(GCF-2,3,4,5,6, VCF-1,2, VDCF-1,2 & SCF-1,2)

DATE: 15.10.2021 MAXIMUM MARKS: 100 TIMING: 3 Hours

BUSINESS MATHEMATICS, REASONING & STATISTICS

1. Ans. c

Explanation:

= log(1+2+3) = log6

= log(1X2X3)

= log1+log2+log3

2. Ans. a

Explanation:

$\frac{A}{B} = \frac{2}{3}, \frac{B}{C} = \frac{1}{4}$

$A:B:C = 2:3:12$

$A\text{'s share} = Rs.\ 510 \times \frac{2}{17} = Rs.\ 60$

3. Ans. d

Explanation:

वर्तमान मूल्य

$= A(1+i)^{-n} = 10000/(1+0.025)^4$

$= 10000/(1.025)^4$

$= 10000/(1.1038)$

$= Rs.9059.50$

4. Ans. a

Explanation:

यहाँ $A(n, i) = 2000,\ i = \frac{6}{100 \times 12} = 0.005$, $n = 24$

माना प्रत्येक महीने के अन्त में A रूपये जमा कराये जाते हैं।

∵ वार्षिकी का भावी मूल्य : $A(n, i) = A$

$\left[\frac{(1+i)^n - 1}{i}\right] \Rightarrow 2000 = A\left[\frac{(1+0.005)^{24} - 1}{0.005}\right] = A\left[\frac{(1.005)^{24} - 1}{0.005}\right]$

$\Rightarrow A = \frac{2000 \times 0.005}{(1.005)^{24} - 1}$

$A = \frac{10}{1.1272 - 1} = \frac{10}{0.1272} = 78.61$ रूपयें

5. Ans. b

Explanation:

$SI = \frac{prt}{100}$

$\frac{3}{8}P = \frac{p \times r \times 25}{400}$

r = 6%

6. Ans. d
Explanation:
अभिष्ट तरीकों की संख्या = 4!×3! = 144

7. Ans. c
Explanation:
कुल रेखाएं बनायी जा सकती है। 10_{C_2}
संरेखीय होने के कारण 7_{C_2} रेखाएं नहीं बनायी जा सकती है।
अत शेष $\Rightarrow 10_{C_2} - 7_{C_2} + 1$
$\Rightarrow 25$

8. Ans. c

यहाँ $\frac{(243)^{\frac{n}{5}} . 3^{2n+1}}{9^n \times 3^{n-1}} = \frac{3^{5 \times \frac{n}{5}} \times 3^{2n+1}}{3^{2n} \times 3^{n-1}} = \frac{3^{\left(5 \times \frac{n}{5}\right)} \times 3^{2n+1}}{3^{2n} \times 3^{n-1}} = \frac{3^n \times 3^{2n+1}}{3^{2n} \times 3^{n-1}}$

$= \frac{3^{n+(2n+1)}}{3^{2n+n-1}} = \frac{3^{(3n+1)}}{3^{(3n-1)}} = 3^{(3n+1)-(3n-1)} = 3^2 = 9.$

9. Ans. b
Explanation:
माना कि तृतीय समानुपाती T हो तो
$x^2 - y^2, x - y, T$
$x^2 - y^2 : x - y :: x - y : T$
$(x - y)^2 = (x^2 - y^2) \times T$
$\frac{(x - y)^2}{x^2 - y^2} = T$
$\frac{x - y}{x + y} = T$

10. Ans. c
Explanation:
$x + \frac{1}{x} = \sqrt{2}$ (वर्ग करने पर)
$\left(x + \frac{1}{x}\right)^2 = \sqrt{2}^{\,2}$
$x^2 + 2 + \frac{1}{x^2} = 2$
$x^2 + \frac{1}{x^2} = 0$

11. Ans. b
Explanation:
मूल –3, 1, 2
घटक x + 3, x – 1, x – 2
अतः समीकरण (x + 3) (x – 1) (x – 2) = 0
अतः $x^3 - 7x + 6 = 0$

12. Ans. C
Explanation:
Let the total Capital be Rs. X
Then $\left(\frac{X}{3} \times \frac{7}{100} \times 1\right) + \left(\frac{X}{4} \times \frac{8}{100} \times 1\right) + \left(\frac{5X}{12} \times \frac{10}{100} \times 1\right) = 561$
X = 6600

13. Ans. a
Explanation:

$$A = \frac{R}{r}[(1+r)^n - 1]$$

$$= \frac{6000}{0.09}[(1+0.09)^8 - 1]$$

= Rs. 66170.84

14. Ans. a
Explanation:

पहली बार
A = 3x
P = x
n = 6

$$\therefore 3x = x\left[1 + \frac{r}{100}\right]^6$$

$$3 = \left[1 + \frac{r}{100}\right]^6$$

दूसरी बार
$A = 27x$
$P = x$
n = ?

$$27x = x\left[1 + \frac{r}{100}\right]^n$$

$$(3)^3 = \left[1 + \frac{r}{100}\right]^n$$

$$\left\{\left[1 + \frac{r}{100}\right]^6\right\}^3 = \left(1 + \frac{r}{100}\right)^n$$

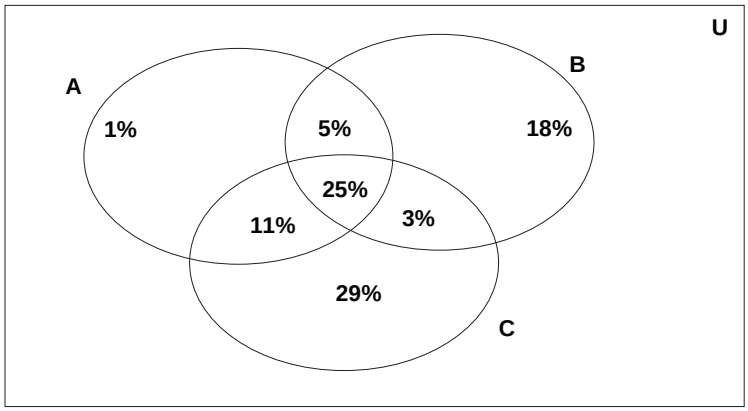
$$\left(1 + \frac{r}{100}\right)^{18} = \left(1 + \frac{r}{100}\right)^n \Rightarrow n = 18$$

15. Ans. b
Explanation:
By formula

$$n(A \cup B \cup C) = n(A) + n(B) + n(C) - n(A \cap B) - n(B \cap C) - n(A \cap C) + n(A \cap B \cap C)$$

92% = 42% + 51% + 68% – 30% – 28% – 36% + $n(A \cap B \cap C)$

$n(A \cap B \cap C) = 25\%$



एक पत्र पढ़ने वाले व्यक्तियों का प्रतिशत
= 1% + 18% + 29% = 48%

16. Ans. D
Explanation:
$(a, a), (b, b), (c, c) \in R$ अतः R समतुल्य सम्बन्ध है।
$\because (a, b) \in R$ and $(b, a) \notin R$ अतः सममित सम्बन्ध नही है।
$\because (a, b), (b, c) \in R$ तथा $(a, c) \notin R$ अतः R संक्रामक सम्बन्ध नही है।

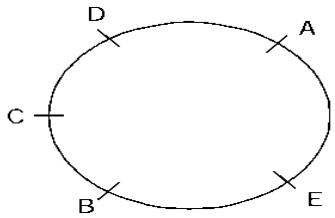
17. Ans. a
Explanation:
$n(A - B) = n(A) - n(A \cap B)$
$47 = 115 - n(A \cap B)$
$n(A \cap B) = 68$
$n(A \cup B) = n(A) + n(B) - n(A \cap B)$
= 115 + 326 - 68 = 373

18. Ans. a
Explanation:
डिकलाईनिंग शेष के नियमानुसार
Declining Balance Depreciation Rate = 1 – (Salvage Value / Cost)^(1/Years)
Rearrange
Salvage value = Cost x (1 - Depreciation rate)^Years
Salvage value = 10000 x (1 - 10%)^10 = 3,486.78

19. Ans. b
Explanation:
16000[(1 + 5%)3 – 1] = 2522

20. Ans. b
Explanation:
सही पेटर्न है x 2 - 2.
अतः 48 गलत है एवं इसका विस्थापन (26 x 2 - 2) i.e. 50 से होना है।

21. Ans. d
Explanation:
प्रश्नानुसार आकृति बनाने पर हम देख सकते हैं कि ग्राफ में सी पूर्व की तरफ देख रहा है।



22. Ans. c
Explanation:
समुच्चय का उभयनिष्ठ हल है।

1	2	3	4	5	6	7
			Y			U

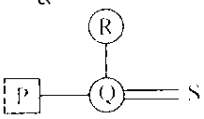
1	2	3	4	5	6	7
T			Y		W	U

1	2	3	4	5	6	7
T	Z		Y		W	U

1	2	3	4	5	6	7
T	Z		Y	X	W	U

1	2	3	4	5	6	7
T	Z	V	Y	X	W	U

23. Ans. d
Explanation:
सासू मॉ



24. Ans. d
Explanation:
चूंकि X तथा Y दोनों Z से छोटे हें, अतः X तथा Y, Z के बेटे या बेटी होंगे। चूंकि Y, Z का बेटा नहीं है, अतः Y, Z की बेटी है।

25. Ans. a
Explanation:
प्रत्येक वर्ण के लिये एक संख्या दी गयी है, अतः उक्त कोड का इस्तेमाल करने पर,
M = 7
O = 2
L = 4
E = 9
K = 5
So, the code for MOLEK is 7 2 4 9 5.

26. Ans. c
Explanation:

दिया गया है बहुलक – माध्य = 63
क्योंकि हम जानते है माध्य, माध्यिका तथा बहुलक के बीच निम्न सम्बन्ध होता हैं।
बहुलक – माध्य = 3 (माध्यिका – माध्य)
माध्यिका – माध्य $= \frac{63}{3} = 21$

27. Ans. a
Explanation:

$b_{vu} = \frac{p}{q} \times b_{yx}$

$= \frac{-3}{2} \times -1.2 = 1.8$

28. Ans. c
Explanation:
$np - npq = \frac{5}{9}$
$p = \frac{1}{3}, q = \frac{2}{3}$
Distribution is $\left(\frac{2}{3} + \frac{1}{3}\right)^5$

29. Ans. b
Explanation:
यदि रेखाऐं सम्पाती होती हैं तो r का मान + - 1 होता है।

30. Ans. a
Explanation:
x पर y की निर्भरता का प्रतीपगमन रेखा का समीकरण $y - \bar{y} = b_{yx}\ x - \bar{x}$
अतः $y - 8.8 = 1.24(x - 5.5)$
$\Rightarrow y = 1.24x + 1.98$

31. Ans. b
Explanation :

$r_R = 1 - \frac{6\Sigma d^2}{n(n^2 - 1)}$

$0.8 = 1 - \frac{6\Sigma d^2}{990}$

$\Sigma d^2 = 33$

Cor. $\Sigma d^2 = 33 - (7)^2 + (9)^2 = 65$

$\text{Cor. } r_R = 1 - \frac{6 \times 65}{990}$

$= 0.61$

32. Ans. d
Explanation:

$$P_{01} = \sqrt{\frac{\sum P_1 q_0}{\sum P_0 q_0} x \frac{\sum P_1 q_1}{\sum P_0 q_1}} x100 = 94.88$$

33. Ans. d
Explanation:

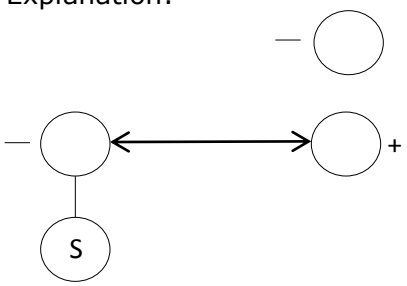
Using Formula : Real wage = $\frac{\text{Money wage}}{\text{Price Index}} \times 100$

$$\Rightarrow 1680 = \frac{\text{Money Wage}}{\left(\frac{215}{120} \times 100\right)} \times 100$$

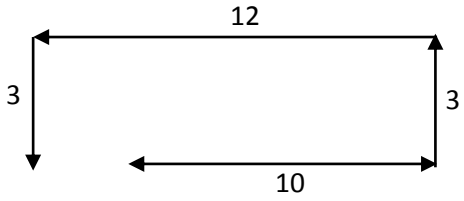
$\because$ Money Wage = $\frac{215}{120} \times 1680 = 3010$ Rs.

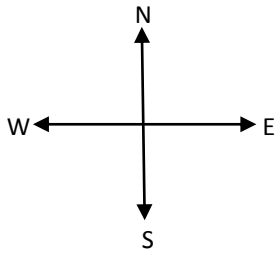
$\because$ Loss of worker = 3010 – 3000 = 10 Rs.

34. Ans. b
Explanation:



35. Ans. c
Explanation:





36. Ans. c
Explanation:
26

37. Ans. d
Explanation:
XC

38. Ans. a
Explanation:
भारत के आर्थिक क्षेत्र से संबंधित उद्देश्यों के पंचवर्षीय योजना को प्रदर्शित करने में पाई चार्ट प्रस्तुतिकरण का उपयुक्त माध्यम है।

39. Ans. d

Explanation:
यदि समंको के समूह में कुछ अवलोकन घनात्मक तथा कुछ ऋणात्मक हो तो गुणोत्तर माध्य अनिर्धारित होगा।

40. Ans. a
Explanation:
$\sigma_x = 3$
$y = 5 - 2x$
$\sigma_y = \frac{2}{1} \times 3 = 6$
$vy = 36$

41. Ans. c
Explanation:
$\sum dx^2 = 250 \qquad n = 10$
$\bar{x} = 50$
$\sigma = \sqrt{\frac{250}{10}} = 5$
$C.V. = \frac{5}{50} \times 100 = 10$

42. Ans. a
Explanation:
$5x + 7y - 22 = 0$
$6x + 2y - 22 = 0$
$r = \sqrt{\frac{10}{42}}$
$byx = \frac{-5}{7}$
$bxy = -\frac{2}{6} \qquad -\frac{5}{7} = -\frac{\sqrt{\frac{10}{42}} \times \sqrt{15}}{\sigma_x} \qquad \sigma_x = 2.64 \quad 6$

43. Ans. b
Explanation:
$byx = 0.80$
$p = \frac{1}{-3}$
$q = \frac{5}{-2}$
$byx = \frac{q}{p} x\ buv$

$$0.80 = \frac{\bar{5}}{\frac{2}{\bar{1}}} \times buv \qquad buv = 0.1066$$
$$3$$

44. Ans. d
Explanation:

$np = 3$

$\sqrt{npq} = 1.5$

$3q = 2.25$

$q = \frac{2.25}{3}$ $q = 0.75$, $p = 0.75$ so n = 12

45. Ans. b
Explanation:

Mean = $6 \times \frac{1}{2} = 3$

$SD = \sqrt{6 \times \frac{1}{2} \times \frac{1}{2}} = 1.22$

46. Ans. b
Explanation:

$np = \frac{10}{3}$

$2\, n_{c_2}\, p^2 q^{n-2} = n_{c_3}\, p^3 q^{n-3}$

$\frac{2 \times n!}{2!\, n-2!}\, q = \frac{n!}{3!\, n-3!}\, p$

$\frac{q}{n-2} = \frac{p}{6}$

$6q = np - 2p$

$6q = \frac{10}{3} - 2p$

$6q = \frac{10 - 6p}{3}$

$18q = 10 - 6p$

$18 - 18p = 10 - 6p$

$12p = 8$

$p = \frac{2}{3}$ $q = \frac{1}{3}$

$n \times \frac{2}{3} = \frac{10}{3}$

$n = 5$

$$5_{c_0}\left(\frac{2}{3}\right)^0\left(\frac{1}{3}\right)^5 + 5_{c_1}\left(\frac{2}{3}\right)^1\left(\frac{1}{3}\right)^4 + 5_{c_2}\left(\frac{2}{3}\right)^2\left(\frac{1}{3}\right)^3$$

$$\frac{1}{3^5} + 5 \times \frac{2}{3^5} + \frac{10 \times 4}{3^5}$$

$$\frac{1 + 10 + 40}{3^5} = \frac{51}{3^5} = \frac{51}{243} = \frac{17}{81}$$

47. Ans. c
Explanation:

$$\int \frac{dx}{x^2 + 2x - 3} = \int \frac{dx}{x^2 + 2x + 1 - 4}$$

$$= \int \frac{dx}{(x^2 + 1)^2 - 2^2}$$

$$\because \int \frac{dx}{x^2 - a^2} = \frac{1}{2a}\log\left(\frac{x - a}{x + a}\right) + c$$

$$= \frac{1}{4}\log\frac{x - 1}{x + 3} + c$$

48. Ans. b
Explanation:
T_5= a+4d =14 ..... (i)
T_{12} = a+11d =35 ..... (ii)
On solving equation (i) and (ii)
a=2

49. Ans. d
Explanation:

$$S_n = \sum n(n + 1)$$

$$S_n = \sum n^2 + \sum n$$

$$S_n = \frac{n(n + 1)(2n + 1)}{6} + \frac{n(n + 1)}{2}$$

$$= \frac{n(n + 1)(n + 2)}{3}$$

50. Ans. d
Explanation:

$$A = \frac{R}{r} = [(1 + r)^n - 1]$$

$$796870 = \frac{R}{0.1}[(1 + 0.1)^{10} - 1]$$

R= 50,000

51. Ans. c
Explanation:

n भुजाओं से बनने वाले एक बहुभुज में विकर्णो की संख्या

$= {}^{n}C_2 - n = \frac{n(n-3)}{2}$

52. Ans. b
Explanation:
Here, we have an A.P. with a = 3,00,000 d= 10,000
And n = 20
Using the sum formula , we get,

$S_{20} = \frac{20}{2} = [6,00,000 + 19 X 10,000]$

= 79,00,000

53. Ans. b
Explanation:

a=3 , r= $\frac{1}{2}$

$S_n = \frac{a(1-r^n)}{1-r}$

$\frac{3069}{512} = \frac{3[1-\frac{1}{2^n}]}{1-\frac{1}{2}}$

$\frac{3069}{3072} = 1-\frac{1}{2^n}$

$\frac{1}{2^n} = \frac{1}{1024}$

n= 10

54. Ans. c
Explanation:
a=132 , l = 468
l = a +(n-1)d
468 = 132 + (n-1)(12)
n =29

$S_n = \frac{n}{2}(a+l)$

$S_{29} = \frac{29}{2}(132+468) = 8700$

55. Ans. c
Explanation:

	Grade I	Grade II	
Plant A	6	3	≤ 120
Plant B	4	10	≤ 180

6x +3y ≤ 120

$4x + 10y \leq 180$

56. Ans. c
Explanation:
A X B = { (2,4), (2,5) ,(3,4),(3,5) }
B X C = { (4,5),(4,6)(5,5)(5,6) }
(A X B)U (B X C) = {(2,4), (2,5) ,(3,4),(3,5), (4,5),(4,6)(5,5)(5,6) }

57. Ans. c
Explanation:

$$A = P\left(1 + \frac{r}{100}\right)^n$$

$$\frac{25}{16}P = P(1 + \frac{r}{100})^2$$

$$\left(\frac{5}{4}\right)^2 = (1 + \frac{r}{100})^2$$

$$\frac{5}{4} = 1 + \frac{r}{100}$$

r = 25%

58. Ans. d
Explanation:
First part = x , second part = 2600-x

$$\frac{x \times 3 \times 5}{100} = \frac{(2600 - x) \times 6 \times 4}{100}$$

15x = 62,400-24x
39x = 62,400
X = 1,600
Second part = 2,600 – 1,600
= Rs. 1,000

59. Ans. c
Explanation:

$$A = P(1 + \frac{5}{100})^n$$

$$A = P\left(\frac{21}{20}\right)^n$$

$$\frac{P}{A} = \left(\frac{20}{21}\right)^n$$

60. Ans. a
Explanation:

$$\log_t a + \log_t b + \log_t c = \log_t z$$

$$\log_t (abc)) = \log_t z$$

Z =abc

61. Ans. a
Explanation:

वर्तमान मूल्य $= \frac{R}{i - g}$

$= \frac{60}{0.07 - 0.05} = 3000$

62. Ans. b
Explanation:

No. of such ways $= \frac{(n-1)!}{2}$

$= \frac{5!}{2}$

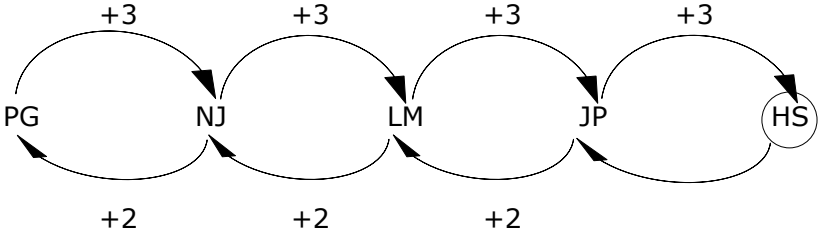
63. Ans. a
Explanation:
If (b+c), (c+a),(a+b) are in A.p.
Then 2(c+a) = b+c+a+b
2b = a+c

64. Ans. c
Explanation:
$^{n}p_{r} = r! \, ^{n}c_{r}$
2880 = r! X 120
r! = 24
r = 4

65. Ans. d
Explanation:
fog(x) = f[g(x)]
= f[2x-3]
= $(2x-3)^2+3(2x-3)+1$
= $4x^2-6x+1$
fog(-1) = 4+6+1 = 11

66. Ans. d
Explanation:
n विभिन्न चीजों जिनमें से r को एक बार लिया जाये तो क्रमचयों की संख्या जिनमें एक विशेष चीज कभी भी न ली जाये = $^{n-1}p_{r}$
व्यवस्थाओं की संख्या = $^{14}p_{6}$

67. Ans. c
Explanation:



68. Ans. b
Explanation:

STSTRUM = $\frac{119}{7} = 17$

1234567

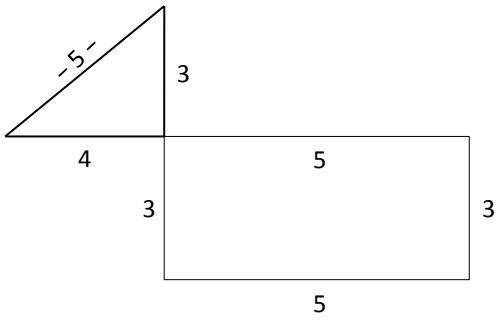
$\because$ STEP = $\frac{60}{4} = 15$

1234

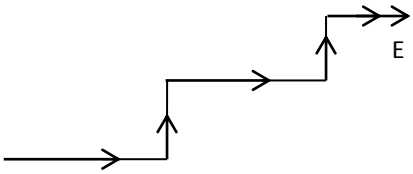
69. Ans. d
Explanation:
STUDENT

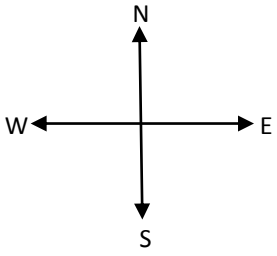
70. Ans. a
Explanation:
AMNESTY = NMAEYTS
BRIGADE = IRBGEDA

71. Ans. c
Explanation:

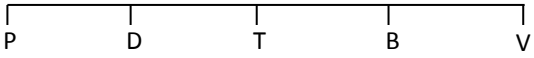


72. Ans. c
Explanation:

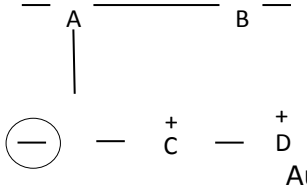




73. Ans. c
Explanation:

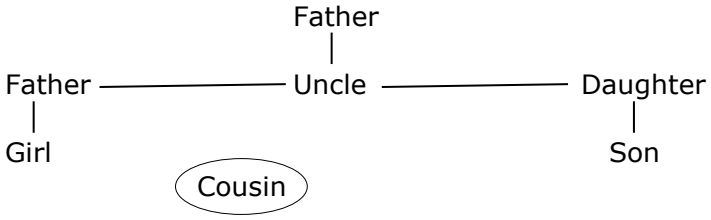


74. Ans. d
Explanation:

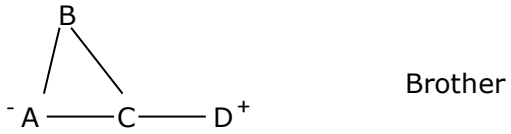


Aunty

75. Ans. d
Explanation:



76. Ans. c
Explanation:



77. Ans. a
Explanation:
फूलों का रंग एक गुणतत्व है क्योंकि रंग में गुणात्मक लक्षण परिलक्षित होते हैं।

78. Ans. b
Explanation:
यदि प्राथमिक तौर पर संग्रहित किये जा चुके समंको को दूसरे व्यक्ति या संस्था द्वारा उपयोग में लिया जाता है तो द्वितीयक समंक कहलाते हैं।

79. Ans. b
Explanation:
परस्पर अपवर्जी वर्गीकरण में सामान्यतः सतत् चर प्रयुक्त होते हैं।

80. Ans. c
Explanation:

0-10	15	
10-20	23	
20-30	27	SO=19+16=35
30-40	19	
40-50	16	

81. Ans. a
Explanation:

$$\bar{x} = A + \frac{\sum dx}{n}$$

82. Ans. c
Explanation:

$$New\ \ Mean = \frac{\bar{x}}{\alpha} \qquad New\ \ Mean = \frac{\bar{x}}{\alpha} + 10$$

83. Ans. d
Explanation:

$$25000 = \frac{n_1 \times 27000 + n_2 \times 17000}{n_1 + n_2} \qquad SO \quad n_1 = 80\% \quad n_2 = 20\%$$

84. Ans. b
Explanation:

$$\bar{x}_{com} = \frac{K\bar{x} + 10\,K\bar{y}}{11K} \qquad \bar{x}_{com} = \frac{\bar{x} + 10\,\bar{y}}{11}$$

85. Ans. b
Explanation:
यदि पुर्नविक्रय के लिये विभिन्न जूतों के आकार के आर्डर के लिये उपयुक्त औसत बहुलक होगा।

86. Ans. a
Explanation:

$$\frac{15 + 25}{2} = 20 \qquad SD = \frac{range}{2} = \frac{10}{2} = 5$$

87. Ans. a
Explanation:
52, 56, 68, 70, 75, 80, 82
Median = 70

X	|X-M|
52	18
56	14
68	2
70	0
75	5
80	10
82	12
	61

$$MD = \frac{61}{7} = 8.71428$$

$$MD\ Coefficient = \frac{8.71428}{70} \times 100$$

88. Ans. b
Explanation:
40 x 100 = 4000-50+40 = $\frac{3990}{100}$ = 39.90

$\bar{x}$ =39.90

$$\sigma = \sqrt{\frac{\sum \times^2}{n} - \bar{x})^2}$$

$$5.1 = \sqrt{\frac{\sum \times^2}{100} - 1600}$$

$Ex^2 = 162601-2500+1600 = 161701$

$$\sigma = \sqrt{\frac{161701}{100} - 1592 .01}$$

$$\sigma = 5$$

89. Ans. a
Explanation:

$A = \frac{2}{5}$ $A' = \frac{3}{5}$ $B = \frac{7}{10}$ $B' = \frac{3}{10}$

$A B' + B A'$

$\frac{2}{5} \times \frac{3}{10} + 7/10 \times \frac{3}{5}$ SO $\frac{6}{50} + \frac{21}{50} = \frac{27}{50}$

90. Ans. a
Explanation:

$\frac{13}{52} \times \frac{12}{51} = \frac{1}{17}$

91. Ans. c
Explanation:

$\frac{5c_2}{7c_2} = \frac{10}{21}$

92. Ans. c
Explanation:
P=2
P=2(1-P)
P=2-2P
3P=2
P=2/3
q= $\frac{1}{3}$

$${}^{5}c_{3}\left(\frac{2}{3}\right)^{3}\left(\frac{1}{3}\right)^{2}$$

$= \frac{80}{243}$

93. Ans. a
Explanation:

$A = \frac{1}{5}$ $A' = \frac{4}{5}$

94. Ans. c
Explanation:

X	P	PX
1	1/3	1/3
2	1/3	2/3
3	1/3	3/3

$\frac{1}{3} + \frac{2}{3} + \frac{3}{3}$

$= \frac{6}{3} = 2$

95. Ans. b
Explanation:

$4_{C_0}\ p^0 q^4 = \frac{16}{81}$

$q = \frac{2}{3} \quad p = \frac{1}{3}$

$4_{C_4}\left(\frac{1}{3}\right)^4 \left(\frac{2}{3}\right)^0 = \frac{1}{81}$

96. Ans. d
Explanation:

$m = 150 \times \frac{2}{100} = 3 \quad p(more\ \ than\ \ 2) = 1 - \frac{e^{-3}3^0}{0!} - \frac{e^{-3}3^1}{1!} - \frac{e^{-3}3^2}{2!}$

$= 1 - \frac{e^{-3}3^0}{0!} - \frac{e^{-3}3^1}{1!} - \frac{e^{-3}3^2}{2!} = 0.58$

97. Ans. c
Explanation :
$\phi(a)$ क्षेत्रफल इंगित करता है $-\infty$ To a

98. Ans. b
Explanation:
$\log\left(a + \sqrt{a^2+1}\right) + \log\left(a + \sqrt{a^2+1}\right)^{-1}$
$= \log\left(a + \sqrt{a^2+1}\right) - \log\left(a + \sqrt{a^2+1}\right)$
$= 0$

99. Ans. d
Explanation:
$E(x-\mu)^2$ तथा $E[x - E(x)]^2$ दोनों ही विचरण है।

100. Ans. a
Explanation:

Largest angle $= \frac{32}{90} \times 360 = 128^0$

Smallest angle $= \frac{17}{90} \times 360 = 68^0$

Difference = 60^0