MKC

Talent Hunt
& Scholarship Exam- 2018

TEST PAPER

CLASS-12 APPEARING

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 - English, General Awareness**. 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. **Each** item 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 n% vun"kk dk fgUnh :ikUrj bl ifLrdk d fiNy i'B ij Nik gA

PART - I

MATHEMATICS

1. Let R be a relation over the set $N \times N$ and it is defined by $(a,b)R(c,d) \Rightarrow a+d = b+c$.
Then R is
(a) Reflexive only
(b) Symmetric only
(c) Transitive only
(d) An equivalence relation

2. A function f from the set of natural numbers to integers defined by

$$f(n) = \begin{cases} \frac{n-1}{2}, & \text{when } n \text{ is odd} \\ -\frac{n}{2}, & \text{when } n \text{ is even , is 2.} \end{cases}$$

(a) One-one but not onto
(b) Onto but not one-one
(c) One-one and onto both
(d) Neither one-one nor onto

3. If $A = \begin{bmatrix} 1 & 2 & -1 \\ -1 & 1 & 2 \\ 2 & 1 & 1 \end{bmatrix}$, then the value of det (adj (adj A)) is :
(a) 14^4 (b) 14^3
(c) 14 (d) None of these

4. Adjoint of the matrix $N = \begin{bmatrix} -4 & -3 & -3 \\ 1 & 0 & 1 \\ 4 & 4 & 3 \end{bmatrix}$ is :
(a) N (b) $2N$
(c) $-N$ (d) None of these

5. If the system of equations $ax+y+z=0$, $x+by+z=0$ and $x+y+cz=0$, where $a,b,c \neq 1$, has a non trivial solution, then the value of $\frac{1}{1-a}+\frac{1}{1-b}+\frac{1}{1-c}$ is :
(a) -1 (b) 0
(c) 1 (d) None of these

1. ekuk R dk lEcU/k N × N ij ,d lEcU/k g vkj ;g (a,b) R (c,d) ⇒ a + d = b + c d }kjk ifjHkkf"kr g] rc R g
(a) doy LorY;
(b) doy lefer
(c) doy lØed
(d) rY; rk lEcU/k

2. çkÑfrd l[;kvk d lePp; l i.kkdk d fy; ,d Qyu f bl idkj ifjHkkf"kr g fd %

$$f(n) = \begin{cases} \frac{n-1}{2}, & \text{tgk } n \text{ fo"ke l[;k gA} \\ -\frac{n}{2}, & \text{tgk } n \text{ le l[;k] 2 gA} \end{cases}$$

(a) ,dh yfdu vkPNkn ugh
(b) vkPNkn yfdu ,dh ugh
(c) ,dh vkj vkPNkn nkuk
(d) u rk ,dh vkj u gh vkPNkn

3. ;fn $A = \begin{bmatrix} 1 & 2 & -1 \\ -1 & 1 & 2 \\ 2 & 1 & 1 \end{bmatrix}$ g rk det(adj (adj A)) dk eku g %
(a) 14^4 (b) 14^3
(c) 14 (d) bue l dkb ugh

4. v0;g $N = \begin{bmatrix} -4 & -3 & -3 \\ 1 & 0 & 1 \\ 4 & 4 & 3 \end{bmatrix}$ dk lg[k.M t g&
(a) N (b) $2N$
(c) $-N$ (d) bue l dkb ugh

5. ;fn lehdj.k fudk; $ax+y+z=0$, $x+by+z=0$ vkj $x+y+cz=0$, d ikl v'kU; gy ugh g tgk $a,b,c \neq 1$, rk $\frac{1}{1-a}+\frac{1}{1-b}+\frac{1}{1-c}$ dk eku g&
(a) -1 (b) 0
(c) 1 (d) bue l dkb ugh

6. Let S be a set containing n elements and we select 2 subsets A and B of S atrandom then the probability that $A \cup B = S$ and $A \cap B = \phi$ is :

(a) 2^n (b) n^2

(c) $1/n$ (d) $1/2^n$

7. Let A, B and C be the three events such that P(A) = 0.3, P(B) = 0.4, P(C) = 0.8, $P(A \cap B) = 0.08$, $P(A \cap C) = 0.28$ and $P(A \cap B \cap C) = 0.09$. If $P(A \cup B \cup C) \geq 0.75$ then $P(B \cap C)$ satisfies :

(a) $P(B \cap C) \leq 0.23$

(b) $P(B \cap C) \leq 0.48$

(c) $0.23 \leq P(B \cap C) \leq 0.48$

(d) None of these

8. In a bag there are three tickets numbered 1, 2, 3. A ticket is drawn at random and put back and this is done four times. The probability that the sum of the numbers is even, is :

(a) $\frac{41}{81}$ (b) $\frac{39}{81}$

(c) $\frac{40}{81}$ (d) None of these

9. If, $\sin^{-1} a + \sin^{-1} b + \sin^{-1} c = \pi$ then the value of $a\sqrt{1-a^2} + b\sqrt{1-b^2} + c\sqrt{1-c^2}$ will be :

(a) 2abc (b) abc

(c) $\frac{1}{2}abc$ (d) $\frac{1}{3}abc$

10. If the scalar projection of the vectors $xi - j + k$ on the vector $2i - j + 5k$ is $\frac{1}{\sqrt{30}}$ then the value of x is equal to :

(a) $\frac{-5}{2}$ (b) 6

(c) –6 (d) 3

6. ekuk leqPp; S e n vo;o g vkj leqPp; S d nk mileqPp;k A vkj B dk ;nPN;k puk tkrk g] rc $A \cup B = S$ vkj $A \cap B = \phi$ dh çkf;drk g \

(a) 2^n (b) n^2

(c) $1/n$ (d) $1/2^n$

7. ekuk A, B o C rhu ?kVuk; g bl idkj P(A) = 0.3, P(B) = 0.4, P(C) = 0.8, $P(A \cap B) = 0.08$] $P(A \cap C) = 0.28$ vkj $P(A \cap B \cap C) = 0.09$ g] ;fn $P(A \cup B \cup C) \geq 0.75$ rc $P(B \cap C)$ lr'V gksxk

(a) $P(B \cap C) \leq 0.23$

(b) $P(B \cap C) \leq 0.48$

(c) $0.23 \leq P(B \cap C) \leq 0.48$

(d) bue l dkb ugh

8. ,d Fky e rhu fVdV g ftu ij 1, 2, 3 vfdr gA ,d fVdV dk ;nPN;k fudkyk tkrk g ,o okil j[kk tkrk gA ;g çfØ;k pkj ckj nkgjkb tkrh g] rk l[;kvk dk ;kxQy le gku dh çkf;drk g\

(a) $\frac{41}{81}$ (b) $\frac{39}{81}$

(c) $\frac{40}{81}$ (d) bue l dkb ugh

9. ;fn $\sin^{-1} a + \sin^{-1} b + \sin^{-1} c = \pi$ rc $a\sqrt{1-a^2} + b\sqrt{1-b^2} + c\sqrt{1-c^2}$ dk eku gksxk \

(a) 2abc (b) abc

(c) $\frac{1}{2}abc$ (d) $\frac{1}{3}abc$

10. ;fn lfn"k $xi - j + k$ dk lfn"k $2i - j + 5k$ ij vfn"k çf{ki $\frac{1}{\sqrt{30}}$ g] rc x dk eku g \

(a) $\frac{-5}{2}$ (b) 6

(c) –6 (d) 3

11. If $a = i + j + k, b = i + 3j + 5k$ and $c = 7i + 9j + 11k$, then the area of the parallelogram having diagonals a + b and b + c is :

(a) $4\sqrt{6}$ (b) $\frac{1}{2}\sqrt{21}$

(c) $\frac{\sqrt{6}}{2}$ (d) $\sqrt{6}$

12. The angle between the lines $2x = 3y = -z$ and $6x = -y = -4z$, is :

(a) 0° (b) 30°

(c) 45° (d) 90°

13. The image of the point (1, 3, 4) with respect to the plane 2x – y + z + 3 = 0 is :

(a) (–1, 4, 3) (b) (–3, 5, 2)

(c) (1, 3, 4) (d)(–1, –3, –4)

14. The centre of sphere passes through four points (0, 0, 0), (0, 2, 0), (1, 0, 0) and (0, 0, 4) is

(a) $\left(\frac{1}{2}, 1, 2\right)$ (b) $\left(-\frac{1}{2}, 1, 2\right)$

(c) $\left(\frac{1}{2}, 1, -2\right)$ (d) $\left(1, \frac{1}{2}, 2\right)$

15. The value of $f(0)$, so that the function $f(x) = \frac{(27-2x)^{1/3} - 3}{9 - 3(243+5x)^{1/5}}, (x \neq 0)$ is continuous, is given by :

(a) 2/3 (b) 6

(c) 2 (d) 4

16. If $x = t + \frac{1}{t}, y = t - \frac{1}{t}$, then $\frac{d^2y}{dx^2}$ is equal to :

(a) $-4t(t^2-1)^{-2}$ (b) $-4t^3(t^2-1)^{-3}$

(c) $(t^2+1)(t^2-1)^{-1}$ (d) $-4t^2(t^2-1)^{-2}$

11. ;fn $a = i + j + k, b = i + 3j + 5k$ rFkk $c = 7i + 9j + 11k$ gk] rk fod.k a + b rFkk b + c oky lekUrj prHkt dk {k=Qy g

(a) $4\sqrt{6}$ (b) $\frac{1}{2}\sqrt{21}$

(c) $\frac{\sqrt{6}}{2}$ (d) $\sqrt{6}$

12. j[kkvk $2x = 3y = -z$ rFkk $6x = -y = -4z$ d e/; dk.k g

(a) 0° (b) 30°

(c) 45° (d) 90°

13. fcUn (1, 3, 4) d lery $2x - y + z + 3 = 0$ d lki{k çfrfcEc g

(a) (–1, 4, 3) (b) (–3, 5, 2)

(c) (1, 3, 4) (d)(–1, –3, –4)

14. pkj fcUnvk (0, 0, 0), (0, 2, 0), (1, 0, 0) rFkk (0, 0, 4) l xtju oky xky dk dUn g

(a) $\left(\frac{1}{2}, 1, 2\right)$ (b) $\left(-\frac{1}{2}, 1, 2\right)$

(c) $\left(\frac{1}{2}, 1, -2\right)$ (d) $\left(1, \frac{1}{2}, 2\right)$

15. $f(0)$ dk eku] bl idkj fd Qyu $f(x) = \frac{(27-2x)^{1/3} - 3}{9 - 3(243+5x)^{1/5}}, (x \neq 0)$ lrr g

(a) 2/3 (b) 6

(c) 2 (d) 4

16. ;fn $x = t + \frac{1}{t}, y = t - \frac{1}{t}$, rk $\frac{d^2y}{dx^2}$ cjkcj g

(a) $-4t(t^2-1)^{-2}$ (b) $-4t^3(t^2-1)^{-3}$

(c) $(t^2+1)(t^2-1)^{-1}$ (d) $-4t^2(t^2-1)^{-2}$

17. If x is real, then the minimum value of $y = \frac{x^2 - x + 1}{x^2 + x + 1}$ is :

(a) 3 (b) $\frac{1}{3}$

(c) $\frac{1}{2}$ (d) 2

18. If $f(x) = Kx - \cos x$ is monotonically increasing for all $x \in R$ then :

(a) K > –1 (b) K< 1

(c) x > 1 (d) None of these

19. The maximum value of sinx (1 + cosx) is:

(a) 3 (b) $\frac{3\sqrt{3}}{4}$

(c) 4 (d) $3\sqrt{3}$

20. The value of $\int \sec x \log(\sec x + \tan x) dx$ is :

(a) $[\log(\sec x + \tan x)]^2 + c$

(b) $\frac{1}{2}[\log(\sec x + \tan x)]^2 + c$

(c) $\sec^2 x + \tan x \sec x + c$

(d) None of these

21. The value of $\int_0^{\pi/2} \frac{x \sin x \cos x}{\cos^4 x + \sin^4 x} dx$ is :

(a) 0 (b) $\frac{\pi}{8}$

(c) $\frac{\pi^2}{8}$ (d) $\frac{\pi^2}{16}$

22. The area in the first quadrant between $x^2 + y^2 = \pi^2$ and $y = \sin x$ is :

(a) $\frac{(\pi^3 - 8)}{4}$ (b) $\frac{\pi^3}{4}$

(c) $\frac{(\pi^3 - 16)}{4}$ (d) $\frac{(\pi^3 - 8)}{2}$

17. ;fn x okLrfod l[;k g] rks $y = \frac{x^2 - x + 1}{x^2 + x + 1}$ dk U;wure eku g\

(a) 3 (b) $\frac{1}{3}$

(c) $\frac{1}{2}$ (d) 2

18. ;fn lHkh $x \in R$ ds fy, $f(x) = Kx - \cos x$ lekU; of)eku Qyu g] rc :

(a) K > –1 (b) K< 1

(c) x > 1 (d) buesa l dkbZ ugha

19. sinx (1 + cosx) dk vf/kdre eku g\

(a) 3 (b) $\frac{3\sqrt{3}}{4}$

(c) 4 (d) $3\sqrt{3}$

20. $\int \sec x \log(\sec x + \tan x) dx$ dk eku g\

(a) $[\log(\sec x + \tan x)]^2 + c$

(b) $\frac{1}{2}[\log(\sec x + \tan x)]^2 + c$

(c) $\sec^2 x + \tan x \sec x + c$

(d) buesa l dkbZ ugha

21. $\int_0^{\pi/2} \frac{x \sin x \cos x}{\cos^4 x + \sin^4 x} dx$ dk eku g\

(a) 0 (b) $\frac{\pi}{8}$

(c) $\frac{\pi^2}{8}$ (d) $\frac{\pi^2}{16}$

22. çFke prFkk'k e $x^2 + y^2 = \pi^2$,oa $y = \sin x$ ds chp f?kjk {ks=Qy g\

(a) $\frac{(\pi^3 - 8)}{4}$ (b) $\frac{\pi^3}{4}$

(c) $\frac{(\pi^3 - 16)}{4}$ (d) $\frac{(\pi^3 - 8)}{2}$

23. The order of the differential equation whose solution is $x^2 + y^2 + 2gx + 2fy + c = 0$, is :

(a) 1 (b) 2

(c) 3 (d) 4

24. Solution of the differential equation $\frac{dy}{dx} + y\sec^2 x = \tan x \sec^2 x$ is :

(a) $y = \tan x - 1 + ce^{-\tan x}$

(b) $y^2 = \tan x - 1 + ce^{-\tan x}$

(c) $ye^{\tan x} = \tan x - 1 + c$

(d) $ye^{\tan x} = \tan x - 1 + c$

25. $\lim_{x \to -2} \frac{\sin^{-1}(x+2)}{x^2 + 2x}$ is equal to :

(a) 9 (b) ∞

(c) $-1/2$ (d) None of these

23. ml vody lehdj.k dh dkfV D;k g\ ftldk gy $x^2 + y^2 + 2gx + 2fy + c = 0$ gA

(a) 1 (b) 2

(c) 3 (d) 4

24. vody lehdj.k $\frac{dy}{dx} + y\sec^2 x = \tan x \sec^2 x$ dk gy g\

(a) $y = \tan x - 1 + ce^{-\tan x}$

(b) $y^2 = \tan x - 1 + ce^{-\tan x}$

(c) $ye^{\tan x} = \tan x - 1 + c$

(d) $ye^{\tan x} = \tan x - 1 + c$

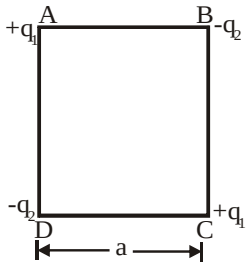
25. $\lim_{x \to -2} \frac{\sin^{-1}(x+2)}{x^2 + 2x}$ cjkcj g\

(a) 9 (b) ∞

(c) $-1/2$ (d) bue l dkb ugh

SCIENCE

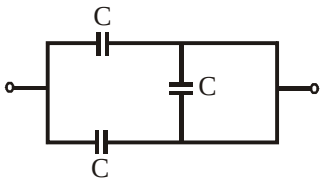
26. Charges are placed at corners of a square of side 'a' If the charge A is in equilibrium, then ratio $\frac{q_1}{q_2}$ is



(a) 1 (b) $\sqrt{2}$

(c) $\frac{1}{\sqrt{2}}$ (d) $2\sqrt{2}$

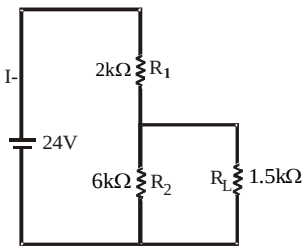
27. The equivalent capacitance of the combination below is



(a) 2C (b) C

(c) $\frac{1}{2}$C (d) None of these

28. For the circuit shown in the figure.



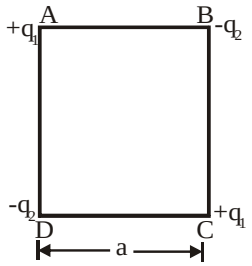
(a) the current I through the battery is 7.5 mA

(b) the potential difference across R_L is 18 Volt

(c) ratio of powers dissipated in R_1 and R_2 is 3

(d) None of these

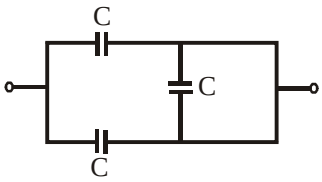
26. iR;d 'a' Hkqtk oky ox d pkjk dkuk ij vko'k j[k g; gA ;fn vko"k A lUrqyu e g rk $\frac{q_1}{q_2}$ dk eku gA



(a) 1 (b) $\sqrt{2}$

(c) $\frac{1}{\sqrt{2}}$ (d) $2\sqrt{2}$

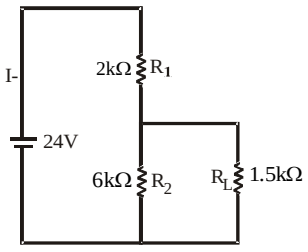
27. uhp fn; x; l;ktu dh rY; /kkfjrk g \



(a) 2C (b) C

(c) $\frac{1}{2}$C (d) bue l dkb ugh

28. fp= e n'kk; x; ifjiFk d fy, \



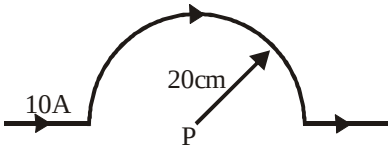
(a) cVjh l iokfgr /kkjk I dk eku 7.5 mA gkxk

(b) R_L dk foHkokUrj 18 Volt g

(c) R_1 ,o R_2 e Åtk d gkl dk vuikr 3 g

(d) bue l dkb ugh

29. A current of 10 A is passing through a long wire which has semicircular loop of the radius 20 cm as shown in the figure. Magnetic field produced at the centre of the loop is



(a) $10\ \pi\mu$ T (b) $5\ \pi\mu$ T

(c) $4\ \pi\mu$ T (d) $2\ \pi\mu$ T

30. If a magnet is suspended at an angle 30° to the magnetic meridian, the dip of needle makes an angle of 45^o with the horizontal, the real dip is

(a) $\tan^{-1}\left(\frac{\sqrt{3}}{2}\right)$ (b) $\tan^{-1}\left(\sqrt{3}\right)$

(c) $\tan^{-1}\left(\sqrt{\frac{3}{2}}\right)$ (d) $\tan^{-1}\left(\frac{2}{\sqrt{3}}\right)$

31. What is the average value of the AC voltage over one complete cycle?

(a) Zero (b) V_{max}

(c) $\frac{2V_{max}}{\pi}$ (d) $\frac{V_{max}}{2}$

32. Solar radiation is

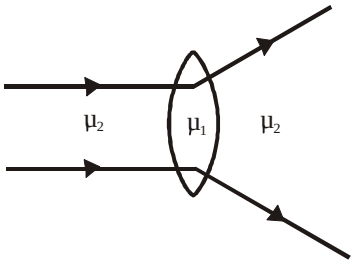
(a) transverse electromagnetic waves

(b) longitudinal electromagnetic waves

(c) stationary waves

(d) None of the above

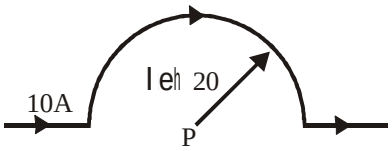
33. A convex lens made up of a material of refractive index μ_1 is immersed in a medium of refractive index μ_2 as shown in the figure. The relation between μ_1 and μ_2 is



(a) $\mu_1 < \mu_2$ (b) $\mu_1 > \mu_2$

(c) $\mu_1 = \mu_2$ (d) $\mu_1 = \sqrt{\mu_2}$

29. ,d 10 ,fEi;j dh /kkjk ,d d.Myhuek yEc rkj ftldh f=T;k 20 leh g(e iokfgr gkrh g tlk fd fp= e fn[kk;k x;k gA bl dUMyh d dUn ij mRiUu pEcdh; {k= g\



(a) $10\ \pi\mu$ T (b) $5\ \pi\mu$ T

(c) $4\ \pi\mu$ T (d) $2\ \pi\mu$ T

30. ;fn ,d pEcd pEcdh; ;kE;kÙkj l dk.k 30° ij yVdku ij mldh fndkr lb {kfrt l 45° dk dk.k cukrh g rc bl LFkku ij okLrfod fndkr g\

(a) $\tan^{-1}\left(\frac{\sqrt{3}}{2}\right)$ (b) $\tan^{-1}\left(\sqrt{3}\right)$

(c) $\tan^{-1}\left(\sqrt{\frac{3}{2}}\right)$ (d) $\tan^{-1}\left(\frac{2}{\sqrt{3}}\right)$

31. iR;korh okYVt dk ,d i.k pØ d nkjku vkSlr eku D;k g\

(a) Zero (b) V_{max}

(c) $\frac{2V_{max}}{\pi}$ (d) $\frac{V_{max}}{2}$

32. lkj fofdj.k g \

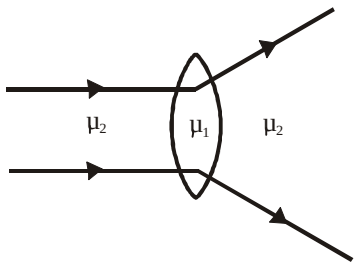
(a) vuiLFk fo|r pEcdh; rjx

(b) vun/; fo|r pEcdh; rjx

(c) vixkeh rjx

(d) bue l dkb ugh

33. ,d mRry yUl ftld inkFk dk vioruked μ_1 g] dk ,d nlj ek/;e ftldk vioruked μ_2 g] e Mcdk;k x;k g tlk fd fp= e fn[kk;k x;k gA rk vioruked μ_1 vkj vioruked μ_2 d chp D;k lEcU/k g\



(a) $\mu_1 < \mu_2$ (b) $\mu_1 > \mu_2$

(c) $\mu_1 = \mu_2$ (d) $\mu_1 = \sqrt{\mu_2}$

34. 2kg ice of -20^0C is mixed with 5kg of water of 20^0C. Then the amount of the water in the container will be :

(a) 6 kg (b) 7 kg

(c) 6.5 kg (d) 5.5 kg

35. Phase difference between the vibrating particles of the plane of vibration is.–

(a) π (b) $\frac{\pi}{2}$

(c) 0 (d) None of these

36. A reaction was found to be of second order with respect to the concentration of carbon monoxide. If the concention of carbon monoxide is doubled, with everything else kept the same, the rate of reaction will

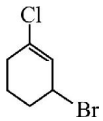
(a) double

(b) remain unchanged

(c) triple

(d) increase by a factor of 4.

37. The IUPAC name of the compond shown below is :



(a) 1- bromo -3- chlorocyclohexene

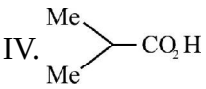
(b) 2- bromo -6- chlorocyclohex-1-ene

(c) 6-bromo-2-chlorocyclohexene

(d) 3- bromo-1-chlorocyclohexene.

38. The correct order of increasing acid strength, of the compounds

I. CH_3CO_2H II. $MeOCH_2CO_2H$

III. CF_2CO_2H IV. 

(a) I < IV < III < II (b) II < IV < I < III

(c) IV < I < III < II (d) IV < I < II < III

39. Uncertainty in the position of an clectron (mass = 9.1 x 10^{-31} kg) moving with a velocity 300 ms^{-1}, accurate upto 0.001 %, will be (h = 6.63 $\times 10^{34}$js)

(a) 3.84 $\times$ 10^{-2}m (b) 19.2 $\times$ 10^{-2}m

(c) 5.76 $\times$ 10^{-2}m (d) 1.92 $\times$ 10^{-2}m

34. -20^0 C d 2kg cQ dk 20^0 C d 5kg ikuh e feyk;k tkrk g rk dVuj e fdruk ikuh gkxk&

(a) 6 kg (b) 7 kg

(c) 6.5 kg (d) 5.5 kg

35. lery ij dEiu djr g, iR;d d.k d chp dk dkykUrj g %

(a) π (b) $\frac{\pi}{2}$

(c) 0 (d) bue l dkb ugh

36. ,d jlk;fud vfHkfØ;k dkcu ekukDlkbM dh lkUnrk d lUnHk e f}rh; Øe dk gA ;fn dkcu ekukDlkbM dh lkUnrk nkxuh dj nh tk,] ¼'k"k lHkh ?kVdk dk ,d leku ¼fLFkj½ j[kr g,½ rc vfHkfØ;k dh nj gk tk,xh %

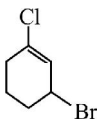
(a) nkxuk

(b) vifjofrr gkxh

(c) rhu xuk

(d) 4 d x.kt e c<xk

37. uhp inf'kr to ;kfxd dk IUPAC uke D;k g\



(a) 1- bromo -3- chlorocyclohexene

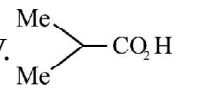
(b) 2- bromo -6- chlorocyclohex-1-ene

(c) 6-bromo-2-chlorocyclohexene

(d) 3- bromo-1-chlorocyclohexene.

38. fuEufyf[kr ;kfxdk dh c<rh vEyh; {kerk dk lgh Øe D;k gkxk\

I. CH_3CO_2H II. $MeOCH_2CO_2H$

III. CF_2CO_2H IV. 

(a) I < IV < III < II (b) II < IV < I < III

(c) IV < I < III < II (d) IV < I < II < III

39. ,d byDVku (n0;eku = 9.1 x 10^{-31} kg) dh vofLFkfr dh vfuf'prrk dk 0.001 % lVhdrk d nk;j e Kkr dj tk 300 ms^{-1}, d ox l xfreku g

(h = 6.63 10^{34} js)

(a) 3.84 10^{-2}m (b) 19.2 10^{-2}m

(c) 5.76 10^{-2}m (d) 1.92 10^{-2}m

40. Rate of a reaction can be expressed by Arrhenius equation as $K = A\, e^{-K/RT}$
in the equation, E represents]
(a) the fraction of molecules with energy greater than the activation energy of the reaction.
(b) the energy above which all the colliding molecules will react.
(c) the energy below which colliding molecules will not react.
(d) the total energy of the reacting molecules at a temperature, T.

41. Resistance of a conductivity cell filled with a solution of an electrolyte of concentration 0.1 M is 100 Ω. The conductivity of this solution is 1.29 S m^{-1}. Resistance of the same cell when filled with 0.2 M of the same solution is 520 Ω. The molar conductivity of 0.02 M solution of the electrolyte will be
(a) 12.4×10^{-4} S $m^2 mol^{-1}$
(b) 124×10^{-4} S $m^2 mol^{-1}$
(c) 1240×10^{-4} S $m^2 mol^{-1}$
(d) 1.24×10^{-4} S $m^2 mol^{-1}$

42. The major binding force of diamond, silicon and quartz is :
(a) electrostatic force
(b) electrical attraction force
(c) covalent bond force
(d) non-covalent bond force

43. Gold number indicates :
(a) protective action of lyophilic colloid.
(b) charge on gold solution.
(c) protective action of lyophobic colloid.
(d) quantity of gold dissolved in a given solution.

44. Match the compounds given in column I with the effects given in column II.

Column-I	**Column-II**
(i) Chloramphenicol	**(a)** Malaria
(ii) Thyroxine	(b) Anaesthetic
(iii) Chloroquine	(c) Typhoid fever
(iv) Chloroform	(d) Goiter

Codes :
(a) (i-c), (ii-d), (iii-a), (iv-b)
(b) (i-a), (ii-b), (iii-c), (iv-d)
(c) (i-b), (ii-c), (iii-a), (iv-d)
(d) (i-d), (ii-a), (iii-b), (iv-c)

40. vfHkfØ;k nj dk Arrhenius leh dj.k $K = A\, e^{-K/RT}$ }kjk 0;Dr fd;k tkrk gA mijkDr leh dj.k e] E fdldk ifrfu/kRo djrk g\
(a) vfHkfØ;k dh lfØ;.k Åtk l vf/kd Åtk /kkj.k dju oky vkf'kd v.k dhA
(b) ml Åtk Lrj dk ftld Åij v.kvk d Vdjku ij ijLij vfHkfØ;k djxA
(c) ml Åtk d Lrj dk ftld uhp tku ij Vdjku oky v.kvk e dkb vfHkfØ;k ugh gkrh\
(d) T rkieku ij vfHkfØ;k jr v.kvk dh dy Åtk

41. 0.1 M lkUnrk oky ,d fo|r vi?kV; l Hkj conductivity cell dh ifrjk/kdrk 100 g. bl foy;u dh pkydrk 1.29 S m^{-1} gA ml h ly dh ifrjk/kdrk 520 Ω g tc ml h foy;u dh 0.2 M ekyjrk oky k no mle Hkj fn;k tkrk gA 0.02 M fo|r vi?kV; foyk;d dh ekyj pkydrk fdruh gkxh \
(a) 12.4×10^{-4} S $m^2 mol^{-1}$
(b) 124×10^{-4} S $m^2 mol^{-1}$
(c) 1240×10^{-4} S $m^2 mol^{-1}$
(d) 1.24×10^{-4} S $m^2 mol^{-1}$

42. ghjk] flfydku rFkk DokVt e e[; vkc/k cy gkrk g \
(a) fo|r LFkfrd cy
(b) fo|r vkd'k.k cy
(c) lgl ;kt d c/k cy
(d) vlgl ;kt h c/k cy

43. ^^Lo.k l[;k** bfxr djrk g \
(a) tyxkgh dkyk;M d lj{kkRed fØ;k dkA
(b) ^^Lo.k foy;u ij yx vko"k dk
(c) ty jk/kh dkyk;M d lj{kkRed fØ;k ij
(d) ,d fn, x, foy;u e ?kyh lku dh ek=k dk

44. dkye&I e fn, x, ;kfxdk dk dkye&II e mYyf[kr iHkko l lefyr dj \&

dkye&I	**dkye& II**
(i) DykjeQfudky	(a) eyfj;k
(ii) Thyroxine	(b) ,ufLFkfl ;k ¼funk no½
(iii) Chloroquine	(c) Vk;Qk;M Toj
(iv) Chloroform	(d) ?k?kk

**dV **
(a) (i-c), (ii-d), (iii-a), (iv-b)
(b) (i-a), (ii-b), (iii-c), (iv-d)
(c) (i-b), (ii-c), (iii-a), (iv-d)
(d) (i-d), (ii-a), (iii-b), (iv-c)

45. CCl_4 is a well known fire extinguisher. However after using it to extinguish fire, the room should be well ventilated. This is because :
(a) it is inflammable at higher temperatures
(b) it is toxic
(c) it produces phosgene by reaction with water vapours at higher temperatures
(d) it is corrosive

46. Enzymes, vitamins and hormones can be classified into a single category of biological chemicals, because all of these
(a) are synthesized in the body
(b) enhance oxidative metabolism
(c) help in regulating metabolism
(d) are proteins

47. Seal is :
(a) carnivorous mammal
(b) herbivorous mammal
(c) amphibian
(d) fish

48. Which is correct matching of causative organism and the disease it causes
(a) Anopheles maculipennis-malaria
(b) Glossina palpalis-sleeping sickness
(c) Wuchereria bancrofti-filariasis
(d) Leishnania donovani-sleeping sickness

49. Haemoglobin is found dissolved in blood plasma of
(a) cockroach
(b) earthworm
(c) rabbit
(d) frog

50. Which group contains biocatalysts
(a) peptidase, amylase, rennin
(b) myosin, oxytocin, adrenalin
(c) rhodopsin, pepsin, steapsin
(d) glucose, amino acids, fatty acids

45. CCl_4 ,d ykdfi; vfXu “keu jlk;u g ijUr bld i;kx d ckn] dej dk vPNh rjg l gokdkj cukuk pkfg,A ,lk blfy, D;kfd&
(a) ;g mPp rkieku ij Toyu”khy gkrk gA
(b) ;g tgjhyk gkrk gA
(c) ;g mPp rkieku ij ty ok’i d lkFk vfHkfØ;k djd Qkl thu xl cukrk gA
(d) ;g tx ink djrk gA

46. fd.od] foVkfeu rFkk gkjeku dk ,d ,dek= to jlk;u ox e j[k ldr g D;kfd ; lHkh&
(a) 'kjhj e cur g
(b) vkDlhdkjd mikp; fØ;k dk c<kr gA
(c) mikip;u fØ;k d fu;eu e enn djr gA
(d) ikVhu gkr gA

47. lhy gkrk g %
(a) ,d ekl kgkjh Lruik;h
(b) 'kkdkgkjh Lruik;h
(c) mHk; thoh
(d) eNyh

48. bue l dku jkx tud tho rFkk mld }kjk tfur jkx dk lgh lefyr ;Xe g\
(a) ,ukfQyhl eD;fyiful &eyfj;k
(b) Xykfluk ikyifyl & funk jkx
(c) opjfj;k cØk¶Vh & Qkbyfj;k
(d) yh'kefu;k nkukokuh & funk jkxA

49. ghekXykfcu fdld jDr lykTek e ?kyh voLFkk e ik;k tkrk g\
(a) dkdjkp ¼frypVVk½
(b) dpvk
(c) [kjxk'k
(d) e<d

50. bue l fdl leg e to mRijd g\
(a) ilVhMl] ,ekbyl] jfuu
(b) ek;kflu] vkDlhVkflu] ,Mhukfyu
(c) jkMiflu] illhu] LVfllu
(d) Xydkt] ,ehuk vEy] QVh vEy

PART - II

ENGLISH

Spotting Error

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).*

51. Emphasis on equality of life ensures (a) / for the health and happiness (b) / of every individual (c) / No error (d)

52. Unless you stop to make noise at once (a) / I will have no option but to (b) / bring the matter to the attention of the police (c) / No error (d)

53. Not one of the hundreds (a) / of striking workers (b) / were allowed to go near the factory (c) / No error (d)

54. The students were (a) / awaiting for (b) / the arrival of the chief guest (c) / No error (d)

55. The reason for (a) / his failure is because (b) / he did not work hard(c) / No error (d)

Fill in the Blanks

Directions : *Each of the following sentences in this section has a blank space and four words or group of words given after the sentence. Select whichever word or group of words you consider most appropriate for the blank space and indicate your response on the Answer Sheet accordingly.*

56. He was offered a salary commensurate _____ the work.

(a) as (b) to (c) with (d) by

57. The accused _____ his involvement in the murder case.

(a) refused (b) denied (c) rejected (d) slammed

58. The government passed a new_____ against smuggling, in parliament.

(a) ordinance (b) ordnance (c) dictat (d) orders

59. The cyclone _____ without causing any great catastrophe.

(a) abetted (b) abated (c) flowed (d) embeded

Synonyms

Direction: *Each item in this section consists of a word in capital letters followed by four words as (a), (b), (c) and (d). Select the word which is most nearly the same in meaning as the original word and mark the correct response as (a), (b), (c) or (d) as the case may be, in your Answer Sheet.*

60. RESIDUE

(a) Remainder (b) Nothing

(c) Recede (d) Little

61. ACME

(a) Nadir (b) Lowest point

(c) Culmination (d) Zenith

62. ASKANCE

(a) Awry (b) Obliquely

(c) To look with disdain (d) Without disapprobation

63. ADUMBRATE

(a) To give a faint shadow of (b) To shadow forth

(c) To fore -shadow (d) To over shadow

Antonyms

Direction : *Each item in this section consists of a word in capital letters followed by four words or phrases as (a), (b), (c) and (d). Select the word or phrase which is nearly opposite to the meaning of the original word and mark the correct response as (a), (b), (c) or (d) as the case may be, in your Answer Sheet.*

64. PROLIX

(a) Common (b) Attractive (c) Short and crisp (d) Bulging out

65. LAUD

(a) To censure (b) To respect (c) To connive (d) To descend

66. RECOUP

(a) To worsen (b) To strengthen (c) To trap (d) To recover

67. DROLL

(a) Roller (b) Shout (c) Serious (d) Whimsical

Ordering of Words in a Sentence

Directions : *Each of the following items in this section consists of a sentence the parts of which have been jumbled. These parts have been labelled P, Q, R and S. Given below each sentence are four sequences namely (a), (b), (c) and (d). You are required to re-arrange the jumbled parts of the sentence and select the correct sequence.*

68. **P** : rules and regulations

Q : he cheerfully ignored its demands

R : a life of

S : unaccustomed to .

The correct order should be :

(a) R Q P S (b) Q R P S (c) S R P Q (d) Q S R P

69. **P** : a person bitten by a rabid dog

Q : would be seized by violent symptoms

R : after an incubation period of a month or two

S : and die an agonizing death

The correct order should be :

(a) P R S Q (b) S R Q P (c) P R Q S (d) P Q R S

70. **P** : and to decide impartially

Q : to hear courteously, to answer wisely

R : four things belong to a judge

S : to consider soberly

The correct order should be :

(a) S Q P R (b) R Q S P (c) Q R P S (d) P Q R S

71. **P** : four degrees below normal

Q : icy winds lashed Srinagar

R : with minimum temperature registering

S : which was already in the grip of gruelling cold wave conditions

The correct order should be :

(a) Q S R P (b) Q P R S (c) R Q S P (d) P Q S R

READING COMPREHENSION

Directions : *In this section, is one short passage. After the passage, you will find few 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

Our age is the age of specializations. Each one knows more about less and less. We concentrate on some narrow field and forget about the largest context in which we could see the meaning of our own specialization. Modern specialization has led to the fragmentation of knowledge. We should not only be specialists but also have a sense of the meaning of life and of social responsibility. We have to reckon with the spirit of science, understand its limitations and develop an outlook which is consistent with its findings. It is no use clinging to traditional forms which have lost their meanings. We cannot ignore the world of scientific achievement and withdraw into the inner life of contemplation. We are involved in the mechanism of the modern world and so should seek even religious truth not merely with our emotions but with our minds. We cannot ignore the scientific civilization. Nor can we drop religion. To reconcile the two is the task set for our generation.

72. The writer says that

(a) We should not be specialists

(b) We should be specialists

(c) We should not be specialist, but have a sense of the meaning of life.

(d) We should be specialist and we should also have a sense of the meaning of life and of social responsibility

73. ' Fragmentation' of knowledge means

(a) Increase of knowledge

(b) Assimilation of knowledge

(c) Splitting the knowledge into different fields

(d) Distribution of knowledge

74. We should seek religious truth with

(a) Our emotions only

(b) Our minds only

(c) Our minds as well as our emotions

(d) Neither our minds nor our emotions

75. The writer says that we should

(a) Follow the religious path

(b) Follow the scientific way

(c) Reject both the scientific way and the religious path

(d) Adopt both the scientific way and the religious path and try to remove the contradictions.

GENERAL AWARENESS

76. Consider the following statements :

In the context of Indian constitution the directive principles of state policy :

1. Puts limitations on the function of legislature
2. Puts limitations on the functions of executive

Which of the above statement is/are true?

(a) Only 1 (b) Only 2

(c) 1 & 2 (d) Neither 1 nor 2

77. Consider the following statements :

1. The Election Commission of India is a five member body
2. The Union Home Ministry decides the election programme both for General as well as by elections
3. The Election Commission settles the disputes regarding division/merger of recognised political parties

Which of the above statements is/are true?

(a) 1 and 2 (b) Only 2

(c) 2 &3 (d) Only 3

78. The picture of Bodhisatva Padmpani is the most famous and usually an illustrated form of drawing/ painting which is located in?

(a) Ajanta (b) Badami

(c) Bagh (d) Ellora

79. During the Civil Disobedience movement, which of the following Riyasats (Princely State) did not support congress?

(a) Bhavnagar (b) Mysore

(c) Junagarh (d) Kathiawar

80. The Vice-President of India is :

1. The second highest dignitary of India.
2. has no responsibility related to his post.
3. Act's as the President in his absence.
4. In case of President's resignation, removal or death, he works as the President.

Choose the correct answer from the codes given below :

(a) 1 and 2 (b) 1, 2 and 3

(c) 1, 3 and 4 (d) All these

76. fuEufyf[kr dFkuk ij fopkj dhft, %

Hkkjr d lfo/kku d lUnHk e] jkT; d uhfr fun'kd rRo

1- fo/kkf;dk d dR;k ij fucU/ku yxkr gA

2- dk;ikfydk d dR;k ij fuc/ku yxkr gA

mijksDr dFkuksa esa lsdkSu&lk@l sl gh gS@gSa

(a) doy 1 (b) doy 2

(c) 1 vkj 2 (d) u rk] 1] u gh 2

77. fuEufyf[kr dFkuk ij fopkj dhft, %

1- Hkkjr dk fuokpu vk;kx ikp&lnL;h; fudk; gA

2- l?k dk xg eU=ky;] vke puko vkj mi&pukok nkuk d fy, puko dk;Øe r; djrk gA

3- fuokpu vk;kx ekU;rk&ikIr jktuhfrd nyk d foHkktu@foy; l lEcfU/kr fookn fuiVkrk gA

mijkDr dFkuk e l dku&lk@l lgh g@g\

(a) 1 vkj 2 (b) doy 2

(c) 2 vkj 3 (d) doy 3

78. ckf/kLRo ineikf.k dk fp= lokf/kd ifl) vkj ik;% vkj[k fp=dkjh g] tk

(a) vtUrk e g (b) cnkeh e g

(c) ck?k e g (d) ,ykjk e g

79. lfou; voKk vkUnkyu d nkjku] fuEufyf[kr e l fdl fj;kIr u dkxl dk leFkku ugh fd;k\

(a) Hkkouxj (b) elj

(c) tukx< (d) dkfB;kokM

80. Hkkjr dk mi&jk"Vifr

1- Hkkjr dk f}rh; mPpre ifrf"Br in/kkjh gA

2- d ikl in l lEcfU/kr dkb vkipkfjd dk; ¼nkf;Ro½ ugh gA

3- jk"Vifr dh vuifLFkfr e mld dk;k dk fuogu djrk gA

4- jk"Vifr }kjk in R;kx] vinLFkhdj.k vFkok eR; d le; jk"Vifr d :i e dk; djrk gA

uhp fn, x, dV l lgh mÙkj pfu,A

(a) 1 ,o 2 (b) 1] 2 ,o 3

(c) 1] 3 ,o 4 (d) ; lHkh

81. Who among the followings had produced the opinion for the formation of constituent assembly in India?

(a) Simon Commission

(b) Rajaji Formula

(c) Cabinet Mission Plan

(d) Vavel Plan

82. Which of the followings Act provided for Federal Government in India?

(a) Government of India Act-1909

(b) Government of India Act-1919

(c) Government of India Act-1935

(d) Government of India Act-1947

83. Which among the following provisions of the Indian Constitution affect the education?

1. Directive Principle of State Policy
2. Rural and Urban Local Bodies
3. 5th Schedule
4. 6th Schdule
5. 7th Schedule

Give the correct answer on the basis of following codes :

(a) 1 and 3 (b) 3, 4 and 5

(b) 1, 2 and 5 (d) All these

84. Who is said to be the saviour of Indian News Papers?

(a) Lord Ripon (b) Lord Lyton

(c) Lord Hestings (d) Charles Metcoff

85. Which was the first Indian State to come under the 'doctrine of lapes' policy of Dalhousie?

(a) Sambhalpur (b) Satara

(c) Udaipur (d) Nagpur

86. "The issue of Deccon became as destructive for Mughal Empire as the issue of Spain for the Nepolian."

Who commented it on Deccon policy of Aurangzeb?

(a) Manoochi (b) Bernier

(c) Travernier (d) Gulam Hussain

81. fuEufyf[kr e l fdl ,d u Hkkjr d fy, lfo/kku lHkk ¼d xBu dk½ dk fopkj fn;k\

(a) lkbeu deh'ku

(b) jktkth Qkeyk

(c) dfcuV fe'ku ;kstuk

(d) ooy ;kstuk

82. fuEufyf[kr e l fdl ,d vf/kfu;e u Hkkjr e l?kh;&'kklu dh 0;oLFkk nh Fkh\

(a) Hkkjr ljdkj vf/kfu;e] 1909

(b) Hkkjr ljdkj vf/kfu;e] 1919

(c) Hkkjr ljdkj vf/kfu;e] 1935

(d) Hkkjr ljdkj vf/kfu;e] 1947

83. Hkkjrh; lfo/kku d fuEufyf[kr e l dku&l iko/kku f'k{kk ij iHkko Mkyr g\

1- jkT; d uhfr fun'kd rRo

2- xkeh.k vkj 'kgjh LFkkuh; fudk;

3- ikpoh vulph

4- NBh vulph

5- lkroh vulph

fuEufyf[kr dVk d vk/kkj ij lgh mRrj pfu,

(a) 1 vkj 2 (b) 3] 4 vkj 5

(c) 1] 2 vkj 5 (d) ; lHkh

84. Hkkjrh; lekpkj i=k dk efDr nkrk fdl dgk tkrk g\

(a) ykM fjiu (b) ykM fyVu

(c) ykM gfLVx (d) pkYl eVdkQ

85. Mygkth dh 0;ixr uhfr dk f'kdkj gku okyk igyk Hkkjrh; jkT; Fkk

(a) lHkyij (b) lrkjk

(c) mn;ij (d) ukxij

86. ^^;g nDdu dk ukl j exy lkekT; d fy, mruk gh ?kkrd fl) gvk ftruk uikfy;u d fy, Liu dk ukljA**

vkjxtc dh nDdu uhfr ij ;g fVli.kh fdldh g\

(a) euph (b) cfu;j

(c) Vofu;j (d) xyke glu

87. Which type of stone were used in Mathura Art?
(a) White Marble (b) Red Sand Stone
(c) Black Marble (d) Quartz

88. The metalic coins were found at first during which period?
(a) Vedic Era (b) Budhist Era
(c) Maurya Era (d) Gupta Era

89. The comets revolve around :
(a) Sun
(b) Mars
(c) Jupiter
(d) No single heavenly body

90. The Karakoram Highway connects which of the following two countries?
(a) India- Nepal (b) China-India
(c) China-Pakistan (d) India-Pakistan

91. Which state has the longest coast line in India?
(a) Tamil Nadu (b) Gujarat
(c) Andhra Pradesh (d) West Bengal

92. Which two seas are connected by the Suez canal?
(a) Red Sea & Arabian Sea
(b) Red Sea & Mediterranean Sea
(c) Arabian Sea & Mediterranean Sea
(d) North Sea & Adriatic Sea

93. Coal & Petrolium is found in :
(a) Igneous Rock (b) Sedimentary Rock
(c) Metamorphic Rock (d) None of these

94. Find the incorrect pair :
(a) Gneiss - Granites
(b) Amphibolites - Basalt
(c) Schist - Basalt
(d) Quartzite - Basalt

95. Juan-de-Fuca plate belongs to
(a) Europe (b) North America
(c) Africa (d) Japan

96. Which solution has been proposed by the Union Home Minister Rajnath Singh to counter Naxal violence?
(a) SAADHAN (b) SAMRIDDHI
(c) SAMADHAN (d) SAMARPAN

87. eFkjk efrdyk e fdl idkj d iRFkjk dk i;kx fd;k x;k Fkk\
(a) lQn lxejej (b) yky cyvk iRFkj
(c) dkyk lxejej (d) DokVt

88. /kkr d flDd loiFke fdl ;x e ikIr g, g\
(a) ofnd ;x (b) ck) ;x
(c) ek; ;x (d) xlr ;x

89. /kedr pkjk vkj ?ker g %
(a) l; d
(b) exy d
(c) cgLifr d
(d) fdlh ,d vrfj{k fi.M d ugh

90. dkjkdkje jktekx bue l fdu nk n'kk dk tkMrk g\
(a) Hkkjr&uiky (b) phu&Hkkjr
(c) phu&ikfdLrku (d) Hkkjr&ikfdLrku

91. Hkkjr d fdl jkT; dh lcl ych rVh; lhek g\
(a) rfeyukM (b) xtjkr
(c) vkU/k in'k (d) if'pe cxky

92. bue l dku l nk len Lot ugj l tM g\
(a) yky lkxj rFkk vjc lkxj
(b) yky lkxj rFkk Hke/; lkxj
(c) vjc lkxj rFkk Hke/; lkxj
(d) mŸkjh lkxj rFkk ,fM;kfVd lkxj

93. dk;k rFkk iVkfy;e ik;k tkrk g %
(a) vkXu; 'kyk e (b) volkno 'kyk e
(c) :ikrfjr 'kyk e (d) bue l dkb ugh

94. bue l vlefyr ;Xe dk fpfUgr dj %&
(a) ukbl & xukbV
(b) ,EQhckykbVl & clkYV
(c) f'k"V & clkYV
(d) DokVtkbV & clkYV

95. tvku&Mh&¶;dk lyV fdl egk}hi l lEc) g\
(a) ;jki (b) mŸkjh vefjdk
(c) vÝhdk (d) tkiku

96. dUnh; xge=h jktukFk flg u uDlyh fglk l fuiVu gr dku lk lek/kku iLrkfor fd;k g\
(a) lk/ku (b) lef)
(c) lek/kku (d) lei.k

97. Which of the following has won French presidential election?

(a) Francois Hollande

(b) Nicolas Sarkozy

(c) Emmanuel Macron

(d) Le Pen

98. Who has been honoured with Woodrow Wilson Award 2017?

(a) Shikha Sharma

(b) Chanda Kochhar

(c) Indira Nooyi

(d) Arundhati Bhattacharya

99. In which of the following state, "Cordon And Combing" operation was launched recently?

(a) Jammu and Kashmir

(b) Chhattisgarh

(c) Assam

(d) Manipur

100. In whose memory, National Anti Terrorism Day is observed?

(a) Rajiv Gandhi

(b) Indira Gandhi

(c) Jawahar Lal Nehru

(d) M.K. Gandhi

97. bue l fdlu Ýkl d jk"Vifr puko e thr gkfly dh g\

(a) ÝkUdkbl gky.M

(b) fudkyl ljdkth

(c) beuvy eØku

(d) yh iu

98. fdl 0;fDRk dk o"k 2017 dk oMjk foYlu ijLdkj inku fd;k x;k g\

(a) f'k[kk 'kek

(b) pUnk dkpj

(c) bfUnjk ub

(d) v:U/krh HkVVkpk;k

99. bue l fdl jkT; e gky e gh ^^,d l?ku ?kjkcnh rFkk ryk'kh** vfHk;ku pyk;k x;k\

(a) tEEk vkj d'ehj

(b) NÙkhlx<

(c) vle

(d) ef.kij

100. fdldh ;kn e ^jk"Vh; vkrdokn jk/kd fnol* euk;k tkrk g\

(a) jkthv xk/kh

(b) bfUnjk xk/kh

(c) tokgj yky ug:

(d) ,e-d- xk/kh

SPACE FOR ROUGH WORK

SPACE FOR ROUGH WORK

SPACE FOR ROUGH WORK

MKC Talent Hunt & Scholarship Exam-2018

TEST PAPER

CLASS-12 APPEARING

le; % *nk ?kaVs* i.kkd % **400**

vun"k

1- ijh{k.k ikjEHk gku d rjUr ckn] vki bl ijh{k.k ifLrdk dh iMrky vo"; dj y fd ble dkb fcuk Nik] QVk ;k NVk gvk i'B vFkok i"ukd vkfn u gkA ;fn ,lk g] rk bl lgh ijh{k.k ifLrdk l cny yhft,A

2- —i;k /;ku j[k fd **OMR** mÿkj&i=d e] mfpr LFkku ij] jky uEcj /;ku l ,o fcuk fdlh pd ;k folxfr d Hkju vkj dVc) dju dh ftEenkjh mEehnokj dh gA fdlh Hkh idkj dh pd@folxfr dh fLFkfr e mÿkj&i=d fujLr dj fn;k tk;xkA

3- bl ijh{k.k ifLrdk ij lkFk e fn, x, dk'Bd e vkidk viuk vuØekd fy[kuk gA ijh{k.k ifLrdk ij vkj dN u fy[kA

4- bl ijh{k.k ifLrdk e dy **100** i"ukd ¼i"u½ fn, x, g] **Hkkx I & xf.kr] foKku vkj Hkkx II- vxth] lkekU; lprr**kA iR;d i"ukd e pkj iR;ÿkj ¼mÿkj½ fn, x, gA bue l ,d iR;ÿkj dk pu y] ftl vki mÿkj&i=d ij vfdr djuk pkgr gA ;fn vkidk ,lk yx fd ,d l vf/kd iR;ÿkj lgh g] rk ml iR;ÿkj dk vfdr dj tk vkidk lokÿke yxA iR;d i"ukd d fy, doy **,d g**h iR;ÿkj puuk gA

5- vkidk viu lHkh iR;Rrj vyx l fn, x, mRrj&i=d ij gh vfdr dju gA mRrj&i=d e fn, x, fun"k nf[k,A

6- **çR;d** ç'uk'k pkj ¼4½ vd dk gA

7- bll igy fd vki ijh{k.k ifLrdk d fofHkUu i"uk"kk d iR;Rrj mRrj&i=d ij vfdr djuk "k: dj] vkidk io"k iek.k&i= d lkFk if'kr vun"kk d vulkj dN fooj.k mRrj&i=d e nu gA

8- vki viu lHkh iR;Rrjk dk mRrj&i=d e Hkju d ckn rFkk ijh{kk d lekiu ij **doy mRrj&i=d v/kh{kd** dk lki nA vkidk viu lkFk ijh{k.k ifLrdk y tku dh vuefr gA

9- dPp dke d fy, i=d ijh{k.k ifLrdk d vUr e lyXu gA

10- **xyr mRrjk d fy, n.M%**

oLrfu'B i"u&i=k e mEehnokj }kjk fn, x, xyr mÿkjk d fy, n.M fn;k tk,xkA

(i) iR;d i"u d fy, pkj odfYir mRrj gA mEehnokj }kjk iR;d i"u d fy, fn, x, ,d xyr mRrj d fy, i"u gr fu;r fd, x, vdk dk **,d** ¼1½ vd n.M d :i e dkVk tk,xkA

(ii) ;fn dkb mEehnokj ,d l vf/kd mRrj nrk g] rk bl **xyr mÿkj** ekuk tk,xk] ;|fi fn, x, mÿkjk e l ,d mÿkj lgh gkrk g] fQj Hkh ml i"u d fy, mi;Drkulkj gh mlh rjg dk n.M fn;k tk,xkA

(iii) ;fn mEehnokj }kjk dkb i"u gy ugh fd;k tkrk g vFkkr mEehnokj }kjk mÿkj ugh fn;k tkrk g] rk ml&i"u d fy, ***dkbZ n.M ugh*** fn;k tk,xkA

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

l;ku n % vun"kk dk fgUnh :ikUrj bl ifLrdk d fiNy i'B ij Nik gA