MAJOR KALSHI CLASSES PVT. LTD.
Allahabad, U.P.

MAJOR KALSHI CLASSES PVT. LTD.

"A way to get commissioned"

MOCK TEST - NDA (I) 2017

TEST BOOKLET

MATHEMATICS

Time Allowed : ***Two Hours and Thirty Minutes*** Maximum Marks : **300**

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 and Test Booklet Series A, B, C or D 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.**
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9. Sheets for rough work are appended in the Test Booklet at the end.
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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-third** of the marks assigned to that question will be deducted as penalty.

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MAJOR KALSHI CLASSES PVT. LTD.
Allahabad, U.P.

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"A way to get commissioned"

MOCK TEST - NDA (I) 2017

TEST BOOKLET

MATHEMATICS

Time Allowed : ***Two Hours and Thirty Minutes*** Maximum Marks : **300**

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 and Test Booklet Series A, B, C or D 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 120 items (questions). Each item is printed both in **Hindi** and **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.
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1. If $\vec{a},\vec{b},\vec{c}$ are unit vectors such that $\vec{a}$ is perpendicular to the plane of $\vec{b},\vec{c}$ and angle between $\vec{b},\vec{c}$ is $\frac{\pi}{3}$ then value of $\left|\vec{a}+\vec{b}+\vec{c}\right|$ is:

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

2. Let P = $[a_{ij}]$ be a 3 × 3 matrix and let Q = $[b_{ij}]$ where $b_{ij} = 2^{i+j} a_{ij}$ for $1 \le i, j \le 3$. If the determinant of P is 2, then determinant of the matrix Q is:

(a) 2^{10} (b) 2^{11}
(c) 2^{12} (d) 2^{13}

3. For the equation $3x^2 + px + 3 = 0$, P > 0 if one of the roots is square of other then P is equal to:

(a) 1/3 (b) 1
(c) 3 (d) 2/3

4. The complex number sinx + icos2x and cosx – isin2x are conjugate to each other for what value of x?

(a) 1 (b) π
(c) $\frac{\pi}{2}$ (d) No solution

5. For any integer n, the integral

$\int_0^{\pi} e^{\cos^2 x} \cos^3(2n+1)x\,dx$ has the value:

(a) π (b) 1
(c) 0 (d) none

6. The value of

$\int_{1/4}^{3/4} \frac{\frac{\pi}{2}+\cos^{-1}x}{2\sin^{-1}x+3\cos^{-1}x+\cos^{-1}(1-x)}dx$ is equal to:

(a) 1/4 (b) 1/8
(c) 1 (d) 1/2

Direction: For the next two items that follow: Consider the function y = a logx + bx^2 + x has its extrenum values at x = 1 and x = 2.

7. The value of a be:

(a) 2 (b) –2
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9. If f(x) = $\cos^2 x + \sec^2 x$, its value always is:

(a) f(x) < 1 (b) f(x) = 1
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10. The value of $\tan 9^0 - \tan 27^0 - \tan 63^0 + \tan 81^0$ is:

(a) 2 (b) 3
(c) 4 (d) none

11. The value of $\int_0^{\pi} \sin^{100} x.\ \cos^{99} x\,dx$ is:

(a) $-\pi$ (b) π
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12. $\int_0^1 \sqrt{\frac{1-x}{1+x}}dx$ is equal to:

(a) $\frac{\pi}{2}+1$ (b) $\frac{\pi}{2}-1$
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13. If the area bounded by the curves $y = ax^2$ and $x = ay^2$ is '1' then value of a is (a > 0):

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14. If 3 natural numbers from 1 to 100 are selected randomly then probability that all are divisible by 2 and 3 both is:

(a) $\frac{4}{105}$ (b) $\frac{4}{33}$
(c) $\frac{4}{35}$ (d) $\frac{4}{1155}$

15. If sin {$\cot^{-1}$ (x + 1)} = cos ($\tan^{-1}$ x), then x is:

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16. If the sides of a triangle are in the ratio $1 : \sqrt{3} : 2$ then the angles opposite to these sides of a triangle are in ratio:

(a) 1 : 3 : 2 (b) 3 : 2 : 1
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17. If x is the first term of a G.P. with infinite number of terms whose sum is 5, then:

(a) 0 < x < 10 (b) x ≥ 0
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1. If $\vec{a},\vec{b},\vec{c}$ are unit vectors such that $\vec{a}$ is perpendicular to the plane of $\vec{b},\vec{c}$ and angle between $\vec{b},\vec{c}$ is $\frac{\pi}{3}$ then value of $\left|\vec{a}+\vec{b}+\vec{c}\right|$ is:

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5. For any integer n, the integral

$\int_0^{\pi} e^{\cos^2 x} \cos^3(2n+1)x\,dx$ has the value:

(a) π (b) 1
(c) 0 (d) none

6. The value of

$\int_{1/4}^{3/4} \frac{\frac{\pi}{2}+\cos^{-1}x}{2\sin^{-1}x+3\cos^{-1}x+\cos^{-1}(1-x)}dx$ is equal to:

(a) 1/4 (b) 1/8
(c) 1 (d) 1/2

Direction: For the next two items that follow: Consider the function y = a logx + bx^2 + x has its extrenum values at x = 1 and x = 2.

7. The value of a be:

(a) 2 (b) –2
(c) 3 (d) none

8. The value of b is:

(a) –1 (b) –1/2
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9. If f(x) = $\cos^2 x + \sec^2 x$, its value always is:

(a) f(x) < 1 (b) f(x) = 1
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10. The value of $\tan 9^0 - \tan 27^0 - \tan 63^0 + \tan 81^0$ is:

(a) 2 (b) 3
(c) 4 (d) none

11. The value of $\int_0^{\pi} \sin^{100} x.\ \cos^{99} x\,dx$ is:

(a) $-\pi$ (b) π
(c) 0 (d) none

12. $\int_0^1 \sqrt{\frac{1-x}{1+x}}dx$ is equal to:

(a) $\frac{\pi}{2}+1$ (b) $\frac{\pi}{2}-1$
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13. If the area bounded by the curves $y = ax^2$ and $x = ay^2$ is '1' then value of a is (a > 0):

(a) 1/3 (b) 1
(c) 1/2 (d) $1/\sqrt{3}$

14. If 3 natural numbers from 1 to 100 are selected randomly then probability that all are divisible by 2 and 3 both is:

(a) $\frac{4}{105}$ (b) $\frac{4}{33}$
(c) $\frac{4}{35}$ (d) $\frac{4}{1155}$

15. If sin {$\cot^{-1}$ (x + 1)} = cos ($\tan^{-1}$ x), then x is:

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16. If the sides of a triangle are in the ratio $1 : \sqrt{3} : 2$ then the angles opposite to these sides of a triangle are in ratio:

(a) 1 : 3 : 2 (b) 3 : 2 : 1
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17. If x is the first term of a G.P. with infinite number of terms whose sum is 5, then:

(a) 0 < x < 10 (b) x ≥ 0
(c) x < –10 (d) –10 < x < 0

1. If $\vec{a},\vec{b},\vec{c}$ are unit vectors such that $\vec{a}$ is perpendicular to the plane of $\vec{b},\vec{c}$ and angle between $\vec{b},\vec{c}$ is $\frac{\pi}{3}$ then value of $\left|\vec{a}+\vec{b}+\vec{c}\right|$ is:

(a) 2 (b) 4
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2. Let P = $[a_{ij}]$ be a 3 × 3 matrix and let Q = $[b_{ij}]$ where $b_{ij} = 2^{i+j} a_{ij}$ for $1 \le i, j \le 3$. If the determinant of P is 2, then determinant of the matrix Q is:

(a) 2^{10} (b) 2^{11}
(c) 2^{12} (d) 2^{13}

3. For the equation $3x^2 + px + 3 = 0$, P > 0 if one of the roots is square of other then P is equal to:

(a) 1/3 (b) 1
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4. The complex number sinx + icos2x and cosx – isin2x are conjugate to each other for what value of x?

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3. For the equation $3x^2 + px + 3 = 0$, P > 0 if one of the roots is square of other then P is equal to:

(a) 1/3 (b) 1
(c) 3 (d) 2/3

4. The complex number sinx + icos2x and cosx – isin2x are conjugate to each other for what value of x?

(a) 1 (b) π
(c) $\frac{\pi}{2}$ (d) No solution

5. For any integer n, the integral

$\int_0^{\pi} e^{\cos^2 x} \cos^3(2n+1)x\,dx$ has the value:

(a) π (b) 1
(c) 0 (d) none

6. The value of

$\int_{1/4}^{3/4} \frac{\frac{\pi}{2}+\cos^{-1}x}{2\sin^{-1}x+3\cos^{-1}x+\cos^{-1}(1-x)}dx$ is equal to:

(a) 1/4 (b) 1/8
(c) 1 (d) 1/2

Direction: For the next two items that follow: Consider the function y = a logx + bx^2 + x has its extrenum values at x = 1 and x = 2.

7. The value of a be:

(a) 2 (b) –2
(c) 3 (d) none

8. The value of b is:

(a) –1 (b) –1/2
(c) 1/2 (d) none

9. If f(x) = $\cos^2 x + \sec^2 x$, its value always is:

(a) f(x) < 1 (b) f(x) = 1
(c) 1 < f(x) < 2 (d) f(x) ≥ 2

10. The value of $\tan 9^0 - \tan 27^0 - \tan 63^0 + \tan 81^0$ is:

(a) 2 (b) 3
(c) 4 (d) none

11. The value of $\int_0^{\pi} \sin^{100} x.\ \cos^{99} x\,dx$ is:

(a) $-\pi$ (b) π
(c) 0 (d) none

12. $\int_0^1 \sqrt{\frac{1-x}{1+x}}dx$ is equal to:

(a) $\frac{\pi}{2}+1$ (b) $\frac{\pi}{2}-1$
(c) 1 (d) π

13. If the area bounded by the curves $y = ax^2$ and $x = ay^2$ is '1' then value of a is (a > 0):

(a) 1/3 (b) 1
(c) 1/2 (d) $1/\sqrt{3}$

14. If 3 natural numbers from 1 to 100 are selected randomly then probability that all are divisible by 2 and 3 both is:

(a) $\frac{4}{105}$ (b) $\frac{4}{33}$
(c) $\frac{4}{35}$ (d) $\frac{4}{1155}$

15. If sin {$\cot^{-1}$ (x + 1)} = cos ($\tan^{-1}$ x), then x is:

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

16. If the sides of a triangle are in the ratio $1 : \sqrt{3} : 2$ then the angles opposite to these sides of a triangle are in ratio:

(a) 1 : 3 : 2 (b) 3 : 2 : 1
(c) 2 : 3 : 1 (d) 1 : 2 : 3

17. If x is the first term of a G.P. with infinite number of terms whose sum is 5, then:

(a) 0 < x < 10 (b) x ≥ 0
(c) x < –10 (d) –10 < x < 0

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(a) 2^{10} (b) 2^{11}
(c) 2^{12} (d) 2^{13}

3. lehdj.k $3x^2+px+3=0$, tgk $P>0$ gr ;fn ,d ey nlj dk ox gk rk P dk eku gkxk\

(a) 1/3 (b) 1
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4. lfEeJ l[;k $\sin x+i\cos 2x$ rFkk $\cos x-i\sin 2x$,d nlj dh l;Xeh gk rk x dk eku D;k gkxk\

(a) 1 (b) π
(c) $\frac{\pi}{2}$ (d) dkb gy ugh

5. fdlh i.kkd n gr] lekdy $\int_0^{\pi} e^{\cos^2 x}\cos^3(2n+1)x\,dx$ dk eku gkxk\

(a) π (b) 1
(c) 0 (d) dkb ugh

6. $\int_{1/4}^{3/4}\frac{\frac{\pi}{2}+\cos^{-1}x}{2\sin^{-1}x+3\cos^{-1}x+\cos^{-1}(1-x)}dx$ dk eku gkxk\

(a) 1/4 (b) 1/8
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funsZ"k% vxys 2 i"uk gr]
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28. The number of arrangements of the letters of the word BANANA in which the two N's do not appear adjacently is :

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25. k d ekuk dh l[;k ftld fy, lehdj.kk dk leg $(k+1)x+8y=4k$,

$kx+(k+3)y=3k-1$

dk vuUr gy gk] g\

(a) 0 (b) 1

(c) 2 (d) dkb ugh

26. ekuk $\omega=-\frac{1}{2}+i\frac{\sqrt{3}}{2}$ rk lkjf.kd $\begin{vmatrix}1 & 1 & 1\\ 1 & -1-\omega^2 & \omega^2\\ 1 & \omega^2 & \omega^4\end{vmatrix}$ g\

(a) 3ω (b) $3\omega(\omega-1)$

(c) $3\omega^2$ (d) $3\omega(1-\omega)$

27. lHkh lfEeJ l[;kvk z_1, z_2 gr tgk $|z_1|=12$ rFkk $|z_2-3-4i|=5$ rk $|z_1-z_2|$ dk U;ure eku gkxk\

(a) 0 (b) 2

(c) 7 (d) 17

28. "kCn 'BANANA' l cuu oky Øep;k dh l[;k ftle dkb nk N lkFk&lkFk u vk;] gkxh\

(a) 40 (b) 60

(c) 80 (d) 100

29. ljy j[kk vk $\frac{x+1}{2}=\frac{y-2}{5}=\frac{z+3}{4}$ rFkk $\frac{x-1}{1}=\frac{y+2}{2}=\frac{z-3}{-3}$ d e/; dk dk.k gkxk\

(a) 45^0 (b) 30^0

(c) 60^0 (d) 90^0

30. fdlh xky rFkk lery d ifrPNn fcUnvk dk fcUniFk gkxk\

(a) oÙk (b) nh?koÙk

(c) ijoy; (d) dkb ugh

31. ;fn lery $\frac{x}{2}+\frac{y}{3}+\frac{z}{4}=1$ v{kk dh A, B rFkk C ij dkVrk g\ rk ΔABC dk {k=Qy gkxk\

(a) $\sqrt{29}$ (b) $\sqrt{41}$

(c) $\sqrt{61}$ (d) dkb ugh

32. idk"k dh ,d fdj.k tk $x+\sqrt{3}y=\sqrt{3}$ d vufn"k g x-v{k l ijkofrr gkrh g] ijkofrr fdj.k dk lehdj.k g\

(a) $\sqrt{3}y=x-\sqrt{3}$ (b) $y=\sqrt{3}x-\sqrt{3}$

(c) $\sqrt{3}y=x-1$ (d) $y=x+\sqrt{3}$

33. ;fn x, y, z lekUrj J.kh e g rFkk $\tan^{-1}x, \tan^{-1}y, \tan^{-1}z$ Hkh lekUrj J.kh e g rk]

(a) 2x = 3y = 6z (b) 6x = 3y = 2z

(c) 6x = 4y = 3z (d) x = y = z

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(a) ekf/;dk (b) cgyd

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35. ml oÙk dk lehdj.k D;k gkxk tk nh?koÙk $\frac{x^2}{16}+\frac{y^2}{9}=1$ dh ukfHk l gkdj tkrk g vkj ft ldk dUn ¼0] 3½ g&

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36. fdlh f=Hkt d vr%dUn dk x-fun"kkd Kkr dhft, ft ldh Hktkvk d e/; fcUn d fun"kkd (0, 1), (1, 1) rFkk (1, 0) g&

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fun"k % vxy nk i"uk gr&

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43. Hktkvk AC rFkk BC d e/; fcUnvk dk feyku okyh j[kk dk ifjek.k gkxk&

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34. ,d d{kk d lHkh Nk=k u xf.kr e [kjkc in"ku fd;kA f"k{kd u iR;d Nk= dk 10 vuxg vd nu dk Qlyk fy;kA fUkEu e l dku&lk lk[;dh; eki vuxg vd nu d i"pkr Hkh ifjofrr ugh gkrk&

(a) ekf/;dk (b) cgyd

(c) ilj.k (d) ek/;

35. ml oÙk dk lehdj.k D;k gkxk tk nh?koÙk $\frac{x^2}{16}+\frac{y^2}{9}=1$ dh ukfHk l gkdj tkrk g vkj ft ldk dUn ¼0] 3½ g&

(a) $x^2 + y^2 - 6y + 7 = 0$

(b) $x^2 + y^2 - 6y - 5 = 0$

(c) $x^2 + y^2 - 6y + 5 = 0$

(d) $x^2 + y^2 - 6y - 7 = 0$

36. fdlh f=Hkt d vr%dUn dk x-fun"kkd Kkr dhft, ft ldh Hktkvk d e/; fcUn d fun"kkd (0, 1), (1, 1) rFkk (1, 0) g&

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

(c) $1-\sqrt{2}$ (d) $2+\sqrt{2}$

37. 0;td $\frac{\tan A}{1-\cot A}+\frac{\cot A}{1-\tan A}$ cjkcj gkxk&

(a) sec A cosec A + 1 (b) tan A + cot A

(c) sec A + cosec A (d) sin A cos A + 1

38. ;fn $y = \sec(\tan^{-1}x)$ rk $x = 1$ ij $\frac{dy}{dx}$ g&

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

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

fun"k % vxy nk i"uk gr&

fuEu lhek dk vodyu dhft,&

$$\lim_{x\to\infty}\left(\frac{x^2+x+1}{x+1}-ax-b\right)=4$$

39. a dk eku gkxk&

(a) 1 (b) –1

(c) 2 (d) –2

40. b dk eku gkxk&

(a) 4 (b) –4

(c) 3 (d) –3

fun"k % vxy rhu i"uk gr%

ΔABC d "kh'k A(2, 3, 1), B(–2, 2, 0) rFkk C(0, 1, –1) g%

41. $\angle ABC$ dk cosine gkxk%

(a) $\frac{1}{\sqrt{3}}$ (b) $\frac{1}{\sqrt{2}}$

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

42. f=Hkt dk {k=Qy gkxk&

(a) $6\sqrt{2}$ (b) $3\sqrt{2}$

(c) $10\sqrt{3}$ (d) dkb ugh

43. Hktkvk AC rFkk BC d e/; fcUnvk dk feyku okyh j[kk dk ifjek.k gkxk&

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

(c) $\frac{3}{\sqrt{2}}$ (d) 2

44. ;fn $A = \{x : x^2 = 1\}$ rFkk $B = \{x : x^4 = 1\}$ rk $A \Delta B$ dk eku gkxk&

(a) {–i, i} (b) {–1, 1}

(c) {–1, 1, i, –1} (d) dkb ugh

45. ;fn A, B rFkk C rhu lePp; gA rk A – (B – C) cjkcj gkxk&

(a) $A-(B\cap C)$ (b) $(A-B)\cup C$

(c) $(A-B)\cup(A\cap C)$ (d) $(A-B)\cup(A-C)$

46. ,d fn; g, ifjfer lePp; ftle n vo;o gk dk mfpr milEePp;k dh l[;k gkxh&

(a) 2n – 1 (b) 2n – 2

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

47. ;fn R ,d lEcU/k g $N \times N$ e tkfd ifjHkkf'kr g (a, b) R (c, d) ;fn vkj doy ;fn ad = bc rk g^&

(a) ,d rY;rk lEcU/k

(b) lefer rFkk lØed ijUr LorY; ugh

(c) LorY;] lefer ijUr lØed ugh

(d) LorY;] lØed ijUr lefer ugh

48. $y = \sin x$ rFkk $x = 0$ vkj $x = 2\pi$ l ifjc) {k=Qy gkxk&

(a) 2 (b) 3

(c) 4 (d) 1

49. The area bounded by the curve $y = 2x - x^2$ and straight line $y = -x$ is:

(a) 9/2 (b) 7/2

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50. Degree and Order of the differential equation $\frac{d^2y}{dx^2} = \left(\frac{dy}{dx}\right)^{2/3}$

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54. The term independent of x in expansion of $\left(\frac{x+1}{x^{2/3}-x^{1/3}+1} - \frac{x-1}{x-x^{1/2}}\right)^{10}$ is :

(a) 120 (b) 210

(c) 310 (d) 4

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50. vody lehdj.k dh ?kkr rFkk dkfV gksxh&

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(a) 3 : 2 : 1 (b) 1 : 3 : 2

(c) 3 : 1 : 2 (d) 1 : 2 : 3

53. nks lekUrj lery $2x + y + 2z = 8$ rFkk $4x + 2y + 4z + 5 = 0$ ds chp dh nwjh gksxh&

(a) 5/2 (b) 7/2

(c) 9/2 (d) 3/2

54. $\left(\frac{x+1}{x^{2/3}-x^{1/3}+1} - \frac{x-1}{x-x^{1/2}}\right)^{10}$ ds foLrkj esa x ls Lora= in gS&

(a) 120 (b) 210

(c) 310 (d) 4

55. vody lehdj.k $\frac{dy}{dx} = \frac{y}{x}$ dk 0;kid gy gksxk&

(a) $\log y = kx$ (b) $y = kx$

(c) $xy = k$ (d) $y = k \log x$

56. vody lehdj.k $\frac{dy}{dx} + \frac{2y}{x} = 0$ tgk $y(1) = 1$ dk gy gksxk

(a) $y = \frac{1}{x^2}$ (b) $x = \frac{1}{y^2}$

(c) $x = \frac{1}{y}$ (d) $y = \frac{1}{x}$

57. mu lHkh ijoy;k dk vody lehdj.k D;k gksxk tks y-v{k ds lekUrj gks&

(a) $\frac{d^3y}{dx^3} = 0$ (b) $\frac{d^2x}{dy^2} = c$

(c) $\frac{d^3x}{dy^3} = 0$ (d) dksbZ ugha

58. $\int e^{\log(\tan x)}dx$ cjkcj gksxk&

(a) log (tanx) + c (b) log (secx) + c

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59. ;fn $f(x) = \cos x - \cos^2 x + \cos^3 x - \ldots\ldots\infty$ rks $\int f(x)dx$ gS&

(a) $\tan\frac{x}{2} + c$ (b) $x + \tan\frac{x}{2} + c$

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60. ;fn $\int \frac{2^x}{\sqrt{1-4^x}}dx = K.\text{Sin}^{-1}(2^x) + c$ rks k dk eku gksxk&

(a) log 2 (b) $\frac{1}{2}\log 2$

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$$\frac{d^2y}{dx^2} = \left(\frac{dy}{dx}\right)^{2/3}$$

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57. mu lHkh ijoy;k dk vody lehdj.k D;k gksxk tks y-v{k ds lekUrj gks&

(a) $\frac{d^3y}{dx^3} = 0$ (b) $\frac{d^2x}{dy^2} = c$

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58. $\int e^{\log(\tan x)}dx$ cjkcj gksxk&

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(c) tanx + c (d) e^{tanx} + c

59. ;fn $f(x) = \cos x - \cos^2 x + \cos^3 x - \ldots\ldots\infty$ rks $\int f(x)dx$ gS&

(a) $\tan\frac{x}{2} + c$ (b) $x + \tan\frac{x}{2} + c$

(c) $x - \frac{1}{2}\tan\frac{x}{2} + c$ (d) $x - \tan\frac{x}{2} + c$

60. ;fn $\int \frac{2^x}{\sqrt{1-4^x}}dx = K.\text{Sin}^{-1}(2^x) + c$ rks k dk eku gksxk&

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53. nks lekUrj lery $2x + y + 2z = 8$ rFkk $4x + 2y + 4z + 5 = 0$ ds chp dh nwjh gksxh&

(a) 5/2 (b) 7/2

(c) 9/2 (d) 3/2

54. $\left(\frac{x+1}{x^{2/3}-x^{1/3}+1} - \frac{x-1}{x-x^{1/2}}\right)^{10}$ ds foLrkj esa x ls Lora= in gS&

(a) 120 (b) 210

(c) 310 (d) 4

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(c) $x > 3$ (d) $1 < x < 2$

62. $\frac{\log x}{x}$ dk egÙke eku gS&

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(c) $\dfrac{13}{63}$ (d) $\dfrac{17}{63}$

77. Suppose that 5% of men and 0.25% of women have grey hair. A grey haired person is selected at random. What is the probability of this person being male assume that there are equal number of male and female:

(a) $\dfrac{20}{21}$ (b) $\dfrac{17}{21}$

(c) $\dfrac{13}{21}$ (d) $\dfrac{17}{21}$

63. ;fn a rFkk b leehdj.k $x^2 + ax + b = 0$ d v"kU; eY; g rk $x^2 + ax + b$ dk U;ure eku gkxk&

(a) 2/3 (b) -9/4

(c) 9/4 (d) 1

64. ;fn fdlh ehukj d "kh"k dk mUu;u dk.k rhu lj[k fcUnvk A, B rFkk C l tk ehukj d vk/kkj dh vkj g Øe"k% $30^0, 45^0$ rFkk 60^0 g rk AB : BC vuikr g&

(a) $1:\sqrt{3}$ (b) 2 : 3

(c) $\sqrt{3}:1$ (d) $\sqrt{3}:\sqrt{2}$

65. $\lim_{x\to 0}\frac{(1-\cos 2x)(3+\cos x)}{x\tan 4x}$ cjkcj gkxk&

(a) 2 (b) 1/2

(c) 4 (d) 3

66. $\left(1-2\sqrt{x}\right)^{50}$ d f}in foLrkj e x d i.kkd ?kkrk d x.kkdk dk ;kx g&

(a) $\frac{1}{2}\left(3^{50}-1\right)$ (b) $\frac{1}{2}\left(2^{50}+1\right)$

(c) $\frac{1}{2}\left(3^{50}+1\right)$ (d) $\frac{1}{2}\left(3^{50}\right)$

67. ekuk y(x) vody leehdj.k $(x\log x).\frac{dy}{dx}+y=2x\log x,\ (x\geq 1)$ dk gy g rk y(e) cjkcj gkxk&

(a) 2 (b) 2e

(c) e (d) 0

68. ;fn m nk fHkUu okLrfod l[;kvk *l* rFkk n, (*l*, n > 1) dk lekUrj ek/; g G_1, G_2 vkj G_3 *l* rFkk n d e/; x.kkUkj ek/; g rk $G_1^4+2G_2^4+G_3^4$ cjkcj gkxk&

(a) $4lmn^2$ (b) $4l^2m^2n^2$

(c) $4l^2mn$ (d) $4lm^2n$

69. ,d f=Hkt PQR e] sinP, sinQ, sinR lekUrj J.kh e g rk&

(a) yEc lekUrj J.kh e gkx

(b) yEc gjkRed J.kh e gkx

(c) ekf/;dk, x.kkUkj J.kh e g

(d) ekf/;dk, lekUrj J.kh e g

70. 7 lQn xn rFkk 3 dkyh xn ,d ifDr e j[kh tkrh g bl ckr dh D;k ikf;drk g fd nk dkyh xn ,d lkFk u vk;\

(a) 1/2 (b) 7/15

(c) 2/15 (d) 1/3

71. oÙkk $x^2+y^2=4$ rFkk $x^2+y^2-6x-8y-24=0$ ij [khph xb mHk;fu'B Li"kZ[kvk dh l[;k gkxh&

(a) 0 (b) 1

(c) 3 (d) 4

72. ;fn $a_n=\sum_{r=0}^{n}\frac{1}{{}^nC_r}$ rk $\sum_{r=0}^{n}\frac{r}{{}^nC_r}$ gkxk&

(a) $(n-1)\,a_n$ (b) $n\,a_n$

(c) $\frac{1}{2}n\,a_n$ (d) dkb ugh

73. ;fn ω bdkb dk dkYifud ?kuey g rk $\left(1+\omega-\omega^2\right)^7$ cjkcj gkxk&

(a) $128\,\omega$ (b) $-128\,\omega$

(c) $128\,\omega^2$ (d) $-128\,\omega^2$

74. ;fn P(A) = 3/8, P(B) = 1/2 rFkk $P\left(A\cap B\right)=1/4$ rk $P\left(\frac{\overline{A}}{\overline{B}}\right)$ dk eku g&

(a) 3/5 (b) 3/4

(c) 1/4 (d) 1/5

75. ;fn "kCn ATTRACTION d v{kjk dk fy[kk tk; rk bl ckr dh D;k ikf;drk gkxh fd lHkh 'T' ,d lkFk vk;\

(a) 1/5 (b) 3/14

(c) 1/15 (d) 2/15

76. ,d cxe 4 lQn rFkk 5 dkyh xn gA nlj cxe 6 lQn rFkk 7 dkyh xn g A ,d xn iFke cxe l nlj cxe Mkyh tkrh g rk bl ckr dh D;k ikf;drk gkxh fd fudkyh tku okyh xn lQn gk&

(a) $\frac{35}{65}$ (b) $\frac{29}{63}$

(c) $\frac{13}{63}$ (d) $\frac{17}{63}$

77. ekuk fd 5% vknfe;k rFkk 0.25% vkjrk d Hkj cky g ,d Hkj cky oky 0;fDr dk ;nPN;k puk tkrk g bl ckr dh D;k ikf;drk g fd ;g 0;fDr vkneh gk tcfd ;g ekuk tkrk g fd vknfe;k vkj vkjrk dh l[;k cjkcj gA

(a) $\frac{20}{21}$ (b) $\frac{17}{21}$

(c) $\frac{13}{21}$ (d) $\frac{7}{21}$

63. ;fn a rFkk b leehdj.k $x^2 + ax + b = 0$ d v"kU; eY; g rk $x^2 + ax + b$ dk U;ure eku gkxk&

(a) 2/3 (b) -9/4

(c) 9/4 (d) 1

64. ;fn fdlh ehukj d "kh"k dk mUu;u dk.k rhu lj[k fcUnvk A, B rFkk C l tk ehukj d vk/kkj dh vkj g Øe"k% $30^0, 45^0$ rFkk 60^0 g rk AB : BC vuikr g&

(a) $1:\sqrt{3}$ (b) 2 : 3

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65. $\lim_{x\to 0}\frac{(1-\cos 2x)(3+\cos x)}{x\tan 4x}$ cjkcj gkxk&

(a) 2 (b) 1/2

(c) 4 (d) 3

66. $\left(1-2\sqrt{x}\right)^{50}$ d f}in foLrkj e x d i.kkd ?kkrk d x.kkdk dk ;kx g&

(a) $\frac{1}{2}\left(3^{50}-1\right)$ (b) $\frac{1}{2}\left(2^{50}+1\right)$

(c) $\frac{1}{2}\left(3^{50}+1\right)$ (d) $\frac{1}{2}\left(3^{50}\right)$

67. ekuk y(x) vody leehdj.k $(x\log x).\frac{dy}{dx}+y=2x\log x,\ (x\geq 1)$ dk gy g rk y(e) cjkcj gkxk&

(a) 2 (b) 2e

(c) e (d) 0

68. ;fn m nk fHkUu okLrfod l[;kvk *l* rFkk n, (*l*, n > 1) dk lekUrj ek/; g G_1, G_2 vkj G_3 *l* rFkk n d e/; x.kkUkj ek/; g rk $G_1^4+2G_2^4+G_3^4$ cjkcj gkxk&

(a) $4lmn^2$ (b) $4l^2m^2n^2$

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(a) yEc lekUrj J.kh e gkx

(b) yEc gjkRed J.kh e gkx

(c) ekf/;dk, x.kkUkj J.kh e g

(d) ekf/;dk, lekUrj J.kh e g

70. 7 lQn xn rFkk 3 dkyh xn ,d ifDr e j[kh tkrh g bl ckr dh D;k ikf;drk g fd nk dkyh xn ,d lkFk u vk;\

(a) 1/2 (b) 7/15

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71. oÙkk $x^2+y^2=4$ rFkk $x^2+y^2-6x-8y-24=0$ ij [khph xb mHk;fu'B Li"kZ[kvk dh l[;k gkxh&

(a) 0 (b) 1

(c) 3 (d) 4

72. ;fn $a_n=\sum_{r=0}^{n}\frac{1}{{}^nC_r}$ rk $\sum_{r=0}^{n}\frac{r}{{}^nC_r}$ gkxk&

(a) $(n-1)\,a_n$ (b) $n\,a_n$

(c) $\frac{1}{2}n\,a_n$ (d) dkb ugh

73. ;fn ω bdkb dk dkYifud ?kuey g rk $\left(1+\omega-\omega^2\right)^7$ cjkcj gkxk&

(a) $128\,\omega$ (b) $-128\,\omega$

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74. ;fn P(A) = 3/8, P(B) = 1/2 rFkk $P\left(A\cap B\right)=1/4$ rk $P\left(\frac{\overline{A}}{\overline{B}}\right)$ dk eku g&

(a) 3/5 (b) 3/4

(c) 1/4 (d) 1/5

75. ;fn "kCn ATTRACTION d v{kjk dk fy[kk tk; rk bl ckr dh D;k ikf;drk gkxh fd lHkh 'T' ,d lkFk vk;\

(a) 1/5 (b) 3/14

(c) 1/15 (d) 2/15

76. ,d cxe 4 lQn rFkk 5 dkyh xn gA nlj cxe 6 lQn rFkk 7 dkyh xn g A ,d xn iFke cxe l nlj cxe Mkyh tkrh g rk bl ckr dh D;k ikf;drk gkxh fd fudkyh tku okyh xn lQn gk&

(a) $\frac{35}{65}$ (b) $\frac{29}{63}$

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(a) 2 (b) 1/2

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(a) 2 (b) 2e

(c) e (d) 0

68. ;fn m nk fHkUu okLrfod l[;kvk *l* rFkk n, (*l*, n > 1) dk lekUrj ek/; g G_1, G_2 vkj G_3 *l* rFkk n d e/; x.kkUkj ek/; g rk $G_1^4+2G_2^4+G_3^4$ cjkcj gkxk&

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(a) yEc lekUrj J.kh e gkx

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(c) ekf/;dk, x.kkUkj J.kh e g

(d) ekf/;dk, lekUrj J.kh e g

70. 7 lQn xn rFkk 3 dkyh xn ,d ifDr e j[kh tkrh g bl ckr dh D;k ikf;drk g fd nk dkyh xn ,d lkFk u vk;\

(a) 1/2 (b) 7/15

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(a) 0 (b) 1

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(a) 3/5 (b) 3/4

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(a) 1/5 (b) 3/14

(c) 1/15 (d) 2/15

76. ,d cxe 4 lQn rFkk 5 dkyh xn gA nlj cxe 6 lQn rFkk 7 dkyh xn g A ,d xn iFke cxe l nlj cxe Mkyh tkrh g rk bl ckr dh D;k ikf;drk gkxh fd fudkyh tku okyh xn lQn gk&

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(c) $\sqrt{3}:1$ (d) $\sqrt{3}:\sqrt{2}$

65. $\lim_{x\to 0}\frac{(1-\cos 2x)(3+\cos x)}{x\tan 4x}$ cjkcj gkxk&

(a) 2 (b) 1/2

(c) 4 (d) 3

66. $\left(1-2\sqrt{x}\right)^{50}$ d f}in foLrkj e x d i.kkd ?kkrk d x.kkdk dk ;kx g&

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67. ekuk y(x) vody leehdj.k $(x\log x).\frac{dy}{dx}+y=2x\log x,\ (x\geq 1)$ dk gy g rk y(e) cjkcj gkxk&

(a) 2 (b) 2e

(c) e (d) 0

68. ;fn m nk fHkUu okLrfod l[;kvk *l* rFkk n, (*l*, n > 1) dk lekUrj ek/; g G_1, G_2 vkj G_3 *l* rFkk n d e/; x.kkUkj ek/; g rk $G_1^4+2G_2^4+G_3^4$ cjkcj gkxk&

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(a) yEc lekUrj J.kh e gkx

(b) yEc gjkRed J.kh e gkx

(c) ekf/;dk, x.kkUkj J.kh e g

(d) ekf/;dk, lekUrj J.kh e g

70. 7 lQn xn rFkk 3 dkyh xn ,d ifDr e j[kh tkrh g bl ckr dh D;k ikf;drk g fd nk dkyh xn ,d lkFk u vk;\

(a) 1/2 (b) 7/15

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(a) 0 (b) 1

(c) 3 (d) 4

72. ;fn $a_n=\sum_{r=0}^{n}\frac{1}{{}^nC_r}$ rk $\sum_{r=0}^{n}\frac{r}{{}^nC_r}$ gkxk&

(a) $(n-1)\,a_n$ (b) $n\,a_n$

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(a) $128\,\omega$ (b) $-128\,\omega$

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(a) 3/5 (b) 3/4

(c) 1/4 (d) 1/5

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(a) 1/5 (b) 3/14

(c) 1/15 (d) 2/15

76. ,d cxe 4 lQn rFkk 5 dkyh xn gA nlj cxe 6 lQn rFkk 7 dkyh xn g A ,d xn iFke cxe l nlj cxe Mkyh tkrh g rk bl ckr dh D;k ikf;drk gkxh fd fudkyh tku okyh xn lQn gk&

(a) $\frac{35}{65}$ (b) $\frac{29}{63}$

(c) $\frac{13}{63}$ (d) $\frac{17}{63}$

77. ekuk fd 5% vknfe;k rFkk 0.25% vkjrk d Hkj cky g ,d Hkj cky oky 0;fDr dk ;nPN;k puk tkrk g bl ckr dh D;k ikf;drk g fd ;g 0;fDr vkneh gk tcfd ;g ekuk tkrk g fd vknfe;k vkj vkjrk dh l[;k cjkcj gA

(a) $\frac{20}{21}$ (b) $\frac{17}{21}$

(c) $\frac{13}{21}$ (d) $\frac{7}{21}$

63. ;fn a rFkk b leehdj.k $x^2 + ax + b = 0$ d v"kU; eY; g rk $x^2 + ax + b$ dk U;ure eku gkxk&

(a) 2/3 (b) -9/4

(c) 9/4 (d) 1

64. ;fn fdlh ehukj d "kh"k dk mUu;u dk.k rhu lj[k fcUnvk A, B rFkk C l tk ehukj d vk/kkj dh vkj g Øe"k% $30^0, 45^0$ rFkk 60^0 g rk AB : BC vuikr g&

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65. $\lim_{x\to 0}\frac{(1-\cos 2x)(3+\cos x)}{x\tan 4x}$ cjkcj gkxk&

(a) 2 (b) 1/2

(c) 4 (d) 3

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(a) $\frac{1}{2}\left(3^{50}-1\right)$ (b) $\frac{1}{2}\left(2^{50}+1\right)$

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67. ekuk y(x) vody leehdj.k $(x\log x).\frac{dy}{dx}+y=2x\log x,\ (x\geq 1)$ dk gy g rk y(e) cjkcj gkxk&

(a) 2 (b) 2e

(c) e (d) 0

68. ;fn m nk fHkUu okLrfod l[;kvk *l* rFkk n, (*l*, n > 1) dk lekUrj ek/; g G_1, G_2 vkj G_3 *l* rFkk n d e/; x.kkUkj ek/; g rk $G_1^4+2G_2^4+G_3^4$ cjkcj gkxk&

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(a) 1/2 (b) 7/15

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71. oÙkk $x^2+y^2=4$ rFkk $x^2+y^2-6x-8y-24=0$ ij [khph xb mHk;fu'B Li"kZ[kvk dh l[;k gkxh&

(a) 0 (b) 1

(c) 3 (d) 4

72. ;fn $a_n=\sum_{r=0}^{n}\frac{1}{{}^nC_r}$ rk $\sum_{r=0}^{n}\frac{r}{{}^nC_r}$ gkxk&

(a) $(n-1)\,a_n$ (b) $n\,a_n$

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73. ;fn ω bdkb dk dkYifud ?kuey g rk $\left(1+\omega-\omega^2\right)^7$ cjkcj gkxk&

(a) $128\,\omega$ (b) $-128\,\omega$

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(a) 3/5 (b) 3/4

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(a) 1/5 (b) 3/14

(c) 1/15 (d) 2/15

76. ,d cxe 4 lQn rFkk 5 dkyh xn gA nlj cxe 6 lQn rFkk 7 dkyh xn g A ,d xn iFke cxe l nlj cxe Mkyh tkrh g rk bl ckr dh D;k ikf;drk gkxh fd fudkyh tku okyh xn lQn gk&

(a) $\frac{35}{65}$ (b) $\frac{29}{63}$

(c) $\frac{13}{63}$ (d) $\frac{17}{63}$

77. ekuk fd 5% vknfe;k rFkk 0.25% vkjrk d Hkj cky g ,d Hkj cky oky 0;fDr dk ;nPN;k puk tkrk g bl ckr dh D;k ikf;drk g fd ;g 0;fDr vkneh gk tcfd ;g ekuk tkrk g fd vknfe;k vkj vkjrk dh l[;k cjkcj gA

(a) $\frac{20}{21}$ (b) $\frac{17}{21}$

(c) $\frac{13}{21}$ (d) $\frac{7}{21}$

63. ;fn a rFkk b leehdj.k $x^2 + ax + b = 0$ d v"kU; eY; g rk $x^2 + ax + b$ dk U;ure eku gkxk&

(a) 2/3 (b) -9/4

(c) 9/4 (d) 1

64. ;fn fdlh ehukj d "kh"k dk mUu;u dk.k rhu lj[k fcUnvk A, B rFkk C l tk ehukj d vk/kkj dh vkj g Øe"k% $30^0, 45^0$ rFkk 60^0 g rk AB : BC vuikr g&

(a) $1:\sqrt{3}$ (b) 2 : 3

(c) $\sqrt{3}:1$ (d) $\sqrt{3}:\sqrt{2}$

65. $\lim_{x\to 0}\frac{(1-\cos 2x)(3+\cos x)}{x\tan 4x}$ cjkcj gkxk&

(a) 2 (b) 1/2

(c) 4 (d) 3

66. $\left(1-2\sqrt{x}\right)^{50}$ d f}in foLrkj e x d i.kkd ?kkrk d x.kkdk dk ;kx g&

(a) $\frac{1}{2}\left(3^{50}-1\right)$ (b) $\frac{1}{2}\left(2^{50}+1\right)$

(c) $\frac{1}{2}\left(3^{50}+1\right)$ (d) $\frac{1}{2}\left(3^{50}\right)$

67. ekuk y(x) vody leehdj.k $(x\log x).\frac{dy}{dx}+y=2x\log x,\ (x\geq 1)$ dk gy g rk y(e) cjkcj gkxk&

(a) 2 (b) 2e

(c) e (d) 0

68. ;fn m nk fHkUu okLrfod l[;kvk *l* rFkk n, (*l*, n > 1) dk lekUrj ek/; g G_1, G_2 vkj G_3 *l* rFkk n d e/; x.kkUkj ek/; g rk $G_1^4+2G_2^4+G_3^4$ cjkcj gkxk&

(a) $4lmn^2$ (b) $4l^2m^2n^2$

(c) $4l^2mn$ (d) $4lm^2n$

69. ,d f=Hkt PQR e] sinP, sinQ, sinR lekUrj J.kh e g rk&

(a) yEc lekUrj J.kh e gkx

(b) yEc gjkRed J.kh e gkx

(c) ekf/;dk, x.kkUkj J.kh e g

(d) ekf/;dk, lekUrj J.kh e g

70. 7 lQn xn rFkk 3 dkyh xn ,d ifDr e j[kh tkrh g bl ckr dh D;k ikf;drk g fd nk dkyh xn ,d lkFk u vk;\

(a) 1/2 (b) 7/15

(c) 2/15 (d) 1/3

71. oÙkk $x^2+y^2=4$ rFkk $x^2+y^2-6x-8y-24=0$ ij [khph xb mHk;fu'B Li"kZ[kvk dh l[;k gkxh&

(a) 0 (b) 1

(c) 3 (d) 4

72. ;fn $a_n=\sum_{r=0}^{n}\frac{1}{{}^nC_r}$ rk $\sum_{r=0}^{n}\frac{r}{{}^nC_r}$ gkxk&

(a) $(n-1)\,a_n$ (b) $n\,a_n$

(c) $\frac{1}{2}n\,a_n$ (d) dkb ugh

73. ;fn ω bdkb dk dkYifud ?kuey g rk $\left(1+\omega-\omega^2\right)^7$ cjkcj gkxk&

(a) $128\,\omega$ (b) $-128\,\omega$

(c) $128\,\omega^2$ (d) $-128\,\omega^2$

74. ;fn P(A) = 3/8, P(B) = 1/2 rFkk $P\left(A\cap B\right)=1/4$ rk $P\left(\frac{\overline{A}}{\overline{B}}\right)$ dk eku g&

(a) 3/5 (b) 3/4

(c) 1/4 (d) 1/5

75. ;fn "kCn ATTRACTION d v{kjk dk fy[kk tk; rk bl ckr dh D;k ikf;drk gkxh fd lHkh 'T' ,d lkFk vk;\

(a) 1/5 (b) 3/14

(c) 1/15 (d) 2/15

76. ,d cxe 4 lQn rFkk 5 dkyh xn gA nlj cxe 6 lQn rFkk 7 dkyh xn g A ,d xn iFke cxe l nlj cxe Mkyh tkrh g rk bl ckr dh D;k ikf;drk gkxh fd fudkyh tku okyh xn lQn gk&

(a) $\frac{35}{65}$ (b) $\frac{29}{63}$

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(a) $\frac{20}{21}$ (b) $\frac{17}{21}$

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64. ;fn fdlh ehukj d "kh"k dk mUu;u dk.k rhu lj[k fcUnvk A, B rFkk C l tk ehukj d vk/kkj dh vkj g Øe"k% $30^0, 45^0$ rFkk 60^0 g rk AB : BC vuikr g&

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65. $\lim_{x\to 0}\frac{(1-\cos 2x)(3+\cos x)}{x\tan 4x}$ cjkcj gkxk&

(a) 2 (b) 1/2

(c) 4 (d) 3

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(c) $\frac{1}{2}\left(3^{50}+1\right)$ (d) $\frac{1}{2}\left(3^{50}\right)$

67. ekuk y(x) vody leehdj.k $(x\log x).\frac{dy}{dx}+y=2x\log x,\ (x\geq 1)$ dk gy g rk y(e) cjkcj gkxk&

(a) 2 (b) 2e

(c) e (d) 0

68. ;fn m nk fHkUu okLrfod l[;kvk *l* rFkk n, (*l*, n > 1) dk lekUrj ek/; g G_1, G_2 vkj G_3 *l* rFkk n d e/; x.kkUkj ek/; g rk $G_1^4+2G_2^4+G_3^4$ cjkcj gkxk&

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(c) ekf/;dk, x.kkUkj J.kh e g

(d) ekf/;dk, lekUrj J.kh e g

70. 7 lQn xn rFkk 3 dkyh xn ,d ifDr e j[kh tkrh g bl ckr dh D;k ikf;drk g fd nk dkyh xn ,d lkFk u vk;\

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(a) 0 (b) 1

(c) 3 (d) 4

72. ;fn $a_n=\sum_{r=0}^{n}\frac{1}{{}^nC_r}$ rk $\sum_{r=0}^{n}\frac{r}{{}^nC_r}$ gkxk&

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(a) $128\,\omega$ (b) $-128\,\omega$

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74. ;fn P(A) = 3/8, P(B) = 1/2 rFkk $P\left(A\cap B\right)=1/4$ rk $P\left(\frac{\overline{A}}{\overline{B}}\right)$ dk eku g&

(a) 3/5 (b) 3/4

(c) 1/4 (d) 1/5

75. ;fn "kCn ATTRACTION d v{kjk dk fy[kk tk; rk bl ckr dh D;k ikf;drk gkxh fd lHkh 'T' ,d lkFk vk;\

(a) 1/5 (b) 3/14

(c) 1/15 (d) 2/15

76. ,d cxe 4 lQn rFkk 5 dkyh xn gA nlj cxe 6 lQn rFkk 7 dkyh xn g A ,d xn iFke cxe l nlj cxe Mkyh tkrh g rk bl ckr dh D;k ikf;drk gkxh fd fudkyh tku okyh xn lQn gk&

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(a) 2 (b) 2e

(c) e (d) 0

68. ;fn m nk fHkUu okLrfod l[;kvk *l* rFkk n, (*l*, n > 1) dk lekUrj ek/; g G_1, G_2 vkj G_3 *l* rFkk n d e/; x.kkUkj ek/; g rk $G_1^4+2G_2^4+G_3^4$ cjkcj gkxk&

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(c) 1/15 (d) 2/15

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68. ;fn m nk fHkUu okLrfod l[;kvk *l* rFkk n, (*l*, n > 1) dk lekUrj ek/; g G_1, G_2 vkj G_3 *l* rFkk n d e/; x.kkUkj ek/; g rk $G_1^4+2G_2^4+G_3^4$ cjkcj gkxk&

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(a) $\frac{20}{21}$ (b) $\frac{17}{21}$

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63. ;fn a rFkk b leehdj.k $x^2 + ax + b = 0$ d v"kU; eY; g rk $x^2 + ax + b$ dk U;ure eku gkxk&

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67. ekuk y(x) vody leehdj.k $(x\log x).\frac{dy}{dx}+y=2x\log x,\ (x\geq 1)$ dk gy g rk y(e) cjkcj gkxk&

(a) 2 (b) 2e

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68. ;fn m nk fHkUu okLrfod l[;kvk *l* rFkk n, (*l*, n > 1) dk lekUrj ek/; g G_1, G_2 vkj G_3 *l* rFkk n d e/; x.kkUkj ek/; g rk $G_1^4+2G_2^4+G_3^4$ cjkcj gkxk&

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(a) $\frac{35}{65}$ (b) $\frac{29}{63}$

(c) $\frac{13}{63}$ (d) $\frac{17}{63}$

77. ekuk fd 5% vknfe;k rFkk 0.25% vkjrk d Hkj cky g ,d Hkj cky oky 0;fDr dk ;nPN;k puk tkrk g bl ckr dh D;k ikf;drk g fd ;g 0;fDr vkneh gk tcfd ;g ekuk tkrk g fd vknfe;k vkj vkjrk dh l[;k cjkcj gA

(a) $\frac{20}{21}$ (b) $\frac{17}{21}$

(c) $\frac{13}{21}$ (d) $\frac{7}{21}$

63. ;fn a rFkk b leehdj.k $x^2 + ax + b = 0$ d v"kU; eY; g rk $x^2 + ax + b$ dk U;ure eku gkxk&

(a) 2/3 (b) -9/4

(c) 9/4 (d) 1

64. ;fn fdlh ehukj d "kh"k dk mUu;u dk.k rhu lj[k fcUnvk A, B rFkk C l tk ehukj d vk/kkj dh vkj g Øe"k% $30^0, 45^0$ rFkk 60^0 g rk AB : BC vuikr g&

(a) $1:\sqrt{3}$ (b) 2 : 3

(c) $\sqrt{3}:1$ (d) $\sqrt{3}:\sqrt{2}$

65. $\lim_{x\to 0}\frac{(1-\cos 2x)(3+\cos x)}{x\tan 4x}$ cjkcj gkxk&

(a) 2 (b) 1/2

(c) 4 (d) 3

66. $\left(1-2\sqrt{x}\right)^{50}$ d f}in foLrkj e x d i.kkd ?kkrk d x.kkdk dk ;kx g&

(a) $\frac{1}{2}\left(3^{50}-1\right)$ (b) $\frac{1}{2}\left(2^{50}+1\right)$

(c) $\frac{1}{2}\left(3^{50}+1\right)$ (d) $\frac{1}{2}\left(3^{50}\right)$

67. ekuk y(x) vody leehdj.k $(x\log x).\frac{dy}{dx}+y=2x\log x,\ (x\geq 1)$ dk gy g rk y(e) cjkcj gkxk&

(a) 2 (b) 2e

(c) e (d) 0

68. ;fn m nk fHkUu okLrfod l[;kvk *l* rFkk n, (*l*, n > 1) dk lekUrj ek/; g G_1, G_2 vkj G_3 *l* rFkk n d e/; x.kkUkj ek/; g rk $G_1^4+2G_2^4+G_3^4$ cjkcj gkxk&

(a) $4lmn^2$ (b) $4l^2m^2n^2$

(c) $4l^2mn$ (d) $4lm^2n$

69. ,d f=Hkt PQR e] sinP, sinQ, sinR lekUrj J.kh e g rk&

(a) yEc lekUrj J.kh e gkx

(b) yEc gjkRed J.kh e gkx

(c) ekf/;dk, x.kkUkj J.kh e g

(d) ekf/;dk, lekUrj J.kh e g

70. 7 lQn xn rFkk 3 dkyh xn ,d ifDr e j[kh tkrh g bl ckr dh D;k ikf;drk g fd nk dkyh xn ,d lkFk u vk;\

(a) 1/2 (b) 7/15

(c) 2/15 (d) 1/3

71. oÙkk $x^2+y^2=4$ rFkk $x^2+y^2-6x-8y-24=0$ ij [khph xb mHk;fu'B Li"kZ[kvk dh l[;k gkxh&

(a) 0 (b) 1

(c) 3 (d) 4

72. ;fn $a_n=\sum_{r=0}^{n}\frac{1}{{}^nC_r}$ rk $\sum_{r=0}^{n}\frac{r}{{}^nC_r}$ gkxk&

(a) $(n-1)\,a_n$ (b) $n\,a_n$

(c) $\frac{1}{2}n\,a_n$ (d) dkb ugh

73. ;fn ω bdkb dk dkYifud ?kuey g rk $\left(1+\omega-\omega^2\right)^7$ cjkcj gkxk&

(a) $128\,\omega$ (b) $-128\,\omega$

(c) $128\,\omega^2$ (d) $-128\,\omega^2$

74. ;fn P(A) = 3/8, P(B) = 1/2 rFkk $P\left(A\cap B\right)=1/4$ rk $P\left(\frac{\overline{A}}{\overline{B}}\right)$ dk eku g&

(a) 3/5 (b) 3/4

(c) 1/4 (d) 1/5

75. ;fn "kCn ATTRACTION d v{kjk dk fy[kk tk; rk bl ckr dh D;k ikf;drk gkxh fd lHkh 'T' ,d lkFk vk;\

(a) 1/5 (b) 3/14

(c) 1/15 (d) 2/15

76. ,d cxe 4 lQn rFkk 5 dkyh xn gA nlj cxe 6 lQn rFkk 7 dkyh xn g A ,d xn iFke cxe l nlj cxe Mkyh tkrh g rk bl ckr dh D;k ikf;drk gkxh fd fudkyh tku okyh xn lQn gk&

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(a) 2 (b) 2e

(c) e (d) 0

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70. 7 lQn xn rFkk 3 dkyh xn ,d ifDr e j[kh tkrh g bl ckr dh D;k ikf;drk g fd nk dkyh xn ,d lkFk u vk;\

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78. A die is tossed thrice. Getting an even number is considered as success then variance of the binomial distribution is:

(a) 1/2 (b) 3/4

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79. If X follows binomial distribution with mean 4 and variance 2, then $P(X \geq 5)$ is:

(a) $\frac{93}{256}$ (b) $\frac{77}{256}$

(c) $\frac{79}{256}$ (d) none

80. A coin is tossed 5 times. What is the probability of getting at least 3 heads?

(a) $\frac{3}{32}$ (b) $\frac{1}{2}$

(c) $\frac{7}{32}$ (d) $\frac{13}{32}$

81. If sec A + tan A = P, then what is the value of sinA?

(a) $\frac{P^2-1}{P^2+1}$ (b) $\frac{P^2+1}{P^2-1}$

(c) 1 (d) none

82. If cot A cot B = 2, then what is the value of cos (A + B) sec (A – B):

(a) 1/3 (b) 2/3

(c) 1 (d) –1

Direction: For the next three items that follow:

Let sin(A + B) = 1 and sin(A – B) = $\frac{1}{2}$ where $A, B \in \left[0, \frac{\pi}{2}\right]$

83. What is the value of A?

(a) $\frac{\pi}{6}$ (b) $\frac{\pi}{3}$

(c) $\frac{\pi}{4}$ (d) $\frac{\pi}{8}$

84. What is the value of tan (A + 2B). tan (2A + B)?

(a) –1 (b) 0

(c) 1 (d) 2

85. What is the value of $\sin^2 A - \sin^2 B$:

(a) 0 (b) 1/2

(c) 1 (d) 2

86. If the sides of ΔABC satisfy 3a = b + c then value of $\cot\frac{B}{2}.\cot\frac{C}{2}$ is:

(a) 1 (b) 2

(c) 3 (d) 4

87. If the sides of a triangle are in the ratio $2:\sqrt{6}:1+\sqrt{3}$, then what is the smallest angle of triangle?

(a) 75^0 (b) 60^0

(c) 45^0 (d) 30^0

88. What is the value of $\cos\left[\tan^{-1}\left\{\tan\left(\frac{15\pi}{4}\right)\right\}\right]$?

(a) $-\frac{1}{\sqrt{2}}$ (b) 0

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

89. What is the principal value of $\sec^{-1}\left(\frac{2}{\sqrt{3}}\right)$:

(a) $\frac{\pi}{2}$ (b) $\frac{\pi}{3}$

(c) $\frac{\pi}{4}$ (d) $\frac{\pi}{6}$

90. Two angles of a triangle are $\tan^{-1}\frac{1}{2}$ and $\tan^{-1}\frac{1}{3}$, then third angle:

(a) 30^0 (b) 45^0

(c) 90^0 (d) 135^0

91. What is the standard deviation of number 7, 9, 11, 13 and 15?

(a) 2.2 (b) 2.4

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(a) 75^0 (b) 60^0

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88. What is the value of $\cos\left[\tan^{-1}\left\{\tan\left(\frac{15\pi}{4}\right)\right\}\right]$?

(a) $-\frac{1}{\sqrt{2}}$ (b) 0

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

89. What is the principal value of $\sec^{-1}\left(\frac{2}{\sqrt{3}}\right)$:

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(c) $\frac{\pi}{4}$ (d) $\frac{\pi}{8}$

84. What is the value of tan (A + 2B). tan (2A + B)?

(a) –1 (b) 0

(c) 1 (d) 2

85. What is the value of $\sin^2 A - \sin^2 B$:

(a) 0 (b) 1/2

(c) 1 (d) 2

86. If the sides of ΔABC satisfy 3a = b + c then value of $\cot\frac{B}{2}.\cot\frac{C}{2}$ is:

(a) 1 (b) 2

(c) 3 (d) 4

87. If the sides of a triangle are in the ratio $2:\sqrt{6}:1+\sqrt{3}$, then what is the smallest angle of triangle?

(a) 75^0 (b) 60^0

(c) 45^0 (d) 30^0

88. What is the value of $\cos\left[\tan^{-1}\left\{\tan\left(\frac{15\pi}{4}\right)\right\}\right]$?

(a) $-\frac{1}{\sqrt{2}}$ (b) 0

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

89. What is the principal value of $\sec^{-1}\left(\frac{2}{\sqrt{3}}\right)$:

(a) $\frac{\pi}{2}$ (b) $\frac{\pi}{3}$

(c) $\frac{\pi}{4}$ (d) $\frac{\pi}{6}$

90. Two angles of a triangle are $\tan^{-1}\frac{1}{2}$ and $\tan^{-1}\frac{1}{3}$, then third angle:

(a) 30^0 (b) 45^0

(c) 90^0 (d) 135^0

91. What is the standard deviation of number 7, 9, 11, 13 and 15?

(a) 2.2 (b) 2.4

(c) 2.6 (d) 2.8

78. ,d ikl dk rhu ckj mNkyk tkrk g rFkk le l[;k vku dk lQyrk ekuk tkrk g] rk f}in foLrkj dk ilj.k gkxk&

(a) 1/2 (b) 3/4

(c) 1/4 (d) 1/3

79. ;fn X f}in forj.k g tgk ek/; 4 rFkk ilj.k 2 g rk P(X≥5) g&

(a) $\frac{93}{256}$ (b) $\frac{77}{256}$

(c) $\frac{79}{256}$ (d) dkbZ ugh

80. ,d fl Ddk 5 ckj mNkyk tkrk gA de&l&de 3 “kh’k vku dh ikf;drk Kkr dhft,&

(a) $\frac{3}{32}$ (b) $\frac{1}{2}$

(c) $\frac{7}{32}$ (d) $\frac{13}{32}$

81. ;fn sec A + tan A = P rk sin A dk eku gkxk\

(a) $\frac{P^2-1}{P^2+1}$ (b) $\frac{P^2+1}{P^2-1}$

(c) 1 (d) dkbZ ugh

82. ;fn cot A cot B = 2 rk cos (A + B) sec (A – B) dk eku D;k gkxk&

(a) 1/3 (b) 2/3

(c) 1 (d) -1

funsZ”k % vxy rhu i”uk gr%

ekuk sin (A + B) = 1 rFkk sin (A - B) = $\frac{1}{2}$ tgk

$A, B \in \left[0, \frac{\pi}{2}\right]$

83. A dk eku D;k gkxk&

(a) $\frac{\pi}{6}$ (b) $\frac{\pi}{3}$

(c) $\frac{\pi}{4}$ (d) $\frac{\pi}{8}$

84. tan (A + 2B). tan (2A + B) dk eku D;k gkxk&

(a) –1 (b) 0

(c) 1 (d) 2

85. $\sin^2 A - \sin^2 B$ dk eku gkxk&

(a) 0 (b) 1/2

(c) 1 (d) 2

86. ;fn f=Hkt dh Hkqtk, lr’V djrh g 3a = b + c dk] rk $\cot\frac{B}{2}.\cot\frac{C}{2}$ dk eku gkxk&

(a) 1 (b) 2

(c) 3 (d) 4

87. ;fn fdlh f=Hkt dh Hkqtk, $2:\sqrt{6}:1+\sqrt{3}$ d vuikr e gk rk f=Hkt dk lcl NkVk dks.k gkxk\

(a) 75^0 (b) 60^0

(c) 45^0 (d) 30^0

88. $\cos\left[\tan^{-1}\left\{\tan\left(\frac{15\pi}{4}\right)\right\}\right]$ dk eku gkxk&

(a) $-\frac{1}{\sqrt{2}}$ (b) 0

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

89. $\sec^{-1}\left(\frac{2}{\sqrt{3}}\right)$ dk e[; eku gkxk&

(a) $\frac{\pi}{2}$ (b) $\frac{\pi}{3}$

(c) $\frac{\pi}{4}$ (d) $\frac{\pi}{6}$

90. fdlh f=Hkt d nks dks.k $\tan^{-1}\frac{1}{2}$ vkj $\tan^{-1}\frac{1}{3}$ g rk rhljs dks.k dk eku gkxk&

(a) 30^0 (b) 45^0

(c) 90^0 (d) 135^0

91. l[;kvk 7] 9] 11] 13 rFkk 15 dk ekud fopyu g&

(a) 2.2 (b) 2.4

(c) 2.6 (d) 2.8

78. ,d ikl dk rhu ckj mNkyk tkrk g rFkk le l[;k vku dk lQyrk ekuk tkrk g] rk f}in foLrkj dk ilj.k gkxk&

(a) 1/2 (b) 3/4

(c) 1/4 (d) 1/3

79. ;fn X f}in forj.k g tgk ek/; 4 rFkk ilj.k 2 g rk P(X≥5) g&

(a) $\frac{93}{256}$ (b) $\frac{77}{256}$

(c) $\frac{79}{256}$ (d) dkbZ ugh

80. ,d fl Ddk 5 ckj mNkyk tkrk gA de&l&de 3 “kh’k vku dh ikf;drk Kkr dhft,&

(a) $\frac{3}{32}$ (b) $\frac{1}{2}$

(c) $\frac{7}{32}$ (d) $\frac{13}{32}$

81. ;fn sec A + tan A = P rk sin A dk eku gkxk\

(a) $\frac{P^2-1}{P^2+1}$ (b) $\frac{P^2+1}{P^2-1}$

(c) 1 (d) dkbZ ugh

82. ;fn cot A cot B = 2 rk cos (A + B) sec (A – B) dk eku D;k gkxk&

(a) 1/3 (b) 2/3

(c) 1 (d) -1

funsZ”k % vxy rhu i”uk gr%

ekuk sin (A + B) = 1 rFkk sin (A - B) = $\frac{1}{2}$ tgk

$A, B \in \left[0, \frac{\pi}{2}\right]$

83. A dk eku D;k gkxk&

(a) $\frac{\pi}{6}$ (b) $\frac{\pi}{3}$

(c) $\frac{\pi}{4}$ (d) $\frac{\pi}{8}$

84. tan (A + 2B). tan (2A + B) dk eku D;k gkxk&

(a) –1 (b) 0

(c) 1 (d) 2

85. $\sin^2 A - \sin^2 B$ dk eku gkxk&

(a) 0 (b) 1/2

(c) 1 (d) 2

86. ;fn f=Hkt dh Hkqtk, lr’V djrh g 3a = b + c dk] rk $\cot\frac{B}{2}.\cot\frac{C}{2}$ dk eku gkxk&

(a) 1 (b) 2

(c) 3 (d) 4

87. ;fn fdlh f=Hkt dh Hkqtk, $2:\sqrt{6}:1+\sqrt{3}$ d vuikr e gk rk f=Hkt dk lcl NkVk dks.k gkxk\

(a) 75^0 (b) 60^0

(c) 45^0 (d) 30^0

88. $\cos\left[\tan^{-1}\left\{\tan\left(\frac{15\pi}{4}\right)\right\}\right]$ dk eku gkxk&

(a) $-\frac{1}{\sqrt{2}}$ (b) 0

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

89. $\sec^{-1}\left(\frac{2}{\sqrt{3}}\right)$ dk e[; eku gkxk&

(a) $\frac{\pi}{2}$ (b) $\frac{\pi}{3}$

(c) $\frac{\pi}{4}$ (d) $\frac{\pi}{6}$

90. fdlh f=Hkt d nks dks.k $\tan^{-1}\frac{1}{2}$ vkj $\tan^{-1}\frac{1}{3}$ g rk rhljs dks.k dk eku gkxk&

(a) 30^0 (b) 45^0

(c) 90^0 (d) 135^0

91. l[;kvk 7] 9] 11] 13 rFkk 15 dk ekud fopyu g&

(a) 2.2 (b) 2.4

(c) 2.6 (d) 2.8

78. ,d ikl dk rhu ckj mNkyk tkrk g rFkk le l[;k vku dk lQyrk ekuk tkrk g] rk f}in foLrkj dk ilj.k gkxk&

(a) 1/2 (b) 3/4

(c) 1/4 (d) 1/3

79. ;fn X f}in forj.k g tgk ek/; 4 rFkk ilj.k 2 g rk P(X≥5) g&

(a) $\frac{93}{256}$ (b) $\frac{77}{256}$

(c) $\frac{79}{256}$ (d) dkbZ ugh

80. ,d fl Ddk 5 ckj mNkyk tkrk gA de&l&de 3 “kh’k vku dh ikf;drk Kkr dhft,&

(a) $\frac{3}{32}$ (b) $\frac{1}{2}$

(c) $\frac{7}{32}$ (d) $\frac{13}{32}$

81. ;fn sec A + tan A = P rk sin A dk eku gkxk\

(a) $\frac{P^2-1}{P^2+1}$ (b) $\frac{P^2+1}{P^2-1}$

(c) 1 (d) dkbZ ugh

82. ;fn cot A cot B = 2 rk cos (A + B) sec (A – B) dk eku D;k gkxk&

(a) 1/3 (b) 2/3

(c) 1 (d) -1

funsZ”k % vxy rhu i”uk gr%

ekuk sin (A + B) = 1 rFkk sin (A - B) = $\frac{1}{2}$ tgk

$A, B \in \left[0, \frac{\pi}{2}\right]$

83. A dk eku D;k gkxk&

(a) $\frac{\pi}{6}$ (b) $\frac{\pi}{3}$

(c) $\frac{\pi}{4}$ (d) $\frac{\pi}{8}$

84. tan (A + 2B). tan (2A + B) dk eku D;k gkxk&

(a) –1 (b) 0

(c) 1 (d) 2

85. $\sin^2 A - \sin^2 B$ dk eku gkxk&

(a) 0 (b) 1/2

(c) 1 (d) 2

86. ;fn f=Hkt dh Hkqtk, lr’V djrh g 3a = b + c dk] rk $\cot\frac{B}{2}.\cot\frac{C}{2}$ dk eku gkxk&

(a) 1 (b) 2

(c) 3 (d) 4

87. ;fn fdlh f=Hkt dh Hkqtk, $2:\sqrt{6}:1+\sqrt{3}$ d vuikr e gk rk f=Hkt dk lcl NkVk dks.k gkxk\

(a) 75^0 (b) 60^0

(c) 45^0 (d) 30^0

88. $\cos\left[\tan^{-1}\left\{\tan\left(\frac{15\pi}{4}\right)\right\}\right]$ dk eku gkxk&

(a) $-\frac{1}{\sqrt{2}}$ (b) 0

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

89. $\sec^{-1}\left(\frac{2}{\sqrt{3}}\right)$ dk e[; eku gkxk&

(a) $\frac{\pi}{2}$ (b) $\frac{\pi}{3}$

(c) $\frac{\pi}{4}$ (d) $\frac{\pi}{6}$

90. fdlh f=Hkt d nks dks.k $\tan^{-1}\frac{1}{2}$ vkj $\tan^{-1}\frac{1}{3}$ g rk rhljs dks.k dk eku gkxk&

(a) 30^0 (b) 45^0

(c) 90^0 (d) 135^0

91. l[;kvk 7] 9] 11] 13 rFkk 15 dk ekud fopyu g&

(a) 2.2 (b) 2.4

(c) 2.6 (d) 2.8

78. ,d ikl dk rhu ckj mNkyk tkrk g rFkk le l[;k vku dk lQyrk ekuk tkrk g] rk f}in foLrkj dk ilj.k gkxk&

(a) 1/2 (b) 3/4

(c) 1/4 (d) 1/3

79. ;fn X f}in forj.k g tgk ek/; 4 rFkk ilj.k 2 g rk P(X≥5) g&

(a) $\frac{93}{256}$ (b) $\frac{77}{256}$

(c) $\frac{79}{256}$ (d) dkbZ ugh

80. ,d fl Ddk 5 ckj mNkyk tkrk gA de&l&de 3 “kh’k vku dh ikf;drk Kkr dhft,&

(a) $\frac{3}{32}$ (b) $\frac{1}{2}$

(c) $\frac{7}{32}$ (d) $\frac{13}{32}$

81. ;fn sec A + tan A = P rk sin A dk eku gkxk\

(a) $\frac{P^2-1}{P^2+1}$ (b) $\frac{P^2+1}{P^2-1}$

(c) 1 (d) dkbZ ugh

82. ;fn cot A cot B = 2 rk cos (A + B) sec (A – B) dk eku D;k gkxk&

(a) 1/3 (b) 2/3

(c) 1 (d) -1

funsZ”k % vxy rhu i”uk gr%

ekuk sin (A + B) = 1 rFkk sin (A - B) = $\frac{1}{2}$ tgk

$A, B \in \left[0, \frac{\pi}{2}\right]$

83. A dk eku D;k gkxk&

(a) $\frac{\pi}{6}$ (b) $\frac{\pi}{3}$

(c) $\frac{\pi}{4}$ (d) $\frac{\pi}{8}$

84. tan (A + 2B). tan (2A + B) dk eku D;k gkxk&

(a) –1 (b) 0

(c) 1 (d) 2

85. $\sin^2 A - \sin^2 B$ dk eku gkxk&

(a) 0 (b) 1/2

(c) 1 (d) 2

86. ;fn f=Hkt dh Hkqtk, lr’V djrh g 3a = b + c dk] rk $\cot\frac{B}{2}.\cot\frac{C}{2}$ dk eku gkxk&

(a) 1 (b) 2

(c) 3 (d) 4

87. ;fn fdlh f=Hkt dh Hkqtk, $2:\sqrt{6}:1+\sqrt{3}$ d vuikr e gk rk f=Hkt dk lcl NkVk dks.k gkxk\

(a) 75^0 (b) 60^0

(c) 45^0 (d) 30^0

88. $\cos\left[\tan^{-1}\left\{\tan\left(\frac{15\pi}{4}\right)\right\}\right]$ dk eku gkxk&

(a) $-\frac{1}{\sqrt{2}}$ (b) 0

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

89. $\sec^{-1}\left(\frac{2}{\sqrt{3}}\right)$ dk e[; eku gkxk&

(a) $\frac{\pi}{2}$ (b) $\frac{\pi}{3}$

(c) $\frac{\pi}{4}$ (d) $\frac{\pi}{6}$

90. fdlh f=Hkt d nks dks.k $\tan^{-1}\frac{1}{2}$ vkj $\tan^{-1}\frac{1}{3}$ g rk rhljs dks.k dk eku gkxk&

(a) 30^0 (b) 45^0

(c) 90^0 (d) 135^0

91. l[;kvk 7] 9] 11] 13 rFkk 15 dk ekud fopyu g&

(a) 2.2 (b) 2.4

(c) 2.6 (d) 2.8

78. ,d ikl dk rhu ckj mNkyk tkrk g rFkk le l[;k vku dk lQyrk ekuk tkrk g] rk f}in foLrkj dk ilj.k gkxk&

(a) 1/2 (b) 3/4

(c) 1/4 (d) 1/3

79. ;fn X f}in forj.k g tgk ek/; 4 rFkk ilj.k 2 g rk P(X≥5) g&

(a) $\frac{93}{256}$ (b) $\frac{77}{256}$

(c) $\frac{79}{256}$ (d) dkbZ ugh

80. ,d fl Ddk 5 ckj mNkyk tkrk gA de&l&de 3 “kh’k vku dh ikf;drk Kkr dhft,&

(a) $\frac{3}{32}$ (b) $\frac{1}{2}$

(c) $\frac{7}{32}$ (d) $\frac{13}{32}$

81. ;fn sec A + tan A = P rk sin A dk eku gkxk\

(a) $\frac{P^2-1}{P^2+1}$ (b) $\frac{P^2+1}{P^2-1}$

(c) 1 (d) dkbZ ugh

82. ;fn cot A cot B = 2 rk cos (A + B) sec (A – B) dk eku D;k gkxk&

(a) 1/3 (b) 2/3

(c) 1 (d) -1

funsZ”k % vxy rhu i”uk gr%

ekuk sin (A + B) = 1 rFkk sin (A - B) = $\frac{1}{2}$ tgk

$A, B \in \left[0, \frac{\pi}{2}\right]$

83. A dk eku D;k gkxk&

(a) $\frac{\pi}{6}$ (b) $\frac{\pi}{3}$

(c) $\frac{\pi}{4}$ (d) $\frac{\pi}{8}$

84. tan (A + 2B). tan (2A + B) dk eku D;k gkxk&

(a) –1 (b) 0

(c) 1 (d) 2

85. $\sin^2 A - \sin^2 B$ dk eku gkxk&

(a) 0 (b) 1/2

(c) 1 (d) 2

86. ;fn f=Hkt dh Hkqtk, lr’V djrh g 3a = b + c dk] rk $\cot\frac{B}{2}.\cot\frac{C}{2}$ dk eku gkxk&

(a) 1 (b) 2

(c) 3 (d) 4

87. ;fn fdlh f=Hkt dh Hkqtk, $2:\sqrt{6}:1+\sqrt{3}$ d vuikr e gk rk f=Hkt dk lcl NkVk dks.k gkxk\

(a) 75^0 (b) 60^0

(c) 45^0 (d) 30^0

88. $\cos\left[\tan^{-1}\left\{\tan\left(\frac{15\pi}{4}\right)\right\}\right]$ dk eku gkxk&

(a) $-\frac{1}{\sqrt{2}}$ (b) 0

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

89. $\sec^{-1}\left(\frac{2}{\sqrt{3}}\right)$ dk e[; eku gkxk&

(a) $\frac{\pi}{2}$ (b) $\frac{\pi}{3}$

(c) $\frac{\pi}{4}$ (d) $\frac{\pi}{6}$

90. fdlh f=Hkt d nks dks.k $\tan^{-1}\frac{1}{2}$ vkj $\tan^{-1}\frac{1}{3}$ g rk rhljs dks.k dk eku gkxk&

(a) 30^0 (b) 45^0

(c) 90^0 (d) 135^0

91. l[;kvk 7] 9] 11] 13 rFkk 15 dk ekud fopyu g&

(a) 2.2 (b) 2.4

(c) 2.6 (d) 2.8

78. ,d ikl dk rhu ckj mNkyk tkrk g rFkk le l[;k vku dk lQyrk ekuk tkrk g] rk f}in foLrkj dk ilj.k gkxk&

(a) 1/2 (b) 3/4

(c) 1/4 (d) 1/3

79. ;fn X f}in forj.k g tgk ek/; 4 rFkk ilj.k 2 g rk P(X≥5) g&

(a) $\frac{93}{256}$ (b) $\frac{77}{256}$

(c) $\frac{79}{256}$ (d) dkbZ ugh

80. ,d fl Ddk 5 ckj mNkyk tkrk gA de&l&de 3 “kh’k vku dh ikf;drk Kkr dhft,&

(a) $\frac{3}{32}$ (b) $\frac{1}{2}$

(c) $\frac{7}{32}$ (d) $\frac{13}{32}$

81. ;fn sec A + tan A = P rk sin A dk eku gkxk\

(a) $\frac{P^2-1}{P^2+1}$ (b) $\frac{P^2+1}{P^2-1}$

(c) 1 (d) dkbZ ugh

82. ;fn cot A cot B = 2 rk cos (A + B) sec (A – B) dk eku D;k gkxk&

(a) 1/3 (b) 2/3

(c) 1 (d) -1

funsZ”k % vxy rhu i”uk gr%

ekuk sin (A + B) = 1 rFkk sin (A - B) = $\frac{1}{2}$ tgk

$A, B \in \left[0, \frac{\pi}{2}\right]$

83. A dk eku D;k gkxk&

(a) $\frac{\pi}{6}$ (b) $\frac{\pi}{3}$

(c) $\frac{\pi}{4}$ (d) $\frac{\pi}{8}$

84. tan (A + 2B). tan (2A + B) dk eku D;k gkxk&

(a) –1 (b) 0

(c) 1 (d) 2

85. $\sin^2 A - \sin^2 B$ dk eku gkxk&

(a) 0 (b) 1/2

(c) 1 (d) 2

86. ;fn f=Hkt dh Hkqtk, lr’V djrh g 3a = b + c dk] rk $\cot\frac{B}{2}.\cot\frac{C}{2}$ dk eku gkxk&

(a) 1 (b) 2

(c) 3 (d) 4

87. ;fn fdlh f=Hkt dh Hkqtk, $2:\sqrt{6}:1+\sqrt{3}$ d vuikr e gk rk f=Hkt dk lcl NkVk dks.k gkxk\

(a) 75^0 (b) 60^0

(c) 45^0 (d) 30^0

88. $\cos\left[\tan^{-1}\left\{\tan\left(\frac{15\pi}{4}\right)\right\}\right]$ dk eku gkxk&

(a) $-\frac{1}{\sqrt{2}}$ (b) 0

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

89. $\sec^{-1}\left(\frac{2}{\sqrt{3}}\right)$ dk e[; eku gkxk&

(a) $\frac{\pi}{2}$ (b) $\frac{\pi}{3}$

(c) $\frac{\pi}{4}$ (d) $\frac{\pi}{6}$

90. fdlh f=Hkt d nks dks.k $\tan^{-1}\frac{1}{2}$ vkj $\tan^{-1}\frac{1}{3}$ g rk rhljs dks.k dk eku gkxk&

(a) 30^0 (b) 45^0

(c) 90^0 (d) 135^0

91. l[;kvk 7] 9] 11] 13 rFkk 15 dk ekud fopyu g&

(a) 2.2 (b) 2.4

(c) 2.6 (d) 2.8

78. ,d ikl dk rhu ckj mNkyk tkrk g rFkk le l[;k vku dk lQyrk ekuk tkrk g] rk f}in foLrkj dk ilj.k gkxk&

(a) 1/2 (b) 3/4

(c) 1/4 (d) 1/3

79. ;fn X f}in forj.k g tgk ek/; 4 rFkk ilj.k 2 g rk P(X≥5) g&

(a) $\frac{93}{256}$ (b) $\frac{77}{256}$

(c) $\frac{79}{256}$ (d) dkbZ ugh

80. ,d fl Ddk 5 ckj mNkyk tkrk gA de&l&de 3 “kh’k vku dh ikf;drk Kkr dhft,&

(a) $\frac{3}{32}$ (b) $\frac{1}{2}$

(c) $\frac{7}{32}$ (d) $\frac{13}{32}$

81. ;fn sec A + tan A = P rk sin A dk eku gkxk\

(a) $\frac{P^2-1}{P^2+1}$ (b) $\frac{P^2+1}{P^2-1}$

(c) 1 (d) dkbZ ugh

82. ;fn cot A cot B = 2 rk cos (A + B) sec (A – B) dk eku D;k gkxk&

(a) 1/3 (b) 2/3

(c) 1 (d) -1

funsZ”k % vxy rhu i”uk gr%

ekuk sin (A + B) = 1 rFkk sin (A - B) = $\frac{1}{2}$ tgk

$A, B \in \left[0, \frac{\pi}{2}\right]$

83. A dk eku D;k gkxk&

(a) $\frac{\pi}{6}$ (b) $\frac{\pi}{3}$

(c) $\frac{\pi}{4}$ (d) $\frac{\pi}{8}$

84. tan (A + 2B). tan (2A + B) dk eku D;k gkxk&

(a) –1 (b) 0

(c) 1 (d) 2

85. $\sin^2 A - \sin^2 B$ dk eku gkxk&

(a) 0 (b) 1/2

(c) 1 (d) 2

86. ;fn f=Hkt dh Hkqtk, lr’V djrh g 3a = b + c dk] rk $\cot\frac{B}{2}.\cot\frac{C}{2}$ dk eku gkxk&

(a) 1 (b) 2

(c) 3 (d) 4

87. ;fn fdlh f=Hkt dh Hkqtk, $2:\sqrt{6}:1+\sqrt{3}$ d vuikr e gk rk f=Hkt dk lcl NkVk dks.k gkxk\

(a) 75^0 (b) 60^0

(c) 45^0 (d) 30^0

88. $\cos\left[\tan^{-1}\left\{\tan\left(\frac{15\pi}{4}\right)\right\}\right]$ dk eku gkxk&

(a) $-\frac{1}{\sqrt{2}}$ (b) 0

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

89. $\sec^{-1}\left(\frac{2}{\sqrt{3}}\right)$ dk e[; eku gkxk&

(a) $\frac{\pi}{2}$ (b) $\frac{\pi}{3}$

(c) $\frac{\pi}{4}$ (d) $\frac{\pi}{6}$

90. fdlh f=Hkt d nks dks.k $\tan^{-1}\frac{1}{2}$ vkj $\tan^{-1}\frac{1}{3}$ g rk rhljs dks.k dk eku gkxk&

(a) 30^0 (b) 45^0

(c) 90^0 (d) 135^0

91. l[;kvk 7] 9] 11] 13 rFkk 15 dk ekud fopyu g&

(a) 2.2 (b) 2.4

(c) 2.6 (d) 2.8

78. ,d ikl dk rhu ckj mNkyk tkrk g rFkk le l[;k vku dk lQyrk ekuk tkrk g] rk f}in foLrkj dk ilj.k gkxk&

(a) 1/2 (b) 3/4

(c) 1/4 (d) 1/3

79. ;fn X f}in forj.k g tgk ek/; 4 rFkk ilj.k 2 g rk P(X≥5) g&

(a) $\frac{93}{256}$ (b) $\frac{77}{256}$

(c) $\frac{79}{256}$ (d) dkbZ ugh

80. ,d fl Ddk 5 ckj mNkyk tkrk gA de&l&de 3 “kh’k vku dh ikf;drk Kkr dhft,&

(a) $\frac{3}{32}$ (b) $\frac{1}{2}$

(c) $\frac{7}{32}$ (d) $\frac{13}{32}$

81. ;fn sec A + tan A = P rk sin A dk eku gkxk\

(a) $\frac{P^2-1}{P^2+1}$ (b) $\frac{P^2+1}{P^2-1}$

(c) 1 (d) dkbZ ugh

82. ;fn cot A cot B = 2 rk cos (A + B) sec (A – B) dk eku D;k gkxk&

(a) 1/3 (b) 2/3

(c) 1 (d) -1

funsZ”k % vxy rhu i”uk gr%

ekuk sin (A + B) = 1 rFkk sin (A - B) = $\frac{1}{2}$ tgk

$A, B \in \left[0, \frac{\pi}{2}\right]$

83. A dk eku D;k gkxk&

(a) $\frac{\pi}{6}$ (b) $\frac{\pi}{3}$

(c) $\frac{\pi}{4}$ (d) $\frac{\pi}{8}$

84. tan (A + 2B). tan (2A + B) dk eku D;k gkxk&

(a) –1 (b) 0

(c) 1 (d) 2

85. $\sin^2 A - \sin^2 B$ dk eku gkxk&

(a) 0 (b) 1/2

(c) 1 (d) 2

86. ;fn f=Hkt dh Hkqtk, lr’V djrh g 3a = b + c dk] rk $\cot\frac{B}{2}.\cot\frac{C}{2}$ dk eku gkxk&

(a) 1 (b) 2

(c) 3 (d) 4

87. ;fn fdlh f=Hkt dh Hkqtk, $2:\sqrt{6}:1+\sqrt{3}$ d vuikr e gk rk f=Hkt dk lcl NkVk dks.k gkxk\

(a) 75^0 (b) 60^0

(c) 45^0 (d) 30^0

88. $\cos\left[\tan^{-1}\left\{\tan\left(\frac{15\pi}{4}\right)\right\}\right]$ dk eku gkxk&

(a) $-\frac{1}{\sqrt{2}}$ (b) 0

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

89. $\sec^{-1}\left(\frac{2}{\sqrt{3}}\right)$ dk e[; eku gkxk&

(a) $\frac{\pi}{2}$ (b) $\frac{\pi}{3}$

(c) $\frac{\pi}{4}$ (d) $\frac{\pi}{6}$

90. fdlh f=Hkt d nks dks.k $\tan^{-1}\frac{1}{2}$ vkj $\tan^{-1}\frac{1}{3}$ g rk rhljs dks.k dk eku gkxk&

(a) 30^0 (b) 45^0

(c) 90^0 (d) 135^0

91. l[;kvk 7] 9] 11] 13 rFkk 15 dk ekud fopyu g&

(a) 2.2 (b) 2.4

(c) 2.6 (d) 2.8

78. ,d ikl dk rhu ckj mNkyk tkrk g rFkk le l[;k vku dk lQyrk ekuk tkrk g] rk f}in foLrkj dk ilj.k gkxk&

(a) 1/2 (b) 3/4

(c) 1/4 (d) 1/3

79. ;fn X f}in forj.k g tgk ek/; 4 rFkk ilj.k 2 g rk P(X≥5) g&

(a) $\frac{93}{256}$ (b) $\frac{77}{256}$

(c) $\frac{79}{256}$ (d) dkbZ ugh

80. ,d fl Ddk 5 ckj mNkyk tkrk gA de&l&de 3 “kh’k vku dh ikf;drk Kkr dhft,&

(a) $\frac{3}{32}$ (b) $\frac{1}{2}$

(c) $\frac{7}{32}$ (d) $\frac{13}{32}$

81. ;fn sec A + tan A = P rk sin A dk eku gkxk\

(a) $\frac{P^2-1}{P^2+1}$ (b) $\frac{P^2+1}{P^2-1}$

(c) 1 (d) dkbZ ugh

82. ;fn cot A cot B = 2 rk cos (A + B) sec (A – B) dk eku D;k gkxk&

(a) 1/3 (b) 2/3

(c) 1 (d) -1

funsZ”k % vxy rhu i”uk gr%

ekuk sin (A + B) = 1 rFkk sin (A - B) = $\frac{1}{2}$ tgk

$A, B \in \left[0, \frac{\pi}{2}\right]$

83. A dk eku D;k gkxk&

(a) $\frac{\pi}{6}$ (b) $\frac{\pi}{3}$

(c) $\frac{\pi}{4}$ (d) $\frac{\pi}{8}$

84. tan (A + 2B). tan (2A + B) dk eku D;k gkxk&

(a) –1 (b) 0

(c) 1 (d) 2

85. $\sin^2 A - \sin^2 B$ dk eku gkxk&

(a) 0 (b) 1/2

(c) 1 (d) 2

86. ;fn f=Hkt dh Hkqtk, lr’V djrh g 3a = b + c dk] rk $\cot\frac{B}{2}.\cot\frac{C}{2}$ dk eku gkxk&

(a) 1 (b) 2

(c) 3 (d) 4

87. ;fn fdlh f=Hkt dh Hkqtk, $2:\sqrt{6}:1+\sqrt{3}$ d vuikr e gk rk f=Hkt dk lcl NkVk dks.k gkxk\

(a) 75^0 (b) 60^0

(c) 45^0 (d) 30^0

88. $\cos\left[\tan^{-1}\left\{\tan\left(\frac{15\pi}{4}\right)\right\}\right]$ dk eku gkxk&

(a) $-\frac{1}{\sqrt{2}}$ (b) 0

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

89. $\sec^{-1}\left(\frac{2}{\sqrt{3}}\right)$ dk e[; eku gkxk&

(a) $\frac{\pi}{2}$ (b) $\frac{\pi}{3}$

(c) $\frac{\pi}{4}$ (d) $\frac{\pi}{6}$

90. fdlh f=Hkt d nks dks.k $\tan^{-1}\frac{1}{2}$ vkj $\tan^{-1}\frac{1}{3}$ g rk rhljs dks.k dk eku gkxk&

(a) 30^0 (b) 45^0

(c) 90^0 (d) 135^0

91. l[;kvk 7] 9] 11] 13 rFkk 15 dk ekud fopyu g&

(a) 2.2 (b) 2.4

(c) 2.6 (d) 2.8

78. ,d ikl dk rhu ckj mNkyk tkrk g rFkk le l[;k vku dk lQyrk ekuk tkrk g] rk f}in foLrkj dk ilj.k gkxk&

(a) 1/2 (b) 3/4

(c) 1/4 (d) 1/3

79. ;fn X f}in forj.k g tgk ek/; 4 rFkk ilj.k 2 g rk P(X≥5) g&

(a) $\frac{93}{256}$ (b) $\frac{77}{256}$

(c) $\frac{79}{256}$ (d) dkbZ ugh

80. ,d fl Ddk 5 ckj mNkyk tkrk gA de&l&de 3 “kh’k vku dh ikf;drk Kkr dhft,&

(a) $\frac{3}{32}$ (b) $\frac{1}{2}$

(c) $\frac{7}{32}$ (d) $\frac{13}{32}$

81. ;fn sec A + tan A = P rk sin A dk eku gkxk\

(a) $\frac{P^2-1}{P^2+1}$ (b) $\frac{P^2+1}{P^2-1}$

(c) 1 (d) dkbZ ugh

82. ;fn cot A cot B = 2 rk cos (A + B) sec (A – B) dk eku D;k gkxk&

(a) 1/3 (b) 2/3

(c) 1 (d) -1

funsZ”k % vxy rhu i”uk gr%

ekuk sin (A + B) = 1 rFkk sin (A - B) = $\frac{1}{2}$ tgk

$A, B \in \left[0, \frac{\pi}{2}\right]$

83. A dk eku D;k gkxk&

(a) $\frac{\pi}{6}$ (b) $\frac{\pi}{3}$

(c) $\frac{\pi}{4}$ (d) $\frac{\pi}{8}$

84. tan (A + 2B). tan (2A + B) dk eku D;k gkxk&

(a) –1 (b) 0

(c) 1 (d) 2

85. $\sin^2 A - \sin^2 B$ dk eku gkxk&

(a) 0 (b) 1/2

(c) 1 (d) 2

86. ;fn f=Hkt dh Hkqtk, lr’V djrh g 3a = b + c dk] rk $\cot\frac{B}{2}.\cot\frac{C}{2}$ dk eku gkxk&

(a) 1 (b) 2

(c) 3 (d) 4

87. ;fn fdlh f=Hkt dh Hkqtk, $2:\sqrt{6}:1+\sqrt{3}$ d vuikr e gk rk f=Hkt dk lcl NkVk dks.k gkxk\

(a) 75^0 (b) 60^0

(c) 45^0 (d) 30^0

88. $\cos\left[\tan^{-1}\left\{\tan\left(\frac{15\pi}{4}\right)\right\}\right]$ dk eku gkxk&

(a) $-\frac{1}{\sqrt{2}}$ (b) 0

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

89. $\sec^{-1}\left(\frac{2}{\sqrt{3}}\right)$ dk e[; eku gkxk&

(a) $\frac{\pi}{2}$ (b) $\frac{\pi}{3}$

(c) $\frac{\pi}{4}$ (d) $\frac{\pi}{6}$

90. fdlh f=Hkt d nks dks.k $\tan^{-1}\frac{1}{2}$ vkj $\tan^{-1}\frac{1}{3}$ g rk rhljs dks.k dk eku gkxk&

(a) 30^0 (b) 45^0

(c) 90^0 (d) 135^0

91. l[;kvk 7] 9] 11] 13 rFkk 15 dk ekud fopyu g&

(a) 2.2 (b) 2.4

(c) 2.6 (d) 2.8

78. ,d ikl dk rhu ckj mNkyk tkrk g rFkk le l[;k vku dk lQyrk ekuk tkrk g] rk f}in foLrkj dk ilj.k gkxk&

(a) 1/2 (b) 3/4

(c) 1/4 (d) 1/3

79. ;fn X f}in forj.k g tgk ek/; 4 rFkk ilj.k 2 g rk P(X≥5) g&

(a) $\frac{93}{256}$ (b) $\frac{77}{256}$

(c) $\frac{79}{256}$ (d) dkbZ ugh

80. ,d fl Ddk 5 ckj mNkyk tkrk gA de&l&de 3 “kh’k vku dh ikf;drk Kkr dhft,&

(a) $\frac{3}{32}$ (b) $\frac{1}{2}$

(c) $\frac{7}{32}$ (d) $\frac{13}{32}$

81. ;fn sec A + tan A = P rk sin A dk eku gkxk\

(a) $\frac{P^2-1}{P^2+1}$ (b) $\frac{P^2+1}{P^2-1}$

(c) 1 (d) dkbZ ugh

82. ;fn cot A cot B = 2 rk cos (A + B) sec (A – B) dk eku D;k gkxk&

(a) 1/3 (b) 2/3

(c) 1 (d) -1

funsZ”k % vxy rhu i”uk gr%

ekuk sin (A + B) = 1 rFkk sin (A - B) = $\frac{1}{2}$ tgk

$A, B \in \left[0, \frac{\pi}{2}\right]$

83. A dk eku D;k gkxk&

(a) $\frac{\pi}{6}$ (b) $\frac{\pi}{3}$

(c) $\frac{\pi}{4}$ (d) $\frac{\pi}{8}$

84. tan (A + 2B). tan (2A + B) dk eku D;k gkxk&

(a) –1 (b) 0

(c) 1 (d) 2

85. $\sin^2 A - \sin^2 B$ dk eku gkxk&

(a) 0 (b) 1/2

(c) 1 (d) 2

86. ;fn f=Hkt dh Hkqtk, lr’V djrh g 3a = b + c dk] rk $\cot\frac{B}{2}.\cot\frac{C}{2}$ dk eku gkxk&

(a) 1 (b) 2

(c) 3 (d) 4

87. ;fn fdlh f=Hkt dh Hkqtk, $2:\sqrt{6}:1+\sqrt{3}$ d vuikr e gk rk f=Hkt dk lcl NkVk dks.k gkxk\

(a) 75^0 (b) 60^0

(c) 45^0 (d) 30^0

88. $\cos\left[\tan^{-1}\left\{\tan\left(\frac{15\pi}{4}\right)\right\}\right]$ dk eku gkxk&

(a) $-\frac{1}{\sqrt{2}}$ (b) 0

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

89. $\sec^{-1}\left(\frac{2}{\sqrt{3}}\right)$ dk e[; eku gkxk&

(a) $\frac{\pi}{2}$ (b) $\frac{\pi}{3}$

(c) $\frac{\pi}{4}$ (d) $\frac{\pi}{6}$

90. fdlh f=Hkt d nks dks.k $\tan^{-1}\frac{1}{2}$ vkj $\tan^{-1}\frac{1}{3}$ g rk rhljs dks.k dk eku gkxk&

(a) 30^0 (b) 45^0

(c) 90^0 (d) 135^0

91. l[;kvk 7] 9] 11] 13 rFkk 15 dk ekud fopyu g&

(a) 2.2 (b) 2.4

(c) 2.6 (d) 2.8

78. ,d ikl dk rhu ckj mNkyk tkrk g rFkk le l[;k vku dk lQyrk ekuk tkrk g] rk f}in foLrkj dk ilj.k gkxk&

(a) 1/2 (b) 3/4

(c) 1/4 (d) 1/3

79. ;fn X f}in forj.k g tgk ek/; 4 rFkk ilj.k 2 g rk P(X≥5) g&

(a) $\frac{93}{256}$ (b) $\frac{77}{256}$

(c) $\frac{79}{256}$ (d) dkbZ ugh

80. ,d fl Ddk 5 ckj mNkyk tkrk gA de&l&de 3 “kh’k vku dh ikf;drk Kkr dhft,&

(a) $\frac{3}{32}$ (b) $\frac{1}{2}$

(c) $\frac{7}{32}$ (d) $\frac{13}{32}$

81. ;fn sec A + tan A = P rk sin A dk eku gkxk\

(a) $\frac{P^2-1}{P^2+1}$ (b) $\frac{P^2+1}{P^2-1}$

(c) 1 (d) dkbZ ugh

82. ;fn cot A cot B = 2 rk cos (A + B) sec (A – B) dk eku D;k gkxk&

(a) 1/3 (b) 2/3

(c) 1 (d) -1

funsZ”k % vxy rhu i”uk gr%

ekuk sin (A + B) = 1 rFkk sin (A - B) = $\frac{1}{2}$ tgk

$A, B \in \left[0, \frac{\pi}{2}\right]$

83. A dk eku D;k gkxk&

(a) $\frac{\pi}{6}$ (b) $\frac{\pi}{3}$

(c) $\frac{\pi}{4}$ (d) $\frac{\pi}{8}$

84. tan (A + 2B). tan (2A + B) dk eku D;k gkxk&

(a) –1 (b) 0

(c) 1 (d) 2

85. $\sin^2 A - \sin^2 B$ dk eku gkxk&

(a) 0 (b) 1/2

(c) 1 (d) 2

86. ;fn f=Hkt dh Hkqtk, lr’V djrh g 3a = b + c dk] rk $\cot\frac{B}{2}.\cot\frac{C}{2}$ dk eku gkxk&

(a) 1 (b) 2

(c) 3 (d) 4

87. ;fn fdlh f=Hkt dh Hkqtk, $2:\sqrt{6}:1+\sqrt{3}$ d vuikr e gk rk f=Hkt dk lcl NkVk dks.k gkxk\

(a) 75^0 (b) 60^0

(c) 45^0 (d) 30^0

88. $\cos\left[\tan^{-1}\left\{\tan\left(\frac{15\pi}{4}\right)\right\}\right]$ dk eku gkxk&

(a) $-\frac{1}{\sqrt{2}}$ (b) 0

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

89. $\sec^{-1}\left(\frac{2}{\sqrt{3}}\right)$ dk e[; eku gkxk&

(a) $\frac{\pi}{2}$ (b) $\frac{\pi}{3}$

(c) $\frac{\pi}{4}$ (d) $\frac{\pi}{6}$

90. fdlh f=Hkt d nks dks.k $\tan^{-1}\frac{1}{2}$ vkj $\tan^{-1}\frac{1}{3}$ g rk rhljs dks.k dk eku gkxk&

(a) 30^0 (b) 45^0

(c) 90^0 (d) 135^0

91. l[;kvk 7] 9] 11] 13 rFkk 15 dk ekud fopyu g&

(a) 2.2 (b) 2.4

(c) 2.6 (d) 2.8

78. ,d ikl dk rhu ckj mNkyk tkrk g rFkk le l[;k vku dk lQyrk ekuk tkrk g] rk f}in foLrkj dk ilj.k gkxk&

(a) 1/2 (b) 3/4

(c) 1/4 (d) 1/3

79. ;fn X f}in forj.k g tgk ek/; 4 rFkk ilj.k 2 g rk P(X≥5) g&

(a) $\frac{93}{256}$ (b) $\frac{77}{256}$

(c) $\frac{79}{256}$ (d) dkbZ ugh

80. ,d fl Ddk 5 ckj mNkyk tkrk gA de&l&de 3 “kh’k vku dh ikf;drk Kkr dhft,&

(a) $\frac{3}{32}$ (b) $\frac{1}{2}$

(c) $\frac{7}{32}$ (d) $\frac{13}{32}$

81. ;fn sec A + tan A = P rk sin A dk eku gkxk\

(a) $\frac{P^2-1}{P^2+1}$ (b) $\frac{P^2+1}{P^2-1}$

(c) 1 (d) dkbZ ugh

82. ;fn cot A cot B = 2 rk cos (A + B) sec (A – B) dk eku D;k gkxk&

(a) 1/3 (b) 2/3

(c) 1 (d) -1

funsZ”k % vxy rhu i”uk gr%

ekuk sin (A + B) = 1 rFkk sin (A - B) = $\frac{1}{2}$ tgk

$A, B \in \left[0, \frac{\pi}{2}\right]$

83. A dk eku D;k gkxk&

(a) $\frac{\pi}{6}$ (b) $\frac{\pi}{3}$

(c) $\frac{\pi}{4}$ (d) $\frac{\pi}{8}$

84. tan (A + 2B). tan (2A + B) dk eku D;k gkxk&

(a) –1 (b) 0

(c) 1 (d) 2

85. $\sin^2 A - \sin^2 B$ dk eku gkxk&

(a) 0 (b) 1/2

(c) 1 (d) 2

86. ;fn f=Hkt dh Hkqtk, lr’V djrh g 3a = b + c dk] rk $\cot\frac{B}{2}.\cot\frac{C}{2}$ dk eku gkxk&

(a) 1 (b) 2

(c) 3 (d) 4

87. ;fn fdlh f=Hkt dh Hkqtk, $2:\sqrt{6}:1+\sqrt{3}$ d vuikr e gk rk f=Hkt dk lcl NkVk dks.k gkxk\

(a) 75^0 (b) 60^0

(c) 45^0 (d) 30^0

88. $\cos\left[\tan^{-1}\left\{\tan\left(\frac{15\pi}{4}\right)\right\}\right]$ dk eku gkxk&

(a) $-\frac{1}{\sqrt{2}}$ (b) 0

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

89. $\sec^{-1}\left(\frac{2}{\sqrt{3}}\right)$ dk e[; eku gkxk&

(a) $\frac{\pi}{2}$ (b) $\frac{\pi}{3}$

(c) $\frac{\pi}{4}$ (d) $\frac{\pi}{6}$

90. fdlh f=Hkt d nks dks.k $\tan^{-1}\frac{1}{2}$ vkj $\tan^{-1}\frac{1}{3}$ g rk rhljs dks.k dk eku gkxk&

(a) 30^0 (b) 45^0

(c) 90^0 (d) 135^0

91. l[;kvk 7] 9] 11] 13 rFkk 15 dk ekud fopyu g&

(a) 2.2 (b) 2.4

(c) 2.6 (d) 2.8

92. What is the arithmetic mean of the series ${}^nC_1$, ${}^nC_2$, ${}^nC_3$, ... ${}^nC_n$?

(a) $\frac{2^n-1}{n}$ (b) $\frac{2^n}{n+1}$

(c) $\frac{2^n}{n}$ (d) $\frac{2^{n+1}}{n+1}$

93. A variate y takes values 2, 3, 4, 2, 5, 4, 3, 2, and 1, what is mode:

(a) 2 (b) 3

(c) 4 (d) 5

94. Each observation of a row data whose variance is σ^2, is multiplied by n. what is the variance of the new set?

(a) σ^2 (b) $n^2\sigma^2$

(c) $n\sigma^2$ (d) $\frac{\sigma^2}{n}$

95. If $\sum_{i=1}^{n}(x_i-2)=110$, $\sum_{i=1}^{n}(x_i-5)=20$ what is mean:

(a) $\frac{11}{2}$ (b) $\frac{2}{11}$

(c) $\frac{17}{3}$ (d) $\frac{17}{9}$

96. What is the sum of two numbers $(11110)_2$ and $(1010)_2$?

(a) $(101000)_2$ (b) $(110000)_2$

(c) $(100100)_2$ (d) $(101100)_2$

97. Let S denote set of all integers. Define a Relation R on S as aRb if $a \geq b$ where a, b $\in S^+$, then R is:

(a) reflexive, but neither symmetric nor transitive

(b) reflexive, summetric but not transitive

(c) equivalence Relation

(d) symmetric but neither reflexive, nor transitive.

98. The roots of the equation $2a^2x^2 - 2abx + b^2 = 0$, when $a < 0$ and $b > 0$

(a) Sometimes Complex

(b) always irrational

(c) always complex

(d) always real

99. What is the mean of the squares of the first 20 natural numbers?

(a) 151.5 (b) 143.5

(c) 65 (d) 72

100. p, q, r, s and t are five numbers such that the average of p, q, and r is 5 and that of s and t is 10 then what is the average of all five numbers?

(a) 7.75 (b) 7.5

(c) 7 (d) 5

101. For two variable x and y the two regression coefficients are byx = 3/2 and bxy = –1/6 then the correlation coefficient between x and y is:

(a) – 1/4 (b) 1/4

(c) – 1/2 (d) 1/2

102. Let z = x + iy where x, y are real variables and $i=\sqrt{-1}$, If $|2z-1|=|z-2|$ then locus of z describes.

(a) circle (b) ellipse

(c) hyperbola (d) none

103. If z = fof(x), where $f(x) = x^2$, then what is $\frac{dz}{dx}$ equal to:

(a) x^3 (b) $2x^3$

(c) $4x^3$ (d) $4x^2$

104. Consider the following statements.

I. The function $f(x) = \sqrt[3]{x}$ is continuous all x except at x = 0

II. The function f(x) = [x] is continuos at x = 3.99, where [x] $\rightarrow$ G.I.F. which of the above is/are correct.

(a) only I (b) only II

(c) both (d) none

105. What is the slope of the tangent to the curve $y = \sin^{-1}(\sin^2 x)$ at x = 0

(a) 0 (b) 1

(c) 2 (d) none

106. The distance between the centre of two spheres $x^2 + y^2 + z^2 - 4y + 3 = 0$ and $x^2 + y^2 + z^2 + 2x + 4z - 4 = 0$ is:

(a) 5 (b) 4

(c) 3 (d) 2

92. What is the arithmetic mean of the series ${}^nC_1$, ${}^nC_2$, ${}^nC_3$, ... ${}^nC_n$?

(a) $\frac{2^n-1}{n}$ (b) $\frac{2^n}{n+1}$

(c) $\frac{2^n}{n}$ (d) $\frac{2^{n+1}}{n+1}$

93. A variate y takes values 2, 3, 4, 2, 5, 4, 3, 2, and 1, what is mode:

(a) 2 (b) 3

(c) 4 (d) 5

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(a) 7.75 (b) 7.5

(c) 7 (d) 5

101. For two variable x and y the two regression coefficients are byx = 3/2 and bxy = –1/6 then the correlation coefficient between x and y is:

(a) – 1/4 (b) 1/4

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102. Let z = x + iy where x, y are real variables and $i=\sqrt{-1}$, If $|2z-1|=|z-2|$ then locus of z describes.

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(a) 5 (b) 4

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92. What is the arithmetic mean of the series ${}^nC_1$, ${}^nC_2$, ${}^nC_3$, ... ${}^nC_n$?

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96. What is the sum of two numbers $(11110)_2$ and $(1010)_2$?

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(a) LorY;] ijUr u lefer vkj lØed

(b) LorY;] lefer ijUr lØed ugh

(c) rY;rk lEcU/k

(d) lefer ijUr u rk LorY; vkj u gh lØed

98. lehdj.k $2a^2x^2 - 2abx + b^2 = 0$ d ey tc $a < 0$ rFkk $b > 0$.

(a) dHkh lfEeJ

(b) lno vifje;

(c) lno lfEeJ

(d) lno okLrfod

99. iFke 20 ik—frd l[;kvk d oxk dk ek/; gkxk&

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100. p, q, r, s rFkk t ikp l[;k, bl idkj g fd p, q rFkk r dk vkl r 5 g rFkk s vkj t dk vkl r 10 g rk lHkh ikp l[;kvk dk vkl r gkxk&

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(a) o`Ùk (b) nh?ko`Ùk

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96. nk l[;kvk $(11110)_2$ rFkk $(1010)_2$ dk ;kx gkxk\

(a) $(101000)_2$ (b) $(110000)_2$

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(a) LorY;] ijUr u lefer vkj lØed

(b) LorY;] lefer ijUr lØed ugh

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(b) lno vifje;

(c) lno lfEeJ

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99. iFke 20 ik—frd l[;kvk d oxk dk ek/; gkxk&

(a) 151.5 (b) 143.5

(c) 65 (d) 72

100. p, q, r, s rFkk t ikp l[;k, bl idkj g fd p, q rFkk r dk vkl r 5 g rFkk s vkj t dk vkl r 10 g rk lHkh ikp l[;kvk dk vkl r gkxk&

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106. nk xkyk $x^2 + y^2 + z^2 - 4y + 3 = 0$ rFkk $x^2 + y^2 + z^2 + 2x + 4z - 4 = 0$ d dUnk d e/; dh njh gkxh&

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(a) $\frac{2^n-1}{n}$ (b) $\frac{2^n}{n+1}$

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106. nk xkyk $x^2 + y^2 + z^2 - 4y + 3 = 0$ rFkk $x^2 + y^2 + z^2 + 2x + 4z - 4 = 0$ d dUnk d e/; dh njh gkxh&

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(a) $\frac{2^n-1}{n}$ (b) $\frac{2^n}{n+1}$

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93. ,d pj y ft ldk eku 2, 3, 4, 2, 5, 4, 3, 2 rFkk 1 eku xg.k djrk g rk cgyd gkxk&

(a) 2 (b) 3

(c) 4 (d) 5

94. v0;ofLFkr vkdM d iR;d i{k.k dk ilj.k σ^2 g bl n l x.kk fd;k tkrk gA rk u; lePp; dk ilj.k D;k gkxk&

(a) σ^2 (b) $n^2\sigma^2$

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(a) 5 (b) 4

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107. The number of solution of the equation $tan^{-1}2x + tan^{-1}3x = \frac{\pi}{4}$ is:

(a) 2 (b) 3

(c) 1 (d) none

108. Out of 7 consonents and 4 vowels words are to be formed by involving 3 consonents and 2 vowels. The number of such words formed is:

(a) 25200 (b) 22500

(c) 10080 (d) 5040

109. The number 251 in decimal system is expressed in binary system:

(a) 11110111 (b) 11111011

(c) 11111101 (d) 11111110

110. What is the argument of the complex number $\frac{(1+i)(2+i)}{3-i}$ where $i = \sqrt{-1}$:

(a) 0 (b) $\frac{\pi}{4}$

(c) $-\frac{\pi}{4}$ (d) $\frac{\pi}{2}$

111. The determinant of an odd order skew symmetric matrix is always:

(a) zero (b) one

(c) negative (d) none

112. For what values of x is

$\log_{10}\left(999 + \sqrt{x^2 - 3x + 2}\right) = 3$?

(a) 0 (b) 1

(c) 2 (d) 1, 2

113. The value of $\log_{5\sqrt{5}}(5)$ is:

(a) 2/3 (b) 1/3

(c) 1/2 (d) 2

114. If $^{15}C_{3r} = {}^{15}C_{r+3}$, then value of r is:

(a) 3 (b) 4

(c) 5 (d) 8

115. If $f(x) = \begin{cases} \frac{1-\cos x}{x}, & x \neq 0 \\ k, & x = 0 \end{cases}$ is continuous at x = 0, then value of k is:

(a) 0 (b) 1/2

(c) 1/4 (d) –1/2

Direction: For the next three items that follow:

Consider $x = \frac{3at}{1+t^3}$, $y = \frac{3at^2}{1+t^3}$ then,

116. The value of $\frac{dx}{dt}$ is:

(a) $\frac{5a}{1+t^2}$ (b) $\frac{2a}{\left(1+t^3\right)^2}$

(c) $\frac{3a\left(1-2t^3\right)}{\left(1+t^3\right)^2}$ (d) none of these

117. The value of $\frac{dy}{dt}$ is:

(a) $\frac{5t}{1+t^3}$ (b) $\frac{3at\left(2-t^3\right)}{\left(1+t^3\right)^2}$

(c) $\frac{7at}{1+t}$ (d) none of these

118. The value of $\frac{dy}{dx}$ at t = 1/2 is:

(a) 5/4 (b) 2/3

(c) 1/5 (d) none of these

119. If x + y= 12, what is the maximum value of xy?

(a) 25 (b) 36

(c) 49 (d) 64

120. The function $f(x) = x^2 - 2x$ increases for all :

(a) x > –1 only (b) x < –1 only

(c) x > 1 only (d) x < 1 only

107. The number of solution of the equation $tan^{-1}2x + tan^{-1}3x = \frac{\pi}{4}$ is:

(a) 2 (b) 3

(c) 1 (d) none

108. Out of 7 consonents and 4 vowels words are to be formed by involving 3 consonents and 2 vowels. The number of such words formed is:

(a) 25200 (b) 22500

(c) 10080 (d) 5040

109. The number 251 in decimal system is expressed in binary system:

(a) 11110111 (b) 11111011

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110. What is the argument of the complex number $\frac{(1+i)(2+i)}{3-i}$ where $i = \sqrt{-1}$:

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114. If $^{15}C_{3r} = {}^{15}C_{r+3}$, then value of r is:

(a) 3 (b) 4

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115. If $f(x) = \begin{cases} \frac{1-\cos x}{x}, & x \neq 0 \\ k, & x = 0 \end{cases}$ is continuous at x = 0, then value of k is:

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(a) $\frac{5a}{1+t^2}$ (b) $\frac{2a}{\left(1+t^3\right)^2}$

(c) $\frac{3a\left(1-2t^3\right)}{\left(1+t^3\right)^2}$ (d) none of these

117. The value of $\frac{dy}{dt}$ is:

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118. The value of $\frac{dy}{dx}$ at t = 1/2 is:

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119. If x + y= 12, what is the maximum value of xy?

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(a) 0 (b) $\frac{\pi}{4}$

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111. The determinant of an odd order skew symmetric matrix is always:

(a) zero (b) one

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112. For what values of x is

$\log_{10}\left(999 + \sqrt{x^2 - 3x + 2}\right) = 3$?

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113. The value of $\log_{5\sqrt{5}}(5)$ is:

(a) 2/3 (b) 1/3

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114. If $^{15}C_{3r} = {}^{15}C_{r+3}$, then value of r is:

(a) 3 (b) 4

(c) 5 (d) 8

115. If $f(x) = \begin{cases} \frac{1-\cos x}{x}, & x \neq 0 \\ k, & x = 0 \end{cases}$ is continuous at x = 0, then value of k is:

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Direction: For the next three items that follow:

Consider $x = \frac{3at}{1+t^3}$, $y = \frac{3at^2}{1+t^3}$ then,

116. The value of $\frac{dx}{dt}$ is:

(a) $\frac{5a}{1+t^2}$ (b) $\frac{2a}{\left(1+t^3\right)^2}$

(c) $\frac{3a\left(1-2t^3\right)}{\left(1+t^3\right)^2}$ (d) none of these

117. The value of $\frac{dy}{dt}$ is:

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118. The value of $\frac{dy}{dx}$ at t = 1/2 is:

(a) 5/4 (b) 2/3

(c) 1/5 (d) none of these

119. If x + y= 12, what is the maximum value of xy?

(a) 25 (b) 36

(c) 49 (d) 64

120. The function $f(x) = x^2 - 2x$ increases for all :

(a) x > –1 only (b) x < –1 only

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107. The number of solution of the equation $tan^{-1}2x + tan^{-1}3x = \frac{\pi}{4}$ is:

(a) 2 (b) 3

(c) 1 (d) none

108. Out of 7 consonents and 4 vowels words are to be formed by involving 3 consonents and 2 vowels. The number of such words formed is:

(a) 25200 (b) 22500

(c) 10080 (d) 5040

109. The number 251 in decimal system is expressed in binary system:

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le; % nks ?k.Vs vkj rhl feuV | i.kkd % 300

vuqn”k

1- ijh{k.k ikjEHk gksus ds rjUr ckn] vki bl ijh{k.k ifLrdk dh iMrky dks vo”; dj ysa fd bl esa dkbZ fcUnq NwVk] QVk ;k NVk gqvk i’B vFkok i”ukd vkfn u gksA ;fn ,slk gks rks bl lgh ijh{k.k ifLrdk ls cny yhft,A

2- —i;k /;ku j[ksa fd OMR mÙkj&i=d esa] mfpr LFkku ij] jky uhyh cky dk ijh{k.k ifLrdk vuØe A, B, C ;k D dks] /;ku ls ,o fcuk fdlh pwd ;k folxfr ds Hkjus vkSj dVs) dsus dh ftEesnkjh mEehnokj dh gSA fdlh Hkh idkj dh pwd@folxfr dh fLFkfr esa mÙkj&i=d fujLr dj fn;k tk;sxkA

3- bl ijh{k.k ifLrdk ij lkFk esa fn, x, dk’Bd esa vkidk viuk vuØekad fy[kuk gSA ijh{k.k ifLrdk ij vkSj dNq u fy[kAA

4- bl ijh{k.k ifLrdk esa dy 120 i”ukd ¼i”u½ fn, x, gSA iR;sd i”ukd **fgUnh** vkSj **vaxzsth** nksuksa esa Nik gSA iR;sd i”ukd ds pkj iR;Ùkj ¼mÙkj½ fn, x, gSA buesa ls ,d iR;Ùkj dks pquus] ftls vki mÙkj&i=d ij vafdr djuk pkgrs gSA ;fn vkidk ,slk yxs fd ,d ls vf/kd iR;Ùkj lgh gSa] rks mls iR;Ùkj dk vafdr djsa tks vkidk lokZÙke yxsA iR;sd i”ukd ds fy, doyk **,d gh** iR;Ùkj puuk gSA

5- vkidk viu lHkh iR;Rrj vyx ls fn, x, mRrj&i=d ij gh vafdr djuk gSA mRrj&i=d esa fn, x, fun”kksZ dks nf[k,A

6- lHkh i”uksa”kksZ ds vad leku gSaA

7- bl ckr igys fd vki ijh{k.k ifLrdk ds fofHkUu i”uksa”kksZ ds iR;Rrj mRrj&i=d ij vafdr djus “k: djsa] vkidk io”k iek.k&i= ds lkFk if’kr vun”kksZ ds vuqlkj dNq fooj.k mRrj&i=d esa nsuk gSA

8- vki viu lHkh iR;Rrjksa dk mRrj&i=d esa Hkjus ds ckn rFkk ijh{kk ds lekiu ij **doyk mRrj&i=d v/khf{kd** dk lkSai nsA vkidk viu lkFk ijh{k.k ifLrdk ys tkuk dHkh vuefr gSA

9- dPps dke ds fy, i=d ijh{k.k ifLrdk ds vUnj esa lyXu gSA

10- **xyr mRrjksa ds fy, n.M %**

oLrqfu’B i”u&i=k esa mEehnokj }kjk fn, x, xyr mÙkjksa ds fy, n.M fn;k tk,xkA

(i) iR;sd i”u ds fy, pkj odfYir mRrj gSA mEehnokj }kjk iR;sd i”u ds fy, fn, x, ,d xyr mRrj ds fy, i”u gr fu;r fd, x, vadksa dk **,d&frgkbZ** n.M ds :i esa dkVk tk,xkA

(ii) ;fn dkbZ mEehnokj ,d ls vf/kd mRrj nrk gS] rks bl **xyr mÙkj** ekuk tk,xk] ;|fi fn, x, mÙkjksa esa ls ,d mÙkj lgh gksrk gS] fQj Hkh ml i”u ds fy, mi;Drkuqlkj gh mlh rjg dk n.M fn;k tk,xkA

(iii) ;fn mEehnokj }kjk dkbZ i”u gy ugha fd;k tkrk gS vFkkr mEehnokj }kjk mÙkj ugha fn;k tkrk gS] rks ml&i”u ds fy, ***dkbZ n.M ugha*** fn;k tk,xkA

tc rd vkidks ;g ijh{k.k ifLrdk [kksyus dks u dgk tk, rc rd u [kksysa A

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"A way to get commissioned"

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2- —i;k /;ku j[ksa fd OMR mÙkj&i=d esa] mfpr LFkku ij] jky uhyh cky dk ijh{k.k ifLrdk vuØe A, B, C ;k D dks] /;ku ls ,o fcuk fdlh pwd ;k folxfr ds Hkjus vkSj dVs) dsus dh ftEesnkjh mEehnokj dh gSA fdlh Hkh idkj dh pwd@folxfr dh fLFkfr esa mÙkj&i=d fujLr dj fn;k tk;sxkA

3- bl ijh{k.k ifLrdk ij lkFk esa fn, x, dk’Bd esa vkidk viuk vuØekad fy[kuk gSA ijh{k.k ifLrdk ij vkSj dNq u fy[kAA

4- bl ijh{k.k ifLrdk esa dy 120 i”ukd ¼i”u½ fn, x, gSA iR;sd i”ukd **fgUnh** vkSj **vaxzsth** nksuksa esa Nik gSA iR;sd i”ukd ds pkj iR;Ùkj ¼mÙkj½ fn, x, gSA buesa ls ,d iR;Ùkj dks pquus] ftls vki mÙkj&i=d ij vafdr djuk pkgrs gSA ;fn vkidk ,slk yxs fd ,d ls vf/kd iR;Ùkj lgh gSa] rks mls iR;Ùkj dk vafdr djsa tks vkidk lokZÙke yxsA iR;sd i”ukd ds fy, doyk **,d gh** iR;Ùkj puuk gSA

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8- vki viu lHkh iR;Rrjksa dk mRrj&i=d esa Hkjus ds ckn rFkk ijh{kk ds lekiu ij **doyk mRrj&i=d v/khf{kd** dk lkSai nsA vkidk viu lkFk ijh{k.k ifLrdk ys tkuk dHkh vuefr gSA

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10- **xyr mRrjksa ds fy, n.M %**

oLrqfu’B i”u&i=k esa mEehnokj }kjk fn, x, xyr mÙkjksa ds fy, n.M fn;k tk,xkA

(i) iR;sd i”u ds fy, pkj odfYir mRrj gSA mEehnokj }kjk iR;sd i”u ds fy, fn, x, ,d xyr mRrj ds fy, i”u gr fu;r fd, x, vadksa dk **,d&frgkbZ** n.M ds :i esa dkVk tk,xkA

(ii) ;fn dkbZ mEehnokj ,d ls vf/kd mRrj nrk gS] rks bl **xyr mÙkj** ekuk tk,xk] ;|fi fn, x, mÙkjksa esa ls ,d mÙkj lgh gksrk gS] fQj Hkh ml i”u ds fy, mi;Drkuqlkj gh mlh rjg dk n.M fn;k tk,xkA

(iii) ;fn mEehnokj }kjk dkbZ i”u gy ugha fd;k tkrk gS vFkkr mEehnokj }kjk mÙkj ugha fn;k tkrk gS] rks ml&i”u ds fy, ***dkbZ n.M ugha*** fn;k tk,xkA

tc rd vkidks ;g ijh{k.k ifLrdk [kksyus dks u dgk tk, rc rd u [kksysa A

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3- bl ijh{k.k ifLrdk ij lkFk esa fn, x, dk’Bd esa vkidk viuk vuØekad fy[kuk gSA ijh{k.k ifLrdk ij vkSj dNq u fy[kAA

4- bl ijh{k.k ifLrdk esa dy 120 i”ukd ¼i”u½ fn, x, gSA iR;sd i”ukd **fgUnh** vkSj **vaxzsth** nksuksa esa Nik gSA iR;sd i”ukd ds pkj iR;Ùkj ¼mÙkj½ fn, x, gSA buesa ls ,d iR;Ùkj dks pquus] ftls vki mÙkj&i=d ij vafdr djuk pkgrs gSA ;fn vkidk ,slk yxs fd ,d ls vf/kd iR;Ùkj lgh gSa] rks mls iR;Ùkj dk vafdr djsa tks vkidk lokZÙke yxsA iR;sd i”ukd ds fy, doyk **,d gh** iR;Ùkj puuk gSA

5- vkidk viu lHkh iR;Rrj vyx ls fn, x, mRrj&i=d ij gh vafdr djuk gSA mRrj&i=d esa fn, x, fun”kksZ dks nf[k,A

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8- vki viu lHkh iR;Rrjksa dk mRrj&i=d esa Hkjus ds ckn rFkk ijh{kk ds lekiu ij **doyk mRrj&i=d v/khf{kd** dk lkSai nsA vkidk viu lkFk ijh{k.k ifLrdk ys tkuk dHkh vuefr gSA

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oLrqfu’B i”u&i=k esa mEehnokj }kjk fn, x, xyr mÙkjksa ds fy, n.M fn;k tk,xkA

(i) iR;sd i”u ds fy, pkj odfYir mRrj gSA mEehnokj }kjk iR;sd i”u ds fy, fn, x, ,d xyr mRrj ds fy, i”u gr fu;r fd, x, vadksa dk **,d&frgkbZ** n.M ds :i esa dkVk tk,xkA

(ii) ;fn dkbZ mEehnokj ,d ls vf/kd mRrj nrk gS] rks bl **xyr mÙkj** ekuk tk,xk] ;|fi fn, x, mÙkjksa esa ls ,d mÙkj lgh gksrk gS] fQj Hkh ml i”u ds fy, mi;Drkuqlkj gh mlh rjg dk n.M fn;k tk,xkA

(iii) ;fn mEehnokj }kjk dkbZ i”u gy ugha fd;k tkrk gS vFkkr mEehnokj }kjk mÙkj ugha fn;k tkrk gS] rks ml&i”u ds fy, ***dkbZ n.M ugha*** fn;k tk,xkA

tc rd vkidks ;g ijh{k.k ifLrdk [kksyus dks u dgk tk, rc rd u [kksysa A

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vuqn”k

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2- —i;k /;ku j[ksa fd OMR mÙkj&i=d esa] mfpr LFkku ij] jky uhyh cky dk ijh{k.k ifLrdk vuØe A, B, C ;k D dks] /;ku ls ,o fcuk fdlh pwd ;k folxfr ds Hkjus vkSj dVs) dsus dh ftEesnkjh mEehnokj dh gSA fdlh Hkh idkj dh pwd@folxfr dh fLFkfr esa mÙkj&i=d fujLr dj fn;k tk;sxkA

3- bl ijh{k.k ifLrdk ij lkFk esa fn, x, dk’Bd esa vkidk viuk vuØekad fy[kuk gSA ijh{k.k ifLrdk ij vkSj dNq u fy[kAA

4- bl ijh{k.k ifLrdk esa dy 120 i”ukd ¼i”u½ fn, x, gSA iR;sd i”ukd **fgUnh** vkSj **vaxzsth** nksuksa esa Nik gSA iR;sd i”ukd ds pkj iR;Ùkj ¼mÙkj½ fn, x, gSA buesa ls ,d iR;Ùkj dks pquus] ftls vki mÙkj&i=d ij vafdr djuk pkgrs gSA ;fn vkidk ,slk yxs fd ,d ls vf/kd iR;Ùkj lgh gSa] rks mls iR;Ùkj dk vafdr djsa tks vkidk lokZÙke yxsA iR;sd i”ukd ds fy, doyk **,d gh** iR;Ùkj puuk gSA

5- vkidk viu lHkh iR;Rrj vyx ls fn, x, mRrj&i=d ij gh vafdr djuk gSA mRrj&i=d esa fn, x, fun”kksZ dks nf[k,A

6- lHkh i”uksa”kksZ ds vad leku gSaA

7- bl ckr igys fd vki ijh{k.k ifLrdk ds fofHkUu i”uksa”kksZ ds iR;Rrj mRrj&i=d ij vafdr djus “k: djsa] vkidk io”k iek.k&i= ds lkFk if’kr vun”kksZ ds vuqlkj dNq fooj.k mRrj&i=d esa nsuk gSA

8- vki viu lHkh iR;Rrjksa dk mRrj&i=d esa Hkjus ds ckn rFkk ijh{kk ds lekiu ij **doyk mRrj&i=d v/khf{kd** dk lkSai nsA vkidk viu lkFk ijh{k.k ifLrdk ys tkuk dHkh vuefr gSA

9- dPps dke ds fy, i=d ijh{k.k ifLrdk ds vUnj esa lyXu gSA

10- **xyr mRrjksa ds fy, n.M %**

oLrqfu’B i”u&i=k esa mEehnokj }kjk fn, x, xyr mÙkjksa ds fy, n.M fn;k tk,xkA

(i) iR;sd i”u ds fy, pkj odfYir mRrj gSA mEehnokj }kjk iR;sd i”u ds fy, fn, x, ,d xyr mRrj ds fy, i”u gr fu;r fd, x, vadksa dk **,d&frgkbZ** n.M ds :i esa dkVk tk,xkA

(ii) ;fn dkbZ mEehnokj ,d ls vf/kd mRrj nrk gS] rks bl **xyr mÙkj** ekuk tk,xk] ;|fi fn, x, mÙkjksa esa ls ,d mÙkj lgh gksrk gS] fQj Hkh ml i”u ds fy, mi;Drkuqlkj gh mlh rjg dk n.M fn;k tk,xkA

(iii) ;fn mEehnokj }kjk dkbZ i”u gy ugha fd;k tkrk gS vFkkr mEehnokj }kjk mÙkj ugha fn;k tkrk gS] rks ml&i”u ds fy, ***dkbZ n.M ugha*** fn;k tk,xkA

tc rd vkidks ;g ijh{k.k ifLrdk [kksyus dks u dgk tk, rc rd u [kksysa A

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(i) iR;sd i”u ds fy, pkj odfYir mRrj gSA mEehnokj }kjk iR;sd i”u ds fy, fn, x, ,d xyr mRrj ds fy, i”u gr fu;r fd, x, vadksa dk **,d&frgkbZ** n.M ds :i esa dkVk tk,xkA

(ii) ;fn dkbZ mEehnokj ,d ls vf/kd mRrj nrk gS] rks bl **xyr mÙkj** ekuk tk,xk] ;|fi fn, x, mÙkjksa esa ls ,d mÙkj lgh gksrk gS] fQj Hkh ml i”u ds fy, mi;Drkuqlkj gh mlh rjg dk n.M fn;k tk,xkA

(iii) ;fn mEehnokj }kjk dkbZ i”u gy ugha fd;k tkrk gS vFkkr mEehnokj }kjk mÙkj ugha fn;k tkrk gS] rks ml&i”u ds fy, ***dkbZ n.M ugha*** fn;k tk,xkA

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5- vkidk viu lHkh iR;Rrj vyx ls fn, x, mRrj&i=d ij gh vafdr djuk gSA mRrj&i=d esa fn, x, fun”kksZ dks nf[k,A

6- lHkh i”uksa”kksZ ds vad leku gSaA

7- bl ckr igys fd vki ijh{k.k ifLrdk ds fofHkUu i”uksa”kksZ ds iR;Rrj mRrj&i=d ij vafdr djus “k: djsa] vkidk io”k iek.k&i= ds lkFk if’kr vun”kksZ ds vuqlkj dNq fooj.k mRrj&i=d esa nsuk gSA

8- vki viu lHkh iR;Rrjksa dk mRrj&i=d esa Hkjus ds ckn rFkk ijh{kk ds lekiu ij **doyk mRrj&i=d v/khf{kd** dk lkSai nsA vkidk viu lkFk ijh{k.k ifLrdk ys tkuk dHkh vuefr gSA

9- dPps dke ds fy, i=d ijh{k.k ifLrdk ds vUnj esa lyXu gSA

10- **xyr mRrjksa ds fy, n.M %**

oLrqfu’B i”u&i=k esa mEehnokj }kjk fn, x, xyr mÙkjksa ds fy, n.M fn;k tk,xkA

(i) iR;sd i”u ds fy, pkj odfYir mRrj gSA mEehnokj }kjk iR;sd i”u ds fy, fn, x, ,d xyr mRrj ds fy, i”u gr fu;r fd, x, vadksa dk **,d&frgkbZ** n.M ds :i esa dkVk tk,xkA

(ii) ;fn dkbZ mEehnokj ,d ls vf/kd mRrj nrk gS] rks bl **xyr mÙkj** ekuk tk,xk] ;|fi fn, x, mÙkjksa esa ls ,d mÙkj lgh gksrk gS] fQj Hkh ml i”u ds fy, mi;Drkuqlkj gh mlh rjg dk n.M fn;k tk,xkA

(iii) ;fn mEehnokj }kjk dkbZ i”u gy ugha fd;k tkrk gS vFkkr mEehnokj }kjk mÙkj ugha fn;k tkrk gS] rks ml&i”u ds fy, ***dkbZ n.M ugha*** fn;k tk,xkA

tc rd vkidks ;g ijh{k.k ifLrdk [kksyus dks u dgk tk, rc rd u [kksysa A

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MAJOR KALSHI CLASSES PVT. LTD.

"A way to get commissioned"

MOCK TEST - NDA/NA

ijh{k.k ifLrdk

xf.kr

le; % nks ?k.Vs vkj rhl feuV | i.kkd % 300

vuqn”k

1- ijh{k.k ikjEHk gksus ds rjUr ckn] vki bl ijh{k.k ifLrdk dh iMrky dks vo”; dj ysa fd bl esa dkbZ fcUnq NwVk] QVk ;k NVk gqvk i’B vFkok i”ukd vkfn u gksA ;fn ,slk gks rks bl lgh ijh{k.k ifLrdk ls cny yhft,A

2- —i;k /;ku j[ksa fd OMR mÙkj&i=d esa] mfpr LFkku ij] jky uhyh cky dk ijh{k.k ifLrdk vuØe A, B, C ;k D dks] /;ku ls ,o fcuk fdlh pwd ;k folxfr ds Hkjus vkSj dVs) dsus dh ftEesnkjh mEehnokj dh gSA fdlh Hkh idkj dh pwd@folxfr dh fLFkfr esa mÙkj&i=d fujLr dj fn;k tk;sxkA

3- bl ijh{k.k ifLrdk ij lkFk esa fn, x, dk’Bd esa vkidk viuk vuØekad fy[kuk gSA ijh{k.k ifLrdk ij vkSj dNq u fy[kAA

4- bl ijh{k.k ifLrdk esa dy 120 i”ukd ¼i”u½ fn, x, gSA iR;sd i”ukd **fgUnh** vkSj **vaxzsth** nksuksa esa Nik gSA iR;sd i”ukd ds pkj iR;Ùkj ¼mÙkj½ fn, x, gSA buesa ls ,d iR;Ùkj dks pquus] ftls vki mÙkj&i=d ij vafdr djuk pkgrs gSA ;fn vkidk ,slk yxs fd ,d ls vf/kd iR;Ùkj lgh gSa] rks mls iR;Ùkj dk vafdr djsa tks vkidk lokZÙke yxsA iR;sd i”ukd ds fy, doyk **,d gh** iR;Ùkj puuk gSA

5- vkidk viu lHkh iR;Rrj vyx ls fn, x, mRrj&i=d ij gh vafdr djuk gSA mRrj&i=d esa fn, x, fun”kksZ dks nf[k,A

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8- vki viu lHkh iR;Rrjksa dk mRrj&i=d esa Hkjus ds ckn rFkk ijh{kk ds lekiu ij **doyk mRrj&i=d v/khf{kd** dk lkSai nsA vkidk viu lkFk ijh{k.k ifLrdk ys tkuk dHkh vuefr gSA

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10- **xyr mRrjksa ds fy, n.M %**

oLrqfu’B i”u&i=k esa mEehnokj }kjk fn, x, xyr mÙkjksa ds fy, n.M fn;k tk,xkA

(i) iR;sd i”u ds fy, pkj odfYir mRrj gSA mEehnokj }kjk iR;sd i”u ds fy, fn, x, ,d xyr mRrj ds fy, i”u gr fu;r fd, x, vadksa dk **,d&frgkbZ** n.M ds :i esa dkVk tk,xkA

(ii) ;fn dkbZ mEehnokj ,d ls vf/kd mRrj nrk gS] rks bl **xyr mÙkj** ekuk tk,xk] ;|fi fn, x, mÙkjksa esa ls ,d mÙkj lgh gksrk gS] fQj Hkh ml i”u ds fy, mi;Drkuqlkj gh mlh rjg dk n.M fn;k tk,xkA

(iii) ;fn mEehnokj }kjk dkbZ i”u gy ugha fd;k tkrk gS vFkkr mEehnokj }kjk mÙkj ugha fn;k tkrk gS] rks ml&i”u ds fy, ***dkbZ n.M ugha*** fn;k tk,xkA

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"A way to get commissioned"

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xf.kr

le; % nks ?k.Vs vkj rhl feuV | i.kkd % 300

vuqn”k

1- ijh{k.k ikjEHk gksus ds rjUr ckn] vki bl ijh{k.k ifLrdk dh iMrky dks vo”; dj ysa fd bl esa dkbZ fcUnq NwVk] QVk ;k NVk gqvk i’B vFkok i”ukd vkfn u gksA ;fn ,slk gks rks bl lgh ijh{k.k ifLrdk ls cny yhft,A

2- —i;k /;ku j[ksa fd OMR mÙkj&i=d esa] mfpr LFkku ij] jky uhyh cky dk ijh{k.k ifLrdk vuØe A, B, C ;k D dks] /;ku ls ,o fcuk fdlh pwd ;k folxfr ds Hkjus vkSj dVs) dsus dh ftEesnkjh mEehnokj dh gSA fdlh Hkh idkj dh pwd@folxfr dh fLFkfr esa mÙkj&i=d fujLr dj fn;k tk;sxkA

3- bl ijh{k.k ifLrdk ij lkFk esa fn, x, dk’Bd esa vkidk viuk vuØekad fy[kuk gSA ijh{k.k ifLrdk ij vkSj dNq u fy[kAA

4- bl ijh{k.k ifLrdk esa dy 120 i”ukd ¼i”u½ fn, x, gSA iR;sd i”ukd **fgUnh** vkSj **vaxzsth** nksuksa esa Nik gSA iR;sd i”ukd ds pkj iR;Ùkj ¼mÙkj½ fn, x, gSA buesa ls ,d iR;Ùkj dks pquus] ftls vki mÙkj&i=d ij vafdr djuk pkgrs gSA ;fn vkidk ,slk yxs fd ,d ls vf/kd iR;Ùkj lgh gSa] rks mls iR;Ùkj dk vafdr djsa tks vkidk lokZÙke yxsA iR;sd i”ukd ds fy, doyk **,d gh** iR;Ùkj puuk gSA

5- vkidk viu lHkh iR;Rrj vyx ls fn, x, mRrj&i=d ij gh vafdr djuk gSA mRrj&i=d esa fn, x, fun”kksZ dks nf[k,A

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7- bl ckr igys fd vki ijh{k.k ifLrdk ds fofHkUu i”uksa”kksZ ds iR;Rrj mRrj&i=d ij vafdr djus “k: djsa] vkidk io”k iek.k&i= ds lkFk if’kr vun”kksZ ds vuqlkj dNq fooj.k mRrj&i=d esa nsuk gSA

8- vki viu lHkh iR;Rrjksa dk mRrj&i=d esa Hkjus ds ckn rFkk ijh{kk ds lekiu ij **doyk mRrj&i=d v/khf{kd** dk lkSai nsA vkidk viu lkFk ijh{k.k ifLrdk ys tkuk dHkh vuefr gSA

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oLrqfu’B i”u&i=k esa mEehnokj }kjk fn, x, xyr mÙkjksa ds fy, n.M fn;k tk,xkA

(i) iR;sd i”u ds fy, pkj odfYir mRrj gSA mEehnokj }kjk iR;sd i”u ds fy, fn, x, ,d xyr mRrj ds fy, i”u gr fu;r fd, x, vadksa dk **,d&frgkbZ** n.M ds :i esa dkVk tk,xkA

(ii) ;fn dkbZ mEehnokj ,d ls vf/kd mRrj nrk gS] rks bl **xyr mÙkj** ekuk tk,xk] ;|fi fn, x, mÙkjksa esa ls ,d mÙkj lgh gksrk gS] fQj Hkh ml i”u ds fy, mi;Drkuqlkj gh mlh rjg dk n.M fn;k tk,xkA

(iii) ;fn mEehnokj }kjk dkbZ i”u gy ugha fd;k tkrk gS vFkkr mEehnokj }kjk mÙkj ugha fn;k tkrk gS] rks ml&i”u ds fy, ***dkbZ n.M ugha*** fn;k tk,xkA

tc rd vkidks ;g ijh{k.k ifLrdk [kksyus dks u dgk tk, rc rd u [kksysa A

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ijh{k.k ifLrdk

xf.kr

le; % nks ?k.Vs vkj rhl feuV | i.kkd % 300

vuqn”k

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2- —i;k /;ku j[ksa fd OMR mÙkj&i=d esa] mfpr LFkku ij] jky uhyh cky dk ijh{k.k ifLrdk vuØe A, B, C ;k D dks] /;ku ls ,o fcuk fdlh pwd ;k folxfr ds Hkjus vkSj dVs) dsus dh ftEesnkjh mEehnokj dh gSA fdlh Hkh idkj dh pwd@folxfr dh fLFkfr esa mÙkj&i=d fujLr dj fn;k tk;sxkA

3- bl ijh{k.k ifLrdk ij lkFk esa fn, x, dk’Bd esa vkidk viuk vuØekad fy[kuk gSA ijh{k.k ifLrdk ij vkSj dNq u fy[kAA

4- bl ijh{k.k ifLrdk esa dy 120 i”ukd ¼i”u½ fn, x, gSA iR;sd i”ukd **fgUnh** vkSj **vaxzsth** nksuksa esa Nik gSA iR;sd i”ukd ds pkj iR;Ùkj ¼mÙkj½ fn, x, gSA buesa ls ,d iR;Ùkj dks pquus] ftls vki mÙkj&i=d ij vafdr djuk pkgrs gSA ;fn vkidk ,slk yxs fd ,d ls vf/kd iR;Ùkj lgh gSa] rks mls iR;Ùkj dk vafdr djsa tks vkidk lokZÙke yxsA iR;sd i”ukd ds fy, doyk **,d gh** iR;Ùkj puuk gSA

5- vkidk viu lHkh iR;Rrj vyx ls fn, x, mRrj&i=d ij gh vafdr djuk gSA mRrj&i=d esa fn, x, fun”kksZ dks nf[k,A

6- lHkh i”uksa”kksZ ds vad leku gSaA

7- bl ckr igys fd vki ijh{k.k ifLrdk ds fofHkUu i”uksa”kksZ ds iR;Rrj mRrj&i=d ij vafdr djus “k: djsa] vkidk io”k iek.k&i= ds lkFk if’kr vun”kksZ ds vuqlkj dNq fooj.k mRrj&i=d esa nsuk gSA

8- vki viu lHkh iR;Rrjksa dk mRrj&i=d esa Hkjus ds ckn rFkk ijh{kk ds lekiu ij **doyk mRrj&i=d v/khf{kd** dk lkSai nsA vkidk viu lkFk ijh{k.k ifLrdk ys tkuk dHkh vuefr gSA

9- dPps dke ds fy, i=d ijh{k.k ifLrdk ds vUnj esa lyXu gSA

10- **xyr mRrjksa ds fy, n.M %**

oLrqfu’B i”u&i=k esa mEehnokj }kjk fn, x, xyr mÙkjksa ds fy, n.M fn;k tk,xkA

(i) iR;sd i”u ds fy, pkj odfYir mRrj gSA mEehnokj }kjk iR;sd i”u ds fy, fn, x, ,d xyr mRrj ds fy, i”u gr fu;r fd, x, vadksa dk **,d&frgkbZ** n.M ds :i esa dkVk tk,xkA

(ii) ;fn dkbZ mEehnokj ,d ls vf/kd mRrj nrk gS] rks bl **xyr mÙkj** ekuk tk,xk] ;|fi fn, x, mÙkjksa esa ls ,d mÙkj lgh gksrk gS] fQj Hkh ml i”u ds fy, mi;Drkuqlkj gh mlh rjg dk n.M fn;k tk,xkA

(iii) ;fn mEehnokj }kjk dkbZ i”u gy ugha fd;k tkrk gS vFkkr mEehnokj }kjk mÙkj ugha fn;k tkrk gS] rks ml&i”u ds fy, ***dkbZ n.M ugha*** fn;k tk,xkA

tc rd vkidks ;g ijh{k.k ifLrdk [kksyus dks u dgk tk, rc rd u [kksysa A

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ijh{k.k ifLrdk

xf.kr

le; % nks ?k.Vs vkj rhl feuV | i.kkd % 300

vuqn”k

1- ijh{k.k ikjEHk gksus ds rjUr ckn] vki bl ijh{k.k ifLrdk dh iMrky dks vo”; dj ysa fd bl esa dkbZ fcUnq NwVk] QVk ;k NVk gqvk i’B vFkok i”ukd vkfn u gksA ;fn ,slk gks rks bl lgh ijh{k.k ifLrdk ls cny yhft,A

2- —i;k /;ku j[ksa fd OMR mÙkj&i=d esa] mfpr LFkku ij] jky uhyh cky dk ijh{k.k ifLrdk vuØe A, B, C ;k D dks] /;ku ls ,o fcuk fdlh pwd ;k folxfr ds Hkjus vkSj dVs) dsus dh ftEesnkjh mEehnokj dh gSA fdlh Hkh idkj dh pwd@folxfr dh fLFkfr esa mÙkj&i=d fujLr dj fn;k tk;sxkA

3- bl ijh{k.k ifLrdk ij lkFk esa fn, x, dk’Bd esa vkidk viuk vuØekad fy[kuk gSA ijh{k.k ifLrdk ij vkSj dNq u fy[kAA

4- bl ijh{k.k ifLrdk esa dy 120 i”ukd ¼i”u½ fn, x, gSA iR;sd i”ukd **fgUnh** vkSj **vaxzsth** nksuksa esa Nik gSA iR;sd i”ukd ds pkj iR;Ùkj ¼mÙkj½ fn, x, gSA buesa ls ,d iR;Ùkj dks pquus] ftls vki mÙkj&i=d ij vafdr djuk pkgrs gSA ;fn vkidk ,slk yxs fd ,d ls vf/kd iR;Ùkj lgh gSa] rks mls iR;Ùkj dk vafdr djsa tks vkidk lokZÙke yxsA iR;sd i”ukd ds fy, doyk **,d gh** iR;Ùkj puuk gSA

5- vkidk viu lHkh iR;Rrj vyx ls fn, x, mRrj&i=d ij gh vafdr djuk gSA mRrj&i=d esa fn, x, fun”kksZ dks nf[k,A

6- lHkh i”uksa”kksZ ds vad leku gSaA

7- bl ckr igys fd vki ijh{k.k ifLrdk ds fofHkUu i”uksa”kksZ ds iR;Rrj mRrj&i=d ij vafdr djus “k: djsa] vkidk io”k iek.k&i= ds lkFk if’kr vun”kksZ ds vuqlkj dNq fooj.k mRrj&i=d esa nsuk gSA

8- vki viu lHkh iR;Rrjksa dk mRrj&i=d esa Hkjus ds ckn rFkk ijh{kk ds lekiu ij **doyk mRrj&i=d v/khf{kd** dk lkSai nsA vkidk viu lkFk ijh{k.k ifLrdk ys tkuk dHkh vuefr gSA

9- dPps dke ds fy, i=d ijh{k.k ifLrdk ds vUnj esa lyXu gSA

10- **xyr mRrjksa ds fy, n.M %**

oLrqfu’B i”u&i=k esa mEehnokj }kjk fn, x, xyr mÙkjksa ds fy, n.M fn;k tk,xkA

(i) iR;sd i”u ds fy, pkj odfYir mRrj gSA mEehnokj }kjk iR;sd i”u ds fy, fn, x, ,d xyr mRrj ds fy, i”u gr fu;r fd, x, vadksa dk **,d&frgkbZ** n.M ds :i esa dkVk tk,xkA

(ii) ;fn dkbZ mEehnokj ,d ls vf/kd mRrj nrk gS] rks bl **xyr mÙkj** ekuk tk,xk] ;|fi fn, x, mÙkjksa esa ls ,d mÙkj lgh gksrk gS] fQj Hkh ml i”u ds fy, mi;Drkuqlkj gh mlh rjg dk n.M fn;k tk,xkA

(iii) ;fn mEehnokj }kjk dkbZ i”u gy ugha fd;k tkrk gS vFkkr mEehnokj }kjk mÙkj ugha fn;k tkrk gS] rks ml&i”u ds fy, ***dkbZ n.M ugha*** fn;k tk,xkA

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le; % nks ?k.Vs vkj rhl feuV | i.kkd % 300

vuqn”k

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2- —i;k /;ku j[ksa fd OMR mÙkj&i=d esa] mfpr LFkku ij] jky uhyh cky dk ijh{k.k ifLrdk vuØe A, B, C ;k D dks] /;ku ls ,o fcuk fdlh pwd ;k folxfr ds Hkjus vkSj dVs) dsus dh ftEesnkjh mEehnokj dh gSA fdlh Hkh idkj dh pwd@folxfr dh fLFkfr esa mÙkj&i=d fujLr dj fn;k tk;sxkA

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5- vkidk viu lHkh iR;Rrj vyx ls fn, x, mRrj&i=d ij gh vafdr djuk gSA mRrj&i=d esa fn, x, fun”kksZ dks nf[k,A

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7- bl ckr igys fd vki ijh{k.k ifLrdk ds fofHkUu i”uksa”kksZ ds iR;Rrj mRrj&i=d ij vafdr djus “k: djsa] vkidk io”k iek.k&i= ds lkFk if’kr vun”kksZ ds vuqlkj dNq fooj.k mRrj&i=d esa nsuk gSA

8- vki viu lHkh iR;Rrjksa dk mRrj&i=d esa Hkjus ds ckn rFkk ijh{kk ds lekiu ij **doyk mRrj&i=d v/khf{kd** dk lkSai nsA vkidk viu lkFk ijh{k.k ifLrdk ys tkuk dHkh vuefr gSA

9- dPps dke ds fy, i=d ijh{k.k ifLrdk ds vUnj esa lyXu gSA

10- **xyr mRrjksa ds fy, n.M %**

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(i) iR;sd i”u ds fy, pkj odfYir mRrj gSA mEehnokj }kjk iR;sd i”u ds fy, fn, x, ,d xyr mRrj ds fy, i”u gr fu;r fd, x, vadksa dk **,d&frgkbZ** n.M ds :i esa dkVk tk,xkA

(ii) ;fn dkbZ mEehnokj ,d ls vf/kd mRrj nrk gS] rks bl **xyr mÙkj** ekuk tk,xk] ;|fi fn, x, mÙkjksa esa ls ,d mÙkj lgh gksrk gS] fQj Hkh ml i”u ds fy, mi;Drkuqlkj gh mlh rjg dk n.M fn;k tk,xkA

(iii) ;fn mEehnokj }kjk dkbZ i”u gy ugha fd;k tkrk gS vFkkr mEehnokj }kjk mÙkj ugha fn;k tkrk gS] rks ml&i”u ds fy, ***dkbZ n.M ugha*** fn;k tk,xkA

tc rd vkidks ;g ijh{k.k ifLrdk [kksyus dks u dgk tk, rc rd u [kksysa A

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MAJOR KALSHI CLASSES PVT. LTD.
Allahabad, U.P.

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MOCK TEST - NDA/NA

ijh{k.k ifLrdk

xf.kr

le; % nks ?k.Vs vkj rhl feuV | i.kkd % 300

vuqn”k

1- ijh{k.k ikjEHk gksus ds rjUr ckn] vki bl ijh{k.k ifLrdk dh iMrky dks vo”; dj ysa fd bl esa dkbZ fcUnq NwVk] QVk ;k NVk gqvk i’B vFkok i”ukd vkfn u gksA ;fn ,slk gks rks bl lgh ijh{k.k ifLrdk ls cny yhft,A

2- —i;k /;ku j[ksa fd OMR mÙkj&i=d esa] mfpr LFkku ij] jky uhyh cky dk ijh{k.k ifLrdk vuØe A, B, C ;k D dks] /;ku ls ,o fcuk fdlh pwd ;k folxfr ds Hkjus vkSj dVs) dsus dh ftEesnkjh mEehnokj dh gSA fdlh Hkh idkj dh pwd@folxfr dh fLFkfr esa mÙkj&i=d fujLr dj fn;k tk;sxkA

3- bl ijh{k.k ifLrdk ij lkFk esa fn, x, dk’Bd esa vkidk viuk vuØekad fy[kuk gSA ijh{k.k ifLrdk ij vkSj dNq u fy[kAA

4- bl ijh{k.k ifLrdk esa dy 120 i”ukd ¼i”u½ fn, x, gSA iR;sd i”ukd **fgUnh** vkSj **vaxzsth** nksuksa esa Nik gSA iR;sd i”ukd ds pkj iR;Ùkj ¼mÙkj½ fn, x, gSA buesa ls ,d iR;Ùkj dks pquus] ftls vki mÙkj&i=d ij vafdr djuk pkgrs gSA ;fn vkidk ,slk yxs fd ,d ls vf/kd iR;Ùkj lgh gSa] rks mls iR;Ùkj dk vafdr djsa tks vkidk lokZÙke yxsA iR;sd i”ukd ds fy, doyk **,d gh** iR;Ùkj puuk gSA

5- vkidk viu lHkh iR;Rrj vyx ls fn, x, mRrj&i=d ij gh vafdr djuk gSA mRrj&i=d esa fn, x, fun”kksZ dks nf[k,A

6- lHkh i”uksa”kksZ ds vad leku gSaA

7- bl ckr igys fd vki ijh{k.k ifLrdk ds fofHkUu i”uksa”kksZ ds iR;Rrj mRrj&i=d ij vafdr djus “k: djsa] vkidk io”k iek.k&i= ds lkFk if’kr vun”kksZ ds vuqlkj dNq fooj.k mRrj&i=d esa nsuk gSA

8- vki viu lHkh iR;Rrjksa dk mRrj&i=d esa Hkjus ds ckn rFkk ijh{kk ds lekiu ij **doyk mRrj&i=d v/khf{kd** dk lkSai nsA vkidk viu lkFk ijh{k.k ifLrdk ys tkuk dHkh vuefr gSA

9- dPps dke ds fy, i=d ijh{k.k ifLrdk ds vUnj esa lyXu gSA

10- **xyr mRrjksa ds fy, n.M %**

oLrqfu’B i”u&i=k esa mEehnokj }kjk fn, x, xyr mÙkjksa ds fy, n.M fn;k tk,xkA

(i) iR;sd i”u ds fy, pkj odfYir mRrj gSA mEehnokj }kjk iR;sd i”u ds fy, fn, x, ,d xyr mRrj ds fy, i”u gr fu;r fd, x, vadksa dk **,d&frgkbZ** n.M ds :i esa dkVk tk,xkA

(ii) ;fn dkbZ mEehnokj ,d ls vf/kd mRrj nrk gS] rks bl **xyr mÙkj** ekuk tk,xk] ;|fi fn, x, mÙkjksa esa ls ,d mÙkj lgh gksrk gS] fQj Hkh ml i”u ds fy, mi;Drkuqlkj gh mlh rjg dk n.M fn;k tk,xkA

(iii) ;fn mEehnokj }kjk dkbZ i”u gy ugha fd;k tkrk gS vFkkr mEehnokj }kjk mÙkj ugha fn;k tkrk gS] rks ml&i”u ds fy, ***dkbZ n.M ugha*** fn;k tk,xkA

tc rd vkidks ;g ijh{k.k ifLrdk [kksyus dks u dgk tk, rc rd u [kksysa A

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ijh{k.k ifLrdk

xf.kr

le; % nks ?k.Vs vkj rhl feuV | i.kkd % 300

vuqn”k

1- ijh{k.k ikjEHk gksus ds rjUr ckn] vki bl ijh{k.k ifLrdk dh iMrky dks vo”; dj ysa fd bl esa dkbZ fcUnq NwVk] QVk ;k NVk gqvk i’B vFkok i”ukd vkfn u gksA ;fn ,slk gks rks bl lgh ijh{k.k ifLrdk ls cny yhft,A

2- —i;k /;ku j[ksa fd OMR mÙkj&i=d esa] mfpr LFkku ij] jky uhyh cky dk ijh{k.k ifLrdk vuØe A, B, C ;k D dks] /;ku ls ,o fcuk fdlh pwd ;k folxfr ds Hkjus vkSj dVs) dsus dh ftEesnkjh mEehnokj dh gSA fdlh Hkh idkj dh pwd@folxfr dh fLFkfr esa mÙkj&i=d fujLr dj fn;k tk;sxkA

3- bl ijh{k.k ifLrdk ij lkFk esa fn, x, dk’Bd esa vkidk viuk vuØekad fy[kuk gSA ijh{k.k ifLrdk ij vkSj dNq u fy[kAA

4- bl ijh{k.k ifLrdk esa dy 120 i”ukd ¼i”u½ fn, x, gSA iR;sd i”ukd **fgUnh** vkSj **vaxzsth** nksuksa esa Nik gSA iR;sd i”ukd ds pkj iR;Ùkj ¼mÙkj½ fn, x, gSA buesa ls ,d iR;Ùkj dks pquus] ftls vki mÙkj&i=d ij vafdr djuk pkgrs gSA ;fn vkidk ,slk yxs fd ,d ls vf/kd iR;Ùkj lgh gSa] rks mls iR;Ùkj dk vafdr djsa tks vkidk lokZÙke yxsA iR;sd i”ukd ds fy, doyk **,d gh** iR;Ùkj puuk gSA

5- vkidk viu lHkh iR;Rrj vyx ls fn, x, mRrj&i=d ij gh vafdr djuk gSA mRrj&i=d esa fn, x, fun”kksZ dks nf[k,A

6- lHkh i”uksa”kksZ ds vad leku gSaA

7- bl ckr igys fd vki ijh{k.k ifLrdk ds fofHkUu i”uksa”kksZ ds iR;Rrj mRrj&i=d ij vafdr djus “k: djsa] vkidk io”k iek.k&i= ds lkFk if’kr vun”kksZ ds vuqlkj dNq fooj.k mRrj&i=d esa nsuk gSA

8- vki viu lHkh iR;Rrjksa dk mRrj&i=d esa Hkjus ds ckn rFkk ijh{kk ds lekiu ij **doyk mRrj&i=d v/khf{kd** dk lkSai nsA vkidk viu lkFk ijh{k.k ifLrdk ys tkuk dHkh vuefr gSA

9- dPps dke ds fy, i=d ijh{k.k ifLrdk ds vUnj esa lyXu gSA

10- **xyr mRrjksa ds fy, n.M %**

oLrqfu’B i”u&i=k esa mEehnokj }kjk fn, x, xyr mÙkjksa ds fy, n.M fn;k tk,xkA

(i) iR;sd i”u ds fy, pkj odfYir mRrj gSA mEehnokj }kjk iR;sd i”u ds fy, fn, x, ,d xyr mRrj ds fy, i”u gr fu;r fd, x, vadksa dk **,d&frgkbZ** n.M ds :i esa dkVk tk,xkA

(ii) ;fn dkbZ mEehnokj ,d ls vf/kd mRrj nrk gS] rks bl **xyr mÙkj** ekuk tk,xk] ;|fi fn, x, mÙkjksa esa ls ,d mÙkj lgh gksrk gS] fQj Hkh ml i”u ds fy, mi;Drkuqlkj gh mlh rjg dk n.M fn;k tk,xkA

(iii) ;fn mEehnokj }kjk dkbZ i”u gy ugha fd;k tkrk gS vFkkr mEehnokj }kjk mÙkj ugha fn;k tkrk gS] rks ml&i”u ds fy, ***dkbZ n.M ugha*** fn;k tk,xkA

tc rd vkidks ;g ijh{k.k ifLrdk [kksyus dks u dgk tk, rc rd u [kksysa A

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