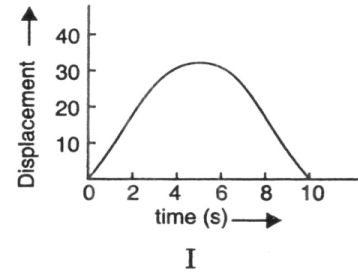


- (a) 100 N (b) 2 N
- (c) 20 N (d) 50 N

26. dEiu djus okys ,d d.k dk foLFkki u $y = A\sin(Bx + Ct + D)$ | sçnf'kr fd; k tkrk g§ rks $[A B C D]$ dk foeh; I # gksrk%

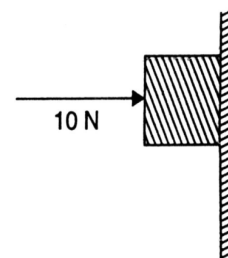
- (a) $[M^0L^{-1}T^0]$ (b) $[M^0L^0T^{-1}]$
- (c) $[M^0L^{-1}T^{-1}]$ (d) $[M^0L^0T^0]$

27. ,d xfreku oLrqdk foLFkki u&l e; xtQ fp= ea çnf'kr g§ bl h fi .M dk dks l k ox&l e; xtQ bl dh xfr dks 0; Dr djrk g§



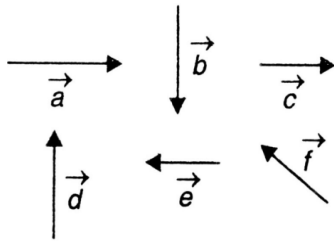
- (a)
- (b)
- (c)
- (d)

28. ,d nhokj ds fo#) fd l h Cykd dks fLFkj j [kus gsrq 10 N ds {kr t cy dh vko'; drk gsrh g§ Cykd rFkk nhokj ds e/; ?k'kz k xqkud 0.2 g§ Cykd ¼x/d½ dk Hkkj g%



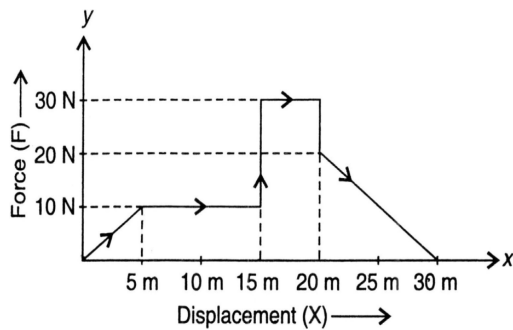
- (a) 100 N (b) 2 N
- (c) 20 N (d) 50 N

29. Six vectors, \vec{a} through \vec{f} , have the magnitudes and directions indicated in the figure. Which of the following statements is true?



- (a) $\vec{b} + \vec{c} = \vec{f}$
- (b) $\vec{d} + \vec{c} = \vec{f}$
- (c) $\vec{d} + \vec{e} = \vec{f}$
- (d) $\vec{b} + \vec{e} = \vec{f}$

30. Given below is a graph between a variable force (F) (along y-axis) and the displacement (X) (along x-axis) of a particle in one dimension. The work done by the force in the displacement interval between 0 m and 30 m is:



- (a) 275 J
- (b) 375 J
- (c) 400 J
- (d) 300 J

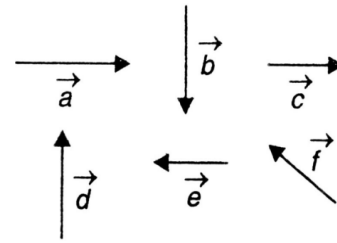
31. Two bodies have their moments of inertia I and 2I respectively about their axis of rotation. If their kinetic energies of rotation are equal, their angular momenta will be in the ratio:

- (a) 2 : 1
- (b) 1 : 2
- (c) $\sqrt{2} : 1$
- (d) $1 : \sqrt{2}$

32. The apparent frequency of a note is 200 Hz, when a listener is moving with a velocity of 40 ms⁻¹ towards a stationary source. When he moves away from the same source with the same speed, the apparent frequency of the same note is 160 Hz. The velocity (in ms⁻¹) of sound in air is:

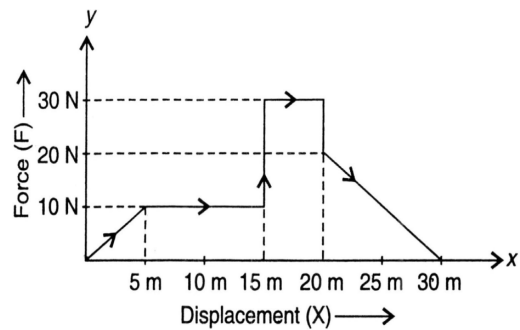
- (a) 340
- (b) 330
- (c) 360
- (d) 320

29. Six vectors, \vec{a} through \vec{f} , have the magnitudes and directions indicated in the figure. Which of the following statements is true?



- (a) $\vec{b} + \vec{c} = \vec{f}$
- (b) $\vec{d} + \vec{c} = \vec{f}$
- (c) $\vec{d} + \vec{e} = \vec{f}$
- (d) $\vec{b} + \vec{e} = \vec{f}$

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- (a) 275 J
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- (d) 300 J

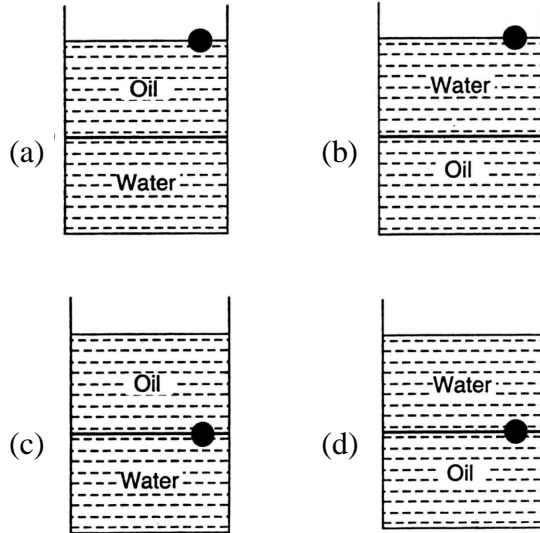
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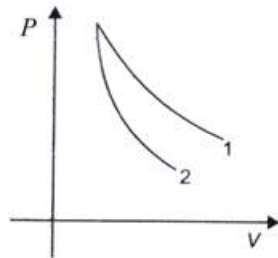
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- (a) 340
- (b) 330
- (c) 360
- (d) 320

33. A ball is made of a material of density ρ where $\rho_{oil} < \rho < \rho_{water}$ with ρ_{oil} and ρ_{water} representing the densities of oil and water, respectively. The oil and water are immiscible. If the above ball is in equilibrium in a mixture of this oil and water, which of the following pictures represents its equilibrium position?

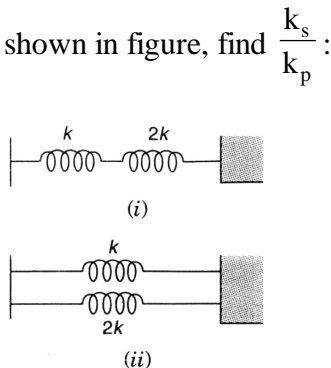


34. Pressure (P) – Volume (V) plots for two gases during adiabatic process are shown. Plots 1 and 2 correspond to gases:



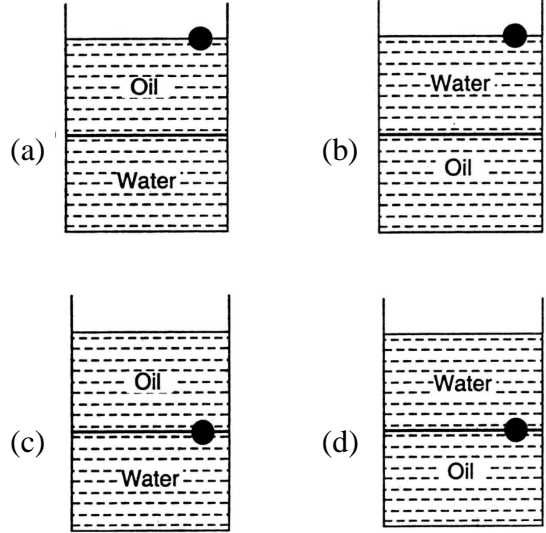
- (a) He and O₂
- (b) O₂ and He
- (c) He and Ar
- (d) O₂ and N₂

35. If k_s and k_p respectively are effective spring constants in series and parallel combination of springs as shown in figure, find $\frac{k_s}{k_p}$:

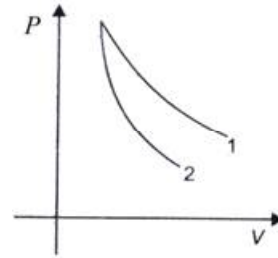


- (a) 9/2
- (b) 3/7
- (c) 2/9
- (d) 7/3

33. , d xan ρ ?kuRo okys, d inkFkz l sfufer gStgk $\rho_{oil} < \rho < \rho_{water}$ tgk ρ_{oil} rFkk ρ_{water} Øe'k% rsy , oa ikuh ds ?kuRo dks çnf'kr djrs gA rsy rFkk ty ijLij v?kyu'khy gA ; fn , d xan rsy , Ø ty dsfeJ.k eal lUrtyr volFkk eagksrksuhpsfn ; x ; s fp= ea l s dks l k fp= xan dh lUrtyr volFkk dks çnf'kr djrk gA



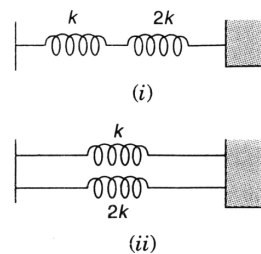
34. #) kSe çfØ; k ds nkjku nks xS ka ds nkic (P) rFkk vk; ru (V) dks xkQ ea n'kz k x; k gA mi jkDr xkQ eajs k; , 1 rFkk 2 fdl xS dks baxr djrh gA



- (a) He rFkk O₂
- (b) O₂ rFkk He
- (c) He rFkk Ar
- (d) O₂ rFkk N₂

35. fp= ea k_s , oa k_p , Jskh , oa lekUrj Øe ea tMs

fLi xka ds i kko h fLi x fu ; rkd garks $\frac{k_s}{k_p}$ Kkr dj%



- (a) 9/2
- (b) 3/7
- (c) 2/9
- (d) 7/3

36. Consider the following molecules (i) PCl_5 , (ii) BF_3 , (iii) XeF_2 and (iv) H_2O and the related statements :
- The molecules not obeying the octet rule are (i), (ii) and (iii).
 - The electron deficient molecules are (i) and (ii).
 - The molecules possessing non-bonding pairs of electrons on central atoms are (iii) and (iv).

Which of the above statements are correct?

- (a) 1 and 2 (b) 1 and 3
(c) 2 and 3 (d) 1, 2 and 3
37. The correct order indicating a decrease in the first ionisation energy in respect of the elements Li, Be, B and C will be :
- (a) $\text{C} > \text{B} > \text{Be} > \text{Li}$ (b) $\text{C} > \text{Be} > \text{B} > \text{Li}$
(c) $\text{Li} > \text{Be} > \text{B} > \text{C}$ (d) $\text{Li} > \text{B} > \text{Be} > \text{C}$

38. Match **List-I** with **List-II** and select the correct answer using the codes given below the Lists:

List-I	List-II
A. Bronsted Acid	1. HCO_3^-
B. Bronsted Base	2. OH^-
C. Lewis Acid	3. Al^{3+}
D. Lewis Base	4. CN^-

Codes:

A	B	C	D	A	B	C	D
(a) 1	2	3	4	(b) 3	4	1	2
(c) 3	2	1	4	(d) 1	4	3	2

39. In a polyelectronic atom, the energies of a set of atomic orbitals designated as 3p, 3d, 4s and 4p will appear in the order of :
- (a) $3p > 4s > 3d > 4p$ (b) $3p > 3d > 4s > 4p$
(c) $4p > 3p > 4s > 3d$ (d) $4p > 3d > 4s > 3p$

40. Rutherford's model of atom is considered untenable because :
- (a) a positively charged nucleus cannot remain separated from negatively charged electrons.
(b) an accelerated electron would continuously lose energy in the form of radiation.
(c) nuclear mass is not sufficiently heavy to keep the light electron in its orbit.
(d) the centre of gravity of the system would be within the volume of the nucleus.

36. fuEufyf[kr v.kq/ka (i) PCl_5 , (ii) BF_3 , (iii) XeF_2 , rFkk (iv) H_2O rFkk mul s l Ec) dFkuka ij fopkj dj%

- v'Vd fu; e dk ikyu u djusokysv.kqg&(i), (ii) rFkk (iii)
 - de byDVtu okys v.kqg&(i) rFkk (ii) gA
 - dBnh; ijek.kq/ka ij fucZU/kr byDVtu ; kaka okys v.kqg& (iii) rFkk (iv)
- mijkDr dFkuka ea l s dku l k dFku l R; gS
- (a) 1 rFkk 2 (b) 1 rFkk 3
(c) 2 rFkk 3 (d) 1, 2 rFkk 3

37. Li, Be, B rFkk C rRokadh iFke vk; uhdj.k ÅtkZ ds?kVrsØe dk l gh mRrj g%
- (a) $\text{C} > \text{B} > \text{Be} > \text{Li}$ (b) $\text{C} > \text{Be} > \text{B} > \text{Li}$
(c) $\text{Li} > \text{Be} > \text{B} > \text{C}$ (d) $\text{Li} > \text{B} > \text{Be} > \text{C}$

38. **I ph-I** rFkk **I ph-II** dks l epyr djarFkk uhpsfn, x, dV/ka dk iz kx dj l gh mRrj dks; fur djA

I ph-I	I ph-II
A. ckl VM vEy	1. HCO_3^-
B. ckl VM {kkj	2. OH^-
C. ypl vEy	3. Al^{3+}
D. ypl {kkj	4. CN^-

dV/%

A	B	C	D	A	B	C	D
(a) 1	2	3	4	(b) 3	4	1	2
(c) 3	2	1	4	(d) 1	4	3	2

39. , d cgpyDVkfud ijek.kqep 3p, 3d, 4s rFkk 4p okys ijek.kq d{kaka ds l epp; dh ÅtkZ dk l gh c<rk Øe g%
- (a) $3p > 4s > 3d > 4p$ (b) $3p > 3d > 4s > 4p$
(c) $4p > 3p > 4s > 3d$ (d) $4p > 3d > 4s > 3p$

40. jnjQkMZ ds ijek.kq ekWly dks v0; ogkfjd ekuk tkrk gSD; kd&
- (a) , d /ku vkof'kr ukfHkd __.k vkof'kr byDVtu l s iFkd ughajg l drA
(b) , d Rofjr byDVtu fofdj.k ds: i ea yxkrkj ÅtkZ dk {k; djsx
(c) ukfHkd nh; eku i; kZr : i l s Hkkjh ugha glrs rkrfd osGYds byDVtu dks mudh d{kka ea l Fkj j[k l dA
(d) izkkyh dk x#Ro dBnz ukfHkd ds vk; ru ds vUnj fufgr gkskA

41. Match **List-I** with **List-II** and select the correct answer using the codes given below the Lists :

List-I (Process)	List-II (Use)
A. Cyanide Process	1. Ultra pure Ge
B. Flotation process	2. Pine oil
C. Electrolytic reduction	3. Extraction of Al
D. Zone refining	4. Extraction of Au

Codes:

	A	B	C	D
(a)	2	4	1	3
(b)	4	2	3	1
(c)	4	2	1	3
(d)	2	4	3	1

42. Match **List-I** with **List-II** and select the correct answer using the codes given below the Lists:

List-I (Type of Water)	List-II (Composition)
A. Heavy water	1. Bicarbonates of Mg and Ca in water
B. Temporary hard water	2. No foreign ions in water
C. Soft water	3. D ₂ O
D. Permanent hard water	4. Sulphates and chlorides of Mg and Ca in water

Codes :

	A	B	C	D		A	B	C	D
(a)	4	3	1	2	(b)	2	1	3	4
(c)	4	1	3	2	(d)	3	1	2	4

43. Match **List-I** with **List-II** and select the correct answer using the codes given below the Lists:

List-I (Compound)	List-II (Use)
A. Acetylsalicylic Acid	1. Insecticide
B. DDT	2. Drug
C. Naphthalene	3. Moth repellent
D. Carbon tetrachloride	4. Fire extinguisher

Codes:

	A	B	C	D
(a)	2	1	3	4
(b)	4	1	2	3
(c)	4	1	3	2
(d)	2	1	4	3

41. **I ph-I** rFk **I ph-II** dks l efsyr djarFkk uhpsfn, x, dWka dk iz kx dj l gh mRrj dk p; u dJA

I ph-I ¼ fØ; k½	I ph-II ¼ ni; kx½
A. l k; ukbM i fØ; k	1. vfr"kp) teŷu; e
B. mRlykou i fØ; k	2. pH+dk ry
C. fo r vi ?kVu	3. , Y; ŷefu; e dk fu'd'kz k
D. tku fjQkbfuax	4. l kx s dk fu'd'kz k

dW%

	A	B	C	D
(a)	2	4	1	3
(b)	4	2	3	1
(c)	4	2	1	3
(d)	2	4	3	1

42. **I ph-I** dks **I ph-II** l s l efsyr djarFkk uhpsfn, x, dWka dk iz kx dj l gh mRrj dk p; u dJA

I ph-I ¼ y ds cdkj½	I ph-II ¼ jpu k½
A. Hkkjh ty	1. ty eaMg rFkk Ca dscckbdckk½
B. vLFkk; h dBkj ty	2. ty ea dckbz clg; vk; u ugha
C. enq ty	3. D ₂ O
D. LFkk; h dBkj ty	4. Mg rFkk Ca dsty ea l YQsV , oaDylyj kbM

dW%

	A	B	C	D		A	B	C	D
(a)	4	3	1	2	(b)	2	1	3	4
(c)	4	1	3	2	(d)	3	1	2	4

43. **I ph-I** dks **I ph-II** ds l kFk l efsyr djarFkk uhpsfn, x, dWka dk iz kx dj l gh mRrj dk p; u dJA

I ph-I ¼ kx d½	I ph-II ¼ z kx½
A. , l hVky l ŷyl kbfyd vEy	1. dWuk'kd
B. DDT	2. vksf/k
C. uŷ Fkyu	3. dW ¼ ekM½ fod"kd
D. dckz Vŷ/kDylyj kbM	4. vfxu 'ked ; U=

dW%

	A	B	C	D
(a)	2	1	3	4
(b)	4	1	2	3
(c)	4	1	3	2
(d)	2	1	4	3

44. Match **List-I** with **List-II** and select the correct answer using the codes given below the Lists:

List-I	List-II
(Type of glass)	(Main constituents)
A. Pyrex	1. Red lead + K_2CO_3
B. Flint	2. Sodium Aluminium Borosilicate
C. Soft	3. Limestone + Na_2CO_3
D. Jena	4. Barium and Zinc Borosilicates

Codes:

	A	B	C	D
(a)	2	3	4	1
(b)	2	1	3	4
(c)	4	2	1	3
(d)	3	1	2	4

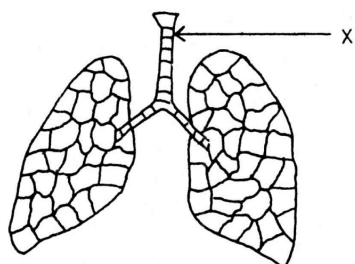
45. Match **List-I** with **List-II** and select the correct answer using the codes given below the Lists :

List-I	List-II
(Halogens)	(Uses)
A. Fluorine	1. Its compound is used in photography
B. Chlorine	2. It is used as an antiseptic
C. Bromine	3. It is used in the production of pesticides
D. Iodine	4. Its compounds are used in refrigeration

Codes:

	A	B	C	D
(a)	4	3	1	2
(b)	3	4	2	1
(c)	3	2	1	4
(d)	2	1	3	4

46. The part labelled as 'X' in the diagram is:



- (a) Larynx (b) Trachea
(c) Bronchiole (d) Bronchus

44. **I ph-I** dks **I ph-II** l s l e syr dja rFkk uhps fn, x, dW/ka dk iz kx dj l gh mRrj dk p; u dja

I ph-I	I ph-II
$\frac{1}{4}$ kh'ks dh fdLe $\frac{1}{2}$	$\frac{1}{2}$ e; l 3k/d $\frac{1}{2}$
A. i kbj D l	1. yky yM $\frac{1}{4}$ l Unj $\frac{1}{2}$ + K_2CO_3
B. fñy.V	2. l kM; e ,Y; fiefu; e ckjks fl fydv
C. enq	3. puuk i RFkj + Na_2CO_3
D. tsuk	4. cfj ; e rFkk ftad ckjksfl fydv

dW%

	A	B	C	D
(a)	2	3	4	1
(b)	2	1	3	4
(c)	4	2	1	3
(d)	3	1	2	4

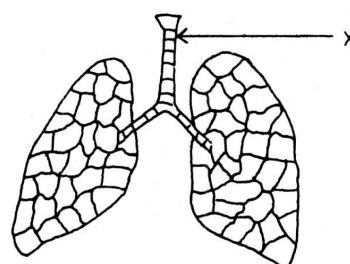
45. **I ph-I** dks **I ph-II** ds l kFk l e syr dja rFkk uhps fn, x, dW/ka dk iz kx dj l gh mRrj dk p; u dja

I ph-I	I ph-II
$\frac{1}{2}$ Sykt u $\frac{1}{2}$	$\frac{1}{4}$ z kx $\frac{1}{2}$
A. fñykhjhu	1. bl ds ; kxd Qk/kxktQh ea iz kx fd, tkrs gA
B. Dykhjhu	2. ; g , d , UVhl sIVd dh rjg iz kx fd; k tkrk gA
C. ctehu	3. bl sdhVuk' kaka ds mRi knu ea blReky fd; k tkrk gA
D. vk; kM/hu	4. muds ; kxdka dks jShtjSku ea iz kx fd; k tkrk gA

dW%

	A	B	C	D
(a)	4	3	1	2
(b)	3	4	2	1
(c)	3	2	1	4
(d)	2	1	3	4

46. çnf' k'z fp= ea 'X' fdl vx dks fplgr djrk g%



- (a) dBuyh (b) 'okl uyh
(c) 'ol fudk (d) 'ol uh

47. Genetic engineering is possible only due to the role of certain specific enzymes that cut DNA at particular points of the sequence. These enzymes are called:
- Nucleases
 - Restriction enzymes
 - DNA Polymerases
 - Nitrogenases
48. Which one of the following organisms has the prokaryotic type of cell structure?
- Mosquito
 - Drosophila
 - Blue-green alga
 - Mustard Plant
49. Doctors use electrocardiogram (ECG):
- to estimate the volume of blood pumped by the heart per minute.
 - to detect changes in the electrical impulses in the heart during its contraction and relaxation.
 - to determine the changes in the sound pattern during opening and closure of valves.
 - to compare the sound waves resulting from vibration produced by cardiac muscles during pumping of heart.
50. In an accident, a person's brain was injured due to which he could not regulate body temperature, hunger and water balance. Which one among the following parts of his brain was affected?
- Cerebellum
 - Medulla oblongata
 - Hypothalamus
 - Corpus callosum
47. vkuøf'kd vflk; kfi=dh døy mu fof'k"V fd.odka dh Hkiedk ds dkj .k I Etko gqk gS tks Mh-, u-, - dks vuøe dsfo'k k fclnøka ij dkVrk gA ; g fd.od dgykrsg%
- U; fDy, I st
 - ckf/kr fd.od
 - Mh-, u-, - i kyhejst
 - ukbVktsthl st
48. buea I s dks I s thoka ea çkDdñnd çdkj dh dks'kdk I j puk i kbz tkrh gS
- ePNj
 - Mh kQyk
 - uhy&gjs 'kky
 - I j I ka dk i kkk
49. MkDvj byDVktkfmZ, kxke dk iz, kx djrs g%
- ân; }kjk çfr feuV dh nj I s iEi fd; sx; s jDr ds vk; ru dk vkdyu djus gA
 - ân; eafI dMtu rFk QSyko ds nkjku mRiIu fo | r vkoska ea gkus okys cnyko dh igpu djus gA
 - okYoka ds [kyus rFk cm gkus ds I e; mRiIu /ofu i Vuzeagkusokysifjorü dk irk yxkukA
 - ân; }kjk jDr I pj.k fd; s tkus ds nkjku ân; i s kh }kjk mRiIu dEi uka ds dkj .k gkus okyh /ofu rjæka dh rgyuk djukA
50. , d nqkVuk ea , d 0; fDr dk eflr"d {kfrxLr gks x; kj ftl ds dkj .ko'k og vius 'kjhj ds rki eku] HkLk rFk ty ds I rgyu dks fu; kstr djus ea vl eflz gA bl dseflr"d dk dks I k Hkx çHkfor gqk\
- vuøflr"d
 - eM; gyk vkCykxkVk
 - gkbi kFkyel
 - dki I dSykd e

PART - II

GENERAL AWARENESS

51. Who is called as the 'Second Ashoka'?
- (a) Harshavardhana (b) Akbar
(c) Kanishka (d) Samudra Gupta
52. Who was the founder of Nalanda University?
- (a) Kumar Gupta-I (b) Skanda Gupta
(c) Samundra Gupta (d) Chandra Gupta-I
53. The correct chronological sequence of the arrival of European Nations for trade through sea route to India is:
- (a) Dutch, English, French, Portuguese
(b) Portuguese, Dutch, English, French
(c) English, French, Portuguese, Dutch
(d) French, Portuguese, Dutch, English
54. Which two countries were involved in 'Seven Years War'?
- (a) Turkey and Austria
(b) England and France
(c) Palestine and Israel
(d) Germany and Russia
55. Consider the following organisations:
- | | |
|----------|----------|
| 1. ASEAN | 2. NAM |
| 3. G-20 | 4. SAARC |
| 5. BRICS | 6. NATO |
- Which of the above group India is not related with?
- (a) 2 and 3 (b) 3 and 5
(c) 1 and 6 (d) 4 and 6
56. Consider the following statements about the National Anthem "Jann Gann Mann".
1. It was first sung on 27th December, 1911 at the Calcutta Session of the Indian National Congress.
 2. It was adopted by the Constituent Assembly on 24th January, 1950.
 3. Playing time of the full version of the National Anthem is approximately 54 seconds.
- Which of the statements given above is/are correct?
- (a) Only 1 (b) 1 and 2
(c) 2 and 3 (d) 1, 2 and 3
51. 'f}rh; v'kkad* fdl s dgl tkrk g\$
(a) g"kb/kz (b) vdcj
(c) dfu"d (d) l epzlr
52. ukylnk fo' ofo |ky; ds l hFkki d dks Fk\$
(a) dlepj xlr&I (b) Ldlunxlr
(c) l epzlr (d) plnaxlr&I
53. Hkkjr es; jksh; nskkads l epz ds jkLrsl s0; ki kj grq
vkxeu dk l gh dkykuøe g\$
(a) Mp] vxst] Yka hl hj i qzkyh
(b) i qzkyh] Mp] vxst] Yka hl h
(c) vxst] Yka hl hj i qzkyh] Mp
(d) Yka hl hj i qzkyh] Mp] vxst
54. 'l Iro"khz ; ø* ea dks l snks ns k 'kkfey Fk\$
(a) Vdlh vlg vkfLV^a, k
(b) bxySM vlg Yka
(c) fQfyLrhu vlg btjkby
(d) telh vlg : l
55. fuEufyf[kr l xBuka ij fopkj dj\$
1. vkf l ; ku 2. , u-, -, e-
3. th-20 4. l kdZ
5. fcDI 6. ulVks
bueal sfdu l ep ds l kfk Hkkjr l Ec) ughag\$
(a) 2 vlg 3 (b) 3 vlg 5
(c) 1 vlg 6 (d) 4 vlg 6
56. jk"Vh; xku ^tu xu eu* ds l Ecl/k eafuEufyf[kr
dFkuka ij fopkj dj\$
1. bl sl oçFke Hkkjr; jk"Vh; dkkd ds dydRrk
vf/ko\$ku ea 27 fnl Ecj] 1911 dks xk; k x; kA
2. bl s 24 tuojh] 1950 ea l fio/kku l Hkk }jkk
vi uk; k x; kA
3. jk"Vh; xku ds l Ei wZ l h dj .k dks ctkus dk
l e; 54 l d.M g\$
fn; sx; s dFkuka ea l s dks l k@l s dFku l R; g\$g\$
(a) doy 1 (b) 1 vlg 2
(c) 2 vlg 3 (d) 1, 2 vlg 3

57. Despite being a Republican State, India is a member of the Commonwealth of Nations whose head is the British Monarch. This is because:
- this membership does not affect the sovereign nature of the Indian Republic
 - this membership only shows that the British ruled over India
 - members of the association are sovereign and independent
 - it is a symbol of the unity among the members of the association
58. Which one of the following was not a principle in the 'Panchsheel' as enunciated in the Sino-Indian agreement in 1954?
- Peaceful co-existence
 - Mutual respect for territorial integrity
 - Mutual non-interference in each other's internal affairs
 - Mutual help in times of need
59. Consider the following and identify the part of the Constitution of India referred to in it:
The state shall endeavour to promote international peace and security, maintain just and honourable relations between nations...
- Fundamental Rights
 - Relations between the Union and the States
 - Elections
 - Directive Principles of State Policy
60. Consider the following Presidents of India:
- Giani Zail Singh
 - Fakhruddin Ali Ahmed
 - Varahagiri Venkata Giri
 - Ramaswamy Venkataraman
- Which of the following is the correct chronology of their tenures?
- 1-2-3-4
 - 2-3-4-1
 - 3-2-1-4
 - 4-2-3-1
61. Who among the following were the five founder leaders of Non-Alignment Movement?
- Mountbatten
 - Jawaharlal Nehru
 - John F. Kennedy
 - Sukarno
 - Kwame Nkrumah
 - Churchill
 - Josip Broz Tito
 - Gamel Abdel Nasser

57. , d x.kra:h; jkT; gksdsckotm] Hkkjr jk"V'e.My dk l nL; gSftl dk cef[k fcfV'k vf/ki fr gA , d k bl fy, gSfd%
- ; g l nL; rk Hkkjrh; x.kra: ds l EçHkq Lo: i dksçHkkfor ugha djrhA
 - ; g l nL; rk fl QZ ; g fn[kykrh gSfd fcfV'k ykxka us Hkkjr ij 'kkl u fd; k FkkA
 - l æBu ds l nL; l koHkE vls Loræ gA
 - ; g l æBu ds l nL; ka dschp , drk dk çrhd gA
58. bueal sck&] 1954 ds phuh&fgln l e>k'sdsrgr çfrikr nr ip'khy fl) kur ea'krfey ugha Fkk\
- 'kkâr i wkZ l g vLrRo
 - , d nL js dh {ks=h; v[k.Mrk ds çfr ijLij l Eeku
 - , d nL jsdsvln: uh ekeykaesijLij vglr{ki dh uhfr
 - vko'; d l e; ea ijLij l gk; rk dh uhfr
59. fuEufyf[kr oDr0; ij fopkj dja rFkk Hkkjr ds l ño/kku eamYyS[kr l Ec) Hkkx dks fpugr dj% jkT; varjk"Vh; 'kkâr rFkk l g {kk dks c<kok nusdk ç; kl dj&s, oajk"Vhadse/; U; k; i wkZ, oal Eekutud l Ecu/kka dks dkw e j [k&...
- eny vf/kdkj
 - dlnz , oajkT; ka ds e/; vki l h l Ecu/k
 - ppko
 - jkT; ds uhfr funskd rRo
60. Hkkjr ds fuEufyf[kr jk"V'fr; ka ij fopkj dhft , %
- Kkuh tsy fâ g
 - Q[k#nahu vyh vgen
 - ojkgfxjh oadV fxjh
 - jkekLokh oadVjeu
- fuEufyf[kr ea l s dks l k mudsdk; bky dk l gh dkykupe gS
- 1-2-3-4
 - 2-3-4-1
 - 3-2-1-4
 - 4-2-3-1
61. uhps fn; s x; s 0; fDr; ka ea l s dks l s ikp urk x/fuji {k vlnksyu ds l l Fkki dka ea 'krfey gS
- ekmUVc/su
 - tokgyky ug;
 - tKk , Q- dsuMh
 - l qtkuE
 - Dokes u#ekg
 - pppy
 - tksl i ckt VhVks
 - xesy vçny ukl j

Select the correct answer using the code given below:

- (a) 1, 2, 3, 4, 5
- (b) 1, 3, 6, 7, 8
- (c) 2, 4, 5, 6, 8
- (d) 2, 4, 5, 7, 8

62. The map given below is related with which of the following state/union territory?



- (a) Delhi
- (b) Goa
- (c) Sikkim
- (d) Daman

63. Examine the map of India given below:



The rivers marked 1, 2, 3, 4, 5 are respectively:

- (a) Kavery, Krishna, Godavari, Mahanadi, Narmada
- (b) Mahanadi, Krishna, Kavery, Narmada, Godavari
- (c) Narmada, Mahanadi, Godavari, Krishna, Kavery
- (d) Krishna, Godavari, Kavery, Mahanadi, Narmada

uhps fn; s x; s dW/ka dk ç; lxx dj l gh mRrj dk p; u dj%

- (a) 1, 2, 3, 4, 5
- (b) 1, 3, 6, 7, 8
- (c) 2, 4, 5, 6, 8
- (d) 2, 4, 5, 7, 8

62. uhps fn; k x; k ekufp= fdI jkT; @dlnz 'kkfI r çnšk l sl EcfU/kr g%



- (a) fnYyh
- (b) xkøk
- (c) fl fDde
- (d) neu

63. fn; s x; s Hkkj r dsekufp= dk v/; ; u dj%



1, 2, 3, 4, 5 l sfpflgr ufn; k; Øe' k%g%

- (a) dkojhj Ñ".kkj xkkojhj egkunj uehk
- (b) egkunj Ñ".kkj dkojhj uehkj xkkojh
- (c) uehkj egkunj xkkojhj Ñ".kkj dkojh
- (d) Ñ".kkj xkkojhj dkojhj egkunj uehk

64. Which one among the following best explains 'Money'?
- (a) It is a medium for producing capital goods.
 - (b) It is a means for redistributing wealth among people.
 - (c) It is a common denominator for measuring value.
 - (d) It is a measure for resource allocation.
65. During which decade did the population record a negative growth rate in India?
- (a) 1921-1931
 - (b) 1911-1921
 - (c) 1941-1951
 - (d) 1931-1941

66. Match **List-I** with **List-II** and select the correct answer using the code given below the lists:

List-I	List-II
(Olympic Players)	(Year of Medal)
A. Vijay Kumar	1. 2008
B. Karnam Malleswari	2. 2012
C. Abhinav Bindra	3. 1996
D. Leander Paes	4. 2000

Codes:

	A	B	C	D
(a)	2	4	3	1
(b)	1	2	3	4
(c)	2	4	1	3
(d)	3	2	1	4

67. In which of the following sports group, the number of players of both the sides are equal?
- (a) Polo and Water Polo
 - (b) Basketball and Volleyball
 - (c) Base Ball and Kho-kho
 - (d) Football and Rugby
68. LAN, WAN and MAN are computer networks covering different areas. Their first alphabets L, W, M respectively stand for:
- (a) Local, World and Middle
 - (b) Long, Wireless and Metropolitan
 - (c) Local, Wide and Metropolitan
 - (d) Least, Wireless and Maximum

64. $buea | s d k \& \acute{e} p n k^* d h | c l s | g h i f j H k k^* k k g \&$
 (a) ; g i n t h a r o L r y / k a d s m R i k n u d k , d e k / ; e g \&
 (b) ; g y k s k a e a / k u d s i q u f o r j . k d k , d e k / ; e g \&
 (c) ; g e w ; k a d k v k d y u d j u s d k , d v k e f o H k k t d g \&
 (d) ; g l \acute{a} k / k u v k o \acute{a} / u d k , d m i k ; g \&
65. $f d l n ' k d e a H k j r e a t u l \acute{a} ; k d k u d k j k R e d$
 $f o d k l n j n t z f d ; k x ; k \&$
 (a) 1921-1931
 (b) 1911-1921
 (c) 1941-1951
 (d) 1931-1941

66. **I ph-I** d k s **I ph-II** l s l e f s y r d j a r f k k u h p s f n ; s
 x ; s d w / k a d k i z k x d j l g h m R r j d k p ; u d j a

I ph-I	I ph-II
(v k y f e i d f [k y k M h)	(e M y c k l r o " k)
A. f o t ; d e k j	1. 2008
B. d . k e e Y y s o j h	2. 2012
C. v f h k u o f c l n k	3. 1996
D. f y , M j i \acute{a}	4. 2000

d w %

	A	B	C	D
(a)	2	4	3	1
(b)	1	2	3	4
(c)	2	4	1	3
(d)	3	2	1	4

67. $b u e a | s f d l [k y l e m e a n k a i \{ k d s f [k y k M h$
 $c j k c j l \acute{a} ; k e a g k r s g \&$
 (a) i k y k s r f k k o k v j i k y k s
 (b) c k L d \acute{a} / c k y r f k k o k w / h c k y
 (c) c \acute{d} c k y r f k k [k k \& [k k s
 (d) Q w / c k n y r f k k j x c h
68. LAN, WAN v l \acute{s} MAN f o f h k u u { k s = k a d k s v k P n k f n r
 d j u s o k y s d e l ; w j u \acute{v} o d z g \& b u d s i f k e v { k j
 L, W v l \acute{s} M \acute{O} e ' k % f d u d s f y , g \&
 (a) y k d y] o Y M Z v l \acute{s} f e M s y
 (b) y k x] o k ; j y \acute{d} v l \acute{s} e \acute{v} / k i k n y / v u
 (c) y k d y] o k b M v l \acute{s} e \acute{v} / k i k n y / v u
 (d) y h L V] o k ; j y \acute{d} v l \acute{s} e \acute{s} D l e e

69. Which of the following is listed from the largest to the smallest?
 (a) TB, MB, GB, KB
 (b) GB, TB, MB, KB
 (c) TB, GB, KB, MB
 (d) TB, GB, MB, KB

70. Match **List-I** with **List-II** and select the correct answer using the code given below the lists:

List-I	List-II
(Indian Air Force)	(Indian Navy)
A. Group Captain	1. Lt. Commander
B. Air Marshal	2. Vice Admiral
C. Squadron Leader	3. Commander
D. Wing Commander	4. Captain

Codes:

	A	B	C	D
(a)	2	4	1	3
(b)	1	4	2	3
(c)	3	2	1	4
(d)	4	2	1	3

71. Which one among the following is **not** a Command of the Indian Army?
 (a) South-Western Command
 (b) South-Eastern Command
 (c) Army Training Command
 (d) Central Command
72. The Central Industrial Security Force is under the administrative control of which of the following ministries?
 (a) Defence Ministry
 (b) Headquarters of the Integrated Joint Staff
 (c) Ministry of Home Affairs
 (d) Prime Minister Office
73. Generally we hear the term TRP in the news. What is the full form of TRP?
 (a) Telly Rating Points
 (b) True Rating Points
 (c) Total Rating Points
 (d) Television Rating Points

69. buea l s dks l k Øe l cl s cM9 l s Nks/s dh vkg l phc) gS
 (a) TB, MB, GB, KB
 (b) GB, TB, MB, KB
 (c) TB, GB, KB, MB
 (d) TB, GB, MB, KB

70. I ph-I dks I ph-II l s l efyr dja rFkk uhrs fn; s x; s dW/ka dk iz kx dj l gh mRrj dk p; u djA

I ph I	I ph II
(Hkjr h; ok; q l suk)	(Hkjr h; uS l suk)
A. xij dSVu	1. ys dek.Mj
B. ; j ek'kz	2. okbl , Mfejy
C. LdokMtu yHMj	3. dek.Mj
D. fox dek.Mj	4. dSVu

dW%

	A	B	C	D
(a)	2	4	1	3
(b)	1	4	2	3
(c)	3	2	1	4
(d)	4	2	1	3

71. fuEufyf[kr ea l s dks l h , d] Hkjr h; l suk dh deku ughagS
 (a) nf{k.kh&i f' peh deku
 (b) nf{k.kh&i whz deku
 (c) l suk cf' k{k.k deku
 (d) e/; deku
72. dlnh; vks l fxd l j {kk cy fuEufyf[kr ea-ky; kaea l sfdl ds iz kkl fud fu; æ.k eagS
 (a) j {kk ea-ky;
 (b) , dh-r l a Ør LVkQ dk eq; ky;
 (c) xg ea-ky;
 (d) iz kku ea-h dk; kz;
73. Vh-vkj-i-h- ds fo" k; eage vDI j [kcjkaea l qurs gA Vh-vkj-i-h- dk ijk vFkz gS
 (a) Vsyh j sVx lokbV
 (b) Vh j sVx lokbV
 (c) Vks/y j sVx lokbV
 (d) Vsyfotu j sVx iokbV

74. Consider the following pairs:

Region often in news – Country

1. Chechnya – Russian Federation
2. Darfur – Mali
3. Swat Valley – Iraq
4. Aleppo – Syria

Which of the above pair/s is/are correctly matched?

- (a) Only 1 and 2
- (b) Only 2 and 3
- (c) Only 1 and 4
- (d) Only 1, 2 and 3

75. What is the correct chronological order of conferring Bharat Ratna to the following?

1. Bhimsen Joshi
2. Amartya Sen
3. Sachin Tendulkar
4. Lata Mangeshkar
5. Madan Mohan Malaviya

- (a) 2-4-1-3-5
- (b) 5-2-1-4-3
- (c) 1-2-5-4-3
- (d) 2-3-4-1-5

74. fuEufyf[kr ; %ela ij fopkj dhft, %

I elpkj ea ik; % vkus – nsk

okys {ks-

1. ppl; k – jf'k; u QMj'sku
2. nkjQj – ekyh
3. Lokr ?kkVh – bjkd
4. vysi ks – I hfj; k

mi ; D r ea l s d k u & l k @ l s ; % e l gh l e f yr g @ g d

- (a) d o y 1 v l s 2
- (b) d o y 2 v l s 3
- (c) d o y 1 v l s 4
- (d) d o y 1] 2 v l s 3

75. fuEu dks Hkkj r jRu fn; s tkus dk I gh Øe D; k gS

1. Hkkel s tks kh
2. ver; l l s
3. I fpu r hnydj
4. yrk exskdj
5. enu eku ekyoh;

- (a) 2-4-1-3-5
- (b) 5-2-1-4-3
- (c) 1-2-5-4-3
- (d) 2-3-4-1-5

ENGLISH**SPOTTING ERRORS**

Directions: Each item in this section has a sentence which is divided into parts labelled (a), (b) and (c). Read each sentence to find out whether there is any error in any part and indicate your answer in the Answer Sheet against the corresponding letter i.e., (a), (b) or (c). If you find no error, your response should be indicated as (d).

76. Tagore was one of the greatest poet that ever lived. No error
 (a) (b) (c) (d)
77. I tried to meet the person whom you said was looking for me. No error
 (a) (b) (c) (d)
78. He was in the temper and refused to discuss the matter again. No error
 (a) (b) (c) (d)
79. Why you worry me when this problem of yours can be solved by your brother No error
 (a) (b) (c) (d)

COMPREHENSION

Directions: In this section, is one short passage. After the passage, you will find new questions each based on what is stated or implied in the passage. First read the passage and then answer the questions following the passage.

PASSAGE

I went into a restaurant, which was already crowded, and ordered my meal. While I was waiting for the soup to arrive, I looked around to see if I knew anyone in the restaurant. It was then I noticed a man sitting at a corner table near the door kept glancing in my direction, as he knew me. I certainly did not know him, for I never forget a face. The man had a newspaper open in front of him, which he was pretending to read, though all the while I could see that he was keeping an eye on me. When the waiter brought my soup, the man was clearly puzzled by the familiar way in which the waiter and I addressed each other. He became even more puzzled as time went on and it grew more and more obvious that I was well-known in the restaurant. Eventually he got up and went into the kitchen. After a few minutes he came out again, paid his bill and left without another glance in my direction.

80. The narrator observed somebody watching him.
 (a) immediately after entering the restaurant
 (b) sometime after he settled down in his seat
 (c) while he was eating his meal
 (d) when the waiter drew his attention to him
81. The narrator puzzled the man who was watching him because
 (a) he was sitting idle without eating
 (b) he came to an overcrowded restaurant
 (c) he sat without talking to anyone
 (d) he appeared to be well-known in the restaurant

82. The man watching the narrator gives us an impression that
- he wanted to make friendship with the narrator
 - he intended to observe without being noticed
 - he wanted to wait until the narrator finished his meal
 - he was an idler
83. The narrator went into an over-crowded restaurant because
- he loved crowds
 - that restaurant was nearest to his office
 - the food there is delicious
 - he is in the habit of going there regularly

SYNONYMS

Directions : Each item in this section consists of a sentence with a **CAPITAL** word, followed by four words. Select the word that is most **similar** in meaning to the capital word.

84. I shall DISCLOSE your identity if you do not speak the truth.
- express
 - blackmail
 - report
 - reveal
85. I would not have built a house here but for the engineer's ASSURANCE that this area never has floods.
- suggestion
 - belief
 - suspicion
 - guarantee
86. The car accident was the CONSEQUENCE of his carelessness.
- result
 - proof
 - end
 - conclusion
87. How could the thief gain ACCESS to the bank lockers?
- permission
 - exit
 - entry
 - nearness

ANTONYMS

Directions: Each item in this section consists of a sentence with a **CAPITAL** word, followed by four words. Select the word that is most nearly **opposite** in meaning to the capital word.

88. That man is known for his ELEGANCE.
- awkwardness
 - indelicacy
 - clumsiness
 - savagery
89. The decision was DELAYED because of him.
- expedited
 - advanced
 - released
 - triggered
90. The room was filled with a DELICIOUS odour.
- bitter
 - repulsive
 - strange
 - unpalatable
91. Silence in this place is MANDATORY.
- optional
 - compulsory
 - imperative
 - irritating

FILL IN THE BLANKS

92. The judge ordered that the criminal be put_____ death.
- to
 - under
 - at
 - till
93. The doctor advised the patient to _____ an operation.
- understand
 - undergo
 - underline
 - underpass

SPACE FOR ROUGH WORK

SPACE FOR ROUGH WORK

