POISSON DISTRIBUTION

Comprehensive sum

- 1. The parameter of PD is
- 2. Poisson Distribution is Skewed
- 3. In PD Mean and variance are same True or False
- 4. The parameter of Poisson Distribution is 4. Find
 - a) Mean
 - b) SD
 - c) Variance
 - d) CV
 - e) Mode
 - f) Probability of Zero Success.
 - g) Probability of Non Zero Success.
- 5. The SD of Poisson Distribution is 4. Find out which of the relation is True.
 - a) P(4) = P(5),
 - b) P(3) = P(4),
 - c) P(15) = P(16),
 - d) P(16) = P(17)
- 6. The parameter of PD is 3. Find P(x > 2) where x is Poisson Variate.
- 7. If P(x = 2) = P(x = 3) find P(2 or 3) where x is a Poisson Variate.
- 8. P(x = 2) = 0.15 and Mean of PD is 6. Find P(4), P(5) where x is Poisson Variate.
- 9. CV of Poisson Variate is 25% find the parameter and mode.
- 10. The mean of PD is 1 and x is a Poisson Variate. Find P(x > 1), P(0 < x < 3)
- 11. If P(x = 0) = P(x = 1) Find P (x is utmost to 1) where x is a Poisson Variable.
- 12. X is a PV with mean 3. Find P(x > 2).
- 13. X is Poisson Variable with mean 1. Find P(4 < x < 6) you are given $e^{-1} = 0.3678$
 - a) 0.001
 - b) 0.002
 - c) 0.0031
 - d) 0.0189
- 14. X belongs to PD with parameter 3 and Y to PD with parameter 2. Find $P(x + y \ge 1)$ where X and Y are independent variable
- 15. X is a Poisson Variate. If P(x = 24) = P(x = 25). Find the parameter and mode.
- 16. X is a Poisson Variable with parameter m. Find P(x + 1) is
 - a) $\frac{m}{m+1} P(x)$
 - b) $\frac{m}{x+1}P(x)$ c) $\frac{m}{x}P(x)$

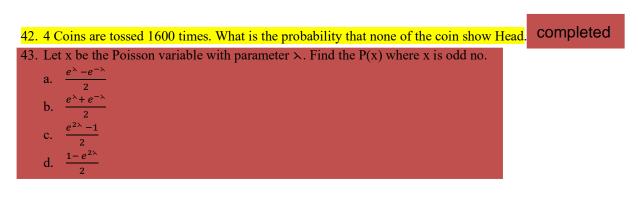
 - d) None
- 17. The SD of PD $\sqrt{3}$. Find the probabilities of
 - a) Zero Success
 - b) Non Zero Success
- 18. If n = 100 and p = 1%. Find Mean and Sd. Find P(x = 2)
- 19. A Co., has 2 cars to hire. The Mean demand is 1.5 cars/day. The % of day only one car is demanded. You are given $e^{-1.5} = 0.2231$

20. P(x = 2) = 9P(x = 4) + 90P(x = 6) where x is a PV the SD is

- a) 2
- b) 1
- c) 3
- d) None
- 21. 5% of Tools are defectives. Out of 40, find the probability of utmost 2 defective ($e^{-2\pi} = 0.135$)
- 22. P(x = 2) = 3P(x = 4). Find variable of X, where X is a Poisson Variable.
- 23. The Parameter of PD is 16 & n = 500. Find p
- 24. The Variable of PD is 20 & n = 500. Find P
- 25. Of 0.1% of Toys are defective. Out of 200 Toys. Find Probability that
 - a) None is defective
 - b) One is defective
- 26. The average number of customers arriving in a bank is 3 customer/ minute. During one minute, find the probability that
 - a) No Customers arrives
 - b) One or more customers arrive. Assume the arrival of customers follows Poisson Law
- 27. A book has 200 pages containing 200 mistakes. A page is taken at random. What is the probability that
 - probability that
 - a) It has no mistakes
 - b) One mistake
 - c) More than $\frac{1}{2}$ mistakes (Assume mistakes follows Poisson Distribution)
- 28. In a Poisson Distribution , the probability of three Successes is half of the Probability of 3 Successes. Find the Mean of the Distribution.
- 29. x is PV with SD. $\sqrt{3}$ find P(x lies in between -1 and 2.6)
- 30. The probability of non zero success of PD is $1 e^{-2.7}$. Find the Mode.
- 31. Mean of PD is 10. Find SD
- 32. The parameter of PD is 3. Find SD and CV
- 33. SD of PD is 2. Find Mode
- 34. In Poisson Distribution P(x = 0) = P(x = 2). Find E(x)
- 35. If x is a Poisson Variate P(x = 3) = 5P(x = 5). Find SD
- 36. If E(x) = 1. Find P(x > 1) where x is a Poisson Variate.
- 37. If PD has two modes 3 and 4. Find the
 - a) Parameter
 - b) CV
 - c) $P(x \le 1)$

38. In Poisson Distribution, probability of a success is very close to

- a) 1
- b) *m*
- c) 0
- d) None
- 39. The parameter of Poisson Distribution is 2 and SD is $\sqrt{3}$. test the validity of the date.
- 40. If x and y are Poisson Variables and are independent. Such that P(x=1)=P(x=2) and P(Y=2) = P(x=2). Find
 - $\tilde{E}(2x + 5y)$
 - -E(x-4y)
 - V(x + 2y)
- 41. Mean of Poisson Distribution is 6. Find Variance and Co-efficient of Variables.



a.1600.e^-4 b.100.e^-160 c.e^-100 d. none

BINOMIAL DISTRIBUTION

The Parameters of BD are $16, \frac{1}{4}$. Find Mean and SD 1. 2. The Mean & SD of a BD are 12 & 2. Find BD 3. If x is a Binomial variate with Mean 4 and SD is $\sqrt{2}$. Find the parameters. 4. In a BD, Mean is K times of Variance. Find K a) q c) $\frac{1}{1-p}$ b) $\frac{1}{p}$ d) None The Binomial Distribution is $\left(\frac{3}{4} + \frac{1}{4}\right)^{16}$. Find 5. a) The parameters Mode f) b) Mean Positively or Negatively Skewed g) c) SD h) Probability of '0' success d) Variance Probability of Non Zero success. i) e) Co-efficient of Variation 6. The parameter of BD are (12,0.5). Find the maximum variance 7. If $p > \frac{1}{2}$ then B.D. is Skewed. 8. X belongs to BD of parameter (6,0.25) and Y belongs to another BD of parameter (10,0.25), If X&Y are indept variables then X + Y belongs to which BD 9. Mean and SD of a BD are 4&3. Test the consistency. 10. In BD of parameter (n, q). then X always takes the values c) Between 0 and 1 a) Between 0 and n b) Between 0 and n (both Inclusive) d) Between 0 and ∞ Natural numbers upto n inclusive of 0 11. $n = 10, q = \frac{2}{3}$ find mean, variance mode 12. $P(X) = \frac{10(4)}{(0.6)^6} \cdot (0.4)^4$ find parameter 13. In BD the sum of the powers of p&q is always equals to 14. In BD mean is 2:p = 0.5 find $P(X \text{ when } X \ge 1)$ 15. Mean & SD of a BD are $4\&\sqrt{2}$ prob. Of Non Zero Success 16. Find the probability of getting 3 heads from 6 coins 17. Find the probability of making 3 correct guessing in 5 True or False type of question. 18. In an examination, the over all % of pass is 60, what is the probability that atleast one student out of 4 has passed the exam. 19. In a family of 4 children what is the probability that two of them are girls. (Assume birth of a boy and girl are equally likely) 20. 80% of commerce students like C.P.T course. In a sample 5 commerce students, find the probability that 80% of them like the course. 21. An experiment succeeds twice as often as it fails. Find the probability that out of 5 experiments two of them succeed. 22. 10 Dates are taken at random what is the probability that two of them are Sundays. completed 23. Mean and SD of BD are 10 & $\sqrt{5}$ find the mode 24. The probability of non zero success in BD is $1 - (0.6)^8$ find the parameter mode and C.V

25. X is a Binomial variate with Mean 4 and SD/2. Find $P(X \ge 2)$ 26. In a BD maximum variance in 2.5 find the parameter & mode 27. X is a Binomial variate and if 4P(X = 4) = P(X = 2) and n = 6 find the parameter $\frac{1}{2}$ a) c) d) None b) 28. If 10 P(X = 1) = p(X = 2) and P is 0.8 find 'n' where X is B variate a) 8 c) 4 b) 6 d) None 29. X belongs to B(6, $\frac{1}{2}$) is Y balance to B(4, $\frac{1}{2}$) find $P(X + Y \ge 1)$ 30. In a BD, $\mu = 4$, $\sigma^2 = 3$ find Mode. 31. X is a binomial variate. P(x = 1) = 0.4096, p(x = 2) = 0.2048, n = 5. Find P 2 5 a) c) b) $\frac{1}{5}$ d) None 32. For a B.D. Mean is 2 and Variance is 4. Find forth central moments. 33. Mean and Variance of B.D. are 4 and $\frac{4}{2}P(x \ge 1)$ 34. If Mean > Variance then the distribution is 35. Mean and Variance of BD and 3 and 2. Find Parameter. 36. X is a Binomial Variate. E(x) = 2 and $V(x) = \frac{4}{3}$. Find the parameter. 37. Mean of BD is 20 add SD is 4. Find the parameter. 38. The parameter of a BD are [n, p] when the distribution tends to i) Poisson ii) Normal 39. $X \sim B(5, p)$ and p(x = 2) = 0.4362. p(x = 3) = 0.2181. Find p 40. If B.D. $(15, \frac{1}{3})$ find mode. 41. X belongs to B.D with parameter $(6, \frac{1}{2})$. If k p(x=4) = P(x=2)then k is equal to 42. X belongs to B(n, p) then the distribution of Y=n-x follows i.e. calculate E(Y)which distribution a) B(n, 1)b) B(n,x)c) B(n,p)d) B(n,q)43. Mean and Variance of B.D. are 3, 2. Find B.D a) $\left(\frac{2}{3} + \frac{1}{3}\right)^9$ b) $\left(\frac{1}{3} + \frac{2}{3}\right)^9$ c) $\left(\frac{2}{6} + \frac{1}{6}\right)^9$

d) None

44. In B.D, if variance = $(Mean)^2$ then n & P

- a) $1, \frac{1}{2}$
- b) 1, 1 c) $2, \frac{1}{2}$
- d) $3, \frac{1}{2}$
- 45. In a B.D, if P(x = 2) = 3 P(x = 3) and n=4. Find p
- 46. In a B.D. if $B(4, \frac{1}{3})$. Find Mean
- 47. The Probability that a Student is not a Swimmer is $\frac{1}{5}$. Find the Probability that out of 5 Students, 4 are Swimmers
 - a) $\left(\frac{4}{5}\right)^4 \cdot \left(\frac{1}{5}\right)$ completed b) $5c, \left(\frac{1}{5}\right)^4.\left(\frac{4}{5}\right)$ c) $5C_4\left(\frac{4}{5}\right)^4 \cdot \frac{1}{5}$
 - d) None
- 48. The Mean and Variance of B.D. are 5 and 3. Which of the following is True
 - a) p > q
 - b) *p* < *q*
 - c) P = q
 - d) None
- 49. The Mean and S.D of B.D are 2 & 1. Find q.

NORMAL DISTRIBUTION

FACULTY: LSS

1. The parameter of ND are 10 and 25. Find

a) CV

- b) *Q*₁
- c) *Q*₂ d) Q_3

g) Points of Inflection h) Mode

e) Quartile Deviation

f) Mean Deviation

d) 8

- 2. Two Quartiles of Normal Distribution are 14.6 & 25.4. Find SD c) 10
 - a) 9 b) 6
- 3. MD of ND is 16. Find Quartile Deviation

4. Points of inflection of Normal Distribution are 40 & 60. Find

- a) Parameter of ND c) QD
- b) MD
- 5. Quartile Deviation of ND is 4.05. Find MD
- 6. $Q_1 = 13.25$ MD about Median = 8. Find Mode.

7. If $X \sim N(3, 36)$; $Y \sim N(5, 64)$ then $X + Y \sim N(8, A)$. Find A. X and Y are independent variable

- 8. The CV of ND is 70% & Mean is 10. Find
 - a) MD 2
 - b) 25th Percentile.
- 9. The % of the area of normal curve under 1, 2, 3 sigma limit.
- 10. Two Tails of a Normal Curve will never touch the Horizontal axis. Test the Correctness.
- 11. The number of methods of fitting the normal distribution.
- 12. X belongs to normal distribution with Mean 10 and SD 3. Y belongs to normal distribution with Mean 12 and SD 4. Find the parameter of ND in which (x + y) belongs to
- 13. The ratio of QD, MD and SD of Normal Distribution is
- 14. the probability density function of Normal variety is

a)
$$f(x) = \frac{1}{4\sqrt{2\pi}}e - \frac{-(x-10)^2}{32}$$
 find the parameter.
b) $f(x) = \frac{1}{\sqrt{72\pi}}e^{\frac{-(x-15)^2}{72}}$ find the parameter.
c) $f(x) = \frac{e^{-(x-4)^2}}{72}$ find the parameter.

d)
$$f(x) = \frac{5}{\sqrt{\pi}} e^{-25x^2}$$
 find the parameter

15.
$$f(x) = Ke \frac{-(x-6)^2}{18}$$
 find K

16.
$$f(x) = Ae \frac{-(x2-6x+9)}{8}$$
 find A.

- 17. $f(x) = \frac{1}{m}e^{-(x^2-8x+16)}$. Find the 'm'.
- 18. Find 50th percentile value of standardized normal distribution.
- 19. Find the Maximum ordinate of the Normal Distribution of Parameter (μ , a^2)
- 20. Find the variance of standardized Normal Distribution.
- 21. In a ND QD is 6, find SD

- b) 9 d) 6

22. In a ND, which of the quartiles are equidistant from Median.

a)	$Q_1 \& Q_2$	c)	$Q_1 \& Q_3$
b)	$Q_2 \& Q_3$	d)	None

- 23. QD, MD, SD are connected by the inequality ____
- 24. Mean = 5; SD = 2.6; Median = 5. Quartile Deviation is 1.5. Find Co-efficient of Quartile Deviation.
- 25. In a Normal Distribution of Parameter (10, 36). Find the Co-efficient of Quartile Deviation.
- 26. In a class of 75 students, the average mark is 50 and SD is 5. A student is taken from the class. What is the probability that his mark is more than 60. (Area of Normal Curve from Z=0 to Z=2 is 0.4772)

How many students got above 60 marks.

- 27. The relation between Quartile Deviation and SD of Normal Distribution is
 - a) 3QD = 2SD
 - b) 2QD = 3SD
 - c) 5QD = 4SD
 - d) None
- 28. The points of inflexions of N.D are 6 and 14. Find S.D
- 29. 5000 students were appeared in an examination Mean mark 39.5 with S.D 12.5. Assuming the distribution is normal, find the number of students got more than 60%. (Area of normal curve from Z=0 to z=1.64 is 0.4496)

Z=1 is 0.3414

- 30. In a N.D mean is 2 and Variance is 4. Find fourth central moment is-
- 31. In N.D, Mean, Median, Mode are
 - a) Unequal
 - b) Equal
 - c) Mean > Variance
 - d) None
- 32. X belongs to N(50,100). Find P(x>60). (Area of normal curve Z=0 to Z=0.3414)
 - 33. Wages of workers in a factory follows
 - a) B.D
 - b) P.D
 - c) Normal
 - d) None
 - 34. Area of normal curve under $\pm 3\sigma$ covers of the items.
 - a) 95%
 - b) 99%
 - c) 99.73%
 - d) 90
 - 35. X and y are two independent normal variable with means $\mu_1 \& \mu_2$ and S.D σ_1 , σ_2 . Then X+Y belongs to
 - a) *Mean* = $\mu_1 + \mu_2$; *S*. *D* = 0
 - b) Mean = 0; S.D = $\sigma 1 + \sigma 2$
 - c) *Mean* = $\mu_1 + \mu_2$; *S*. *D* = $\sigma 1 + \sigma 2$
 - d) Mean = $\overline{x_1} + \overline{x_2}$; S. D = $\sqrt{\sigma 1 + \sigma 2}$

36. _____ is/are bi-Parametric distribution

a) B.D

b) N.D

c) P.D

d) a and c a and b

37. In Normal Distribution, Q1=54.52 and Q3 = 78.86. Find Median.

38. For a normal distribution $f(x) = \sqrt{\frac{2}{11}} \cdot e^{-2(x-3)^2}$. Find Mean and S.D

- 39. Which is not a characteristic of ND?
 - a. Mean lies at the centre of the NC
 - b. Multimodal
 - c. Mean=Median=Mode
 - d. It is Symmetric
- 40. If X belongs to N(50,16), which is not true?
 - a. P(X>60)=.3
 - b. P(X<60)=.4
 - c. P(X<50)=.5
 - d. P(X>50)=.5

PROBABILITY CONCEPT

FACULTY: LSS

TYPE -1 – PROBLEMS USING SET THEORY

1. If $P(A) = \frac{1}{4}$ $P(B) = \frac{2}{5}$ $P(A \cup B) = \frac{1}{2}$. Find $P(A \cap B)$. 2. If $P(A \cup B) = \frac{2}{5}$ $P(B) = \frac{1}{3}$. If A & B are independent. Find P(A)3. If $P(A) = \frac{1}{2}$ $P(B) = \frac{1}{2}$ $P(A \cup B) = \frac{7}{12}$. Find a) $P(A \cap B)$ b) $P\left(\frac{A}{B}\right)$ c) $P\left(\frac{B}{A}\right)$ d) *P*(*Exactly one event to occur*) 4. If $P(A) = \frac{1}{2}$ $P(B) = \frac{1}{4}$ $P\left(\frac{A}{B}\right) = \frac{1}{6}$. Find $P\left(\frac{B}{4}\right)$ 5. If $P(A \cap B) = P(A) \times P(B)$ then A & B are 6. If P(B - A) = P(B) then A & B are 7. $P\left(\frac{A}{B}\right) = P(A)$ then A and B are 8. If $P(A \cup B) = P(A)$ then $P(A \cap B)$ is equal to 9. $P(A) = \frac{1}{2} P(\overline{B}) = \frac{5}{8}$ $P(A \cup B) = \frac{3}{4}$. Find $P(\overline{A} \cap \overline{B})$ (A and B are not independent event. 10. $P(A) = \frac{3}{2}$; $P(B) = \frac{1}{2}$; $P(A \cap B) = \frac{3}{4}$. Find $P(A' \cup B')$ where A and B are two events. 11. For 2 event A and B the probability of occurrence of exactly one event is denoted by a) $P(A \cap \overline{B}) + P(\overline{A} \cap B)$ b) $P(A \cap \overline{B})$ c) $P(A^c \cup B)$ d) $P(A^c \cup B^c)$ 12. P(A) = 0.45; P(B) = 0.35 P(A and B) = 0.25. Find a) $P\left(\frac{A}{R}\right)$ b) $P\left(\frac{B}{A}\right)$ 13. If $P(A_1) = \frac{2}{3}$; $P(A_2) = \frac{3}{8}$; $P(A_1 \cap A_2) = \frac{1}{4}$; then $A_1 \& A_2$ are a) Mutually exclusive event but not independent b) Mutually exclusive event and independent c) Independent but not Mutually Exclusive d) None 14. For any two events A &B, which of the following is true a) $P(A \cap B) \neq P(A) <$ b) $P(A \cup B) \leq P(A) + P(B)$ c) $P(A) \leq P(A \cup B)$ d) All the above

17.A. Two events A&B do not occur simultaneously then A and B are a. Mutually exclusive b. Mutually exhaustive c. Mutually independent d. Dependent

15.
$$P(A) = \frac{2}{3}, P(B) = \frac{3}{5}; P(A \cup B) = \frac{5}{6}. Find P(A/B')^{\Box}$$

16.
$$P(A) = \frac{1}{2}$$
; $P(B) = \frac{1}{3}$; $P(A \cap B) = \frac{1}{4}$. Find $P(A \cup B)$

17. $P(A \cup B) = 0.8$; $P(A \cap B) = 0.3$. $P(\overline{A}) + P(\overline{B})$ is equal to

TYPE -2 -STATEMENT FORM OF PROBLEM

18. If a die is rolled on, find the probability of getting

- a) Prime Number
- b) Odd Numbers
- c) Multiples of 3.

19. If two dice are rolled on find the probability of getting the sum of face number is-

- a) 7 or 11
- b) Both faces show the same face number (or difference at the Face Numbers is Zero) 17.D. P(A)=2/3, P(B)=3/5, P(AUB)=5/6 Find P(B/A)
- c) Sum is neither 3 nor 16.
- 20. A card is drawn from a pack 52 cards. Find the probability of getting
 - a) A king or spade
 - b) King or Jack (KNAVE)
 - c) King or Black card
 - d) Queen or Red

21. A bag contains 6 red and 4 White Balls. Two Balls are drawn at a time. What is the

probability of getting.

a) Both of them are Red.

- b) One is Red and Other is white
- 22. A bag contains 3 Red and 9 White Balls. 5 Balls are drawn at a time. Find the probability that 3 of them are Red.

23. A bag contains 5 Red, 4 Black and M Green Balls. 2 Balls are at a time. If the probability of getting two green balls is $\frac{1}{2}$. Find the value of M.

- a) 5
- <mark>b) 6</mark>
- c) 7
- d) None
- 24. Two Balls are drawn one after another without replacement from a bag containing 4 White and 3 Black.
- 25. Two balls are drawn one after another without replacement from a bag containing 4 White and 3 Black. What is the probability that the first ball is White and second ball is Black?
- 26. A Family has 3 Children. What is the probability that they celebrate the Birthday on different dates.
- 27. What is the probability that a year has 53 Sundays or 53 Mondays or 53 Tuesdays.
- 28. A pack has 52 cards with 2 Extra Jokers. Find the probability of getting King Spade card.

17.B. A and B are two events. Which of the following are true? a. P(A-B) = P(A) - P(B)b. P(A-B) = P(A) - P(AnB)c. P(B-A) = P(B) + P(AnB)d. P(B-A) = P(A) + P(B) - P(AnB)

17.C. P(A)=0.3, P(B)=0.35 P(AUB)=0.45. Find P(AnB)

17.E. P(A) = 1/4, P(B)=2/5, P(AUB)=11/20 Find (i) P(AnB') (ii) P(A'nB)

17.F. A & B are MEE. P(AUB)=2/3, P(A)=2/5 P(B)=?

17.G. A&B are independent. A and B are mutually exhaustive. P(A) = 1/5. Find P(B)(Problem wrong)

- 29. A problem in Statistics is given to two students A and B. The odds favouring A in solving is 3 : 2 and the odds against B in solving are 4 : 3. Find the probability that the problem is solved.
- 30. Two candidates A and B applied for two vacancies for the same post. The chances of A being selected are 60% and that of B are 80%. Find the probability that
 - a) 'A' alone is selected
 - b) Both of them are selected
 - c) At least one of them is selected
 - d) None of them is selected.
 - e) Exactly one is selected.
 - 31. 3 Horses A, B, C are in a Race. A's winning chance is Twice of B; B's winning is twice of C. Find the probability of each horse winning.
- 32. A team of 4 is to be formed from 6 Boys and 5 Girls. Find the probability that the team includes exactly 2 Girls.
- 33. A's getting Scholarship is 0.6 and B's getting Scholarship is 0.7. Find the probability of at least one of them is getting Scholarship.
- 34. A committee of 5 is to be formed from 8 Boys and 3 girls. What is the probability that if two particular girls are included in the committee.
- 35. Four couples are placed in a room. Two persons are selected. Find the probability that they are a Gentleman and a Lady but not a Couple.
- 36. A bag contains 6 Red Balls and Some Blue Balls. If Probability of Drawing a Blue Ball is Twice that of a Red Ball. Find number of Blue Balls
 - a) 10
 - b) 12
 - c) 14
 - d) 16
- 37. Two dice are rolled on. Find the probability of getting a Multiples of 2 on one die and multiple of 3 on the other.
- 38. A Cricket team winning a match at Kanpur is $\frac{2}{5}$ and losing at Delhi is $\frac{1}{7}$. What is the probability of winning of winning at least one match?
- 39. Two cards are drawn from a pack of 52 cards one after another without replacement. What is the probability that
 - a) Both are Spades
 - b) First Card is Red and Second Card is Blue. black
- 40. A Bag contains 2 Red 3 Green and 2 Blue Balls. Two Balls are drawn at random. Find the probability that none of them is Blue.
- 41. In a game of cards, are distributed equally among 4 players. What is the probability that a specific player get all the 4 kings.
- 42. 'A' can hit the Target 3 out of 6 shots and 'B' can hit 4 out of 5 shots. Find the probability of hitting the target.
- 43. A die is thrown twice. Find the probability that the sum of the numbers is divisible by 4.

- 44. Sum of the face numbers, when 2 dice are rolled on in S. The probability of S is maximum. Then S is _____
 - a) 5
 - b) 7
 - c) 6
 - d) 8
- 45. Find the probability of getting exactly 2 Heads if coins are tossed.
- 46. When an unbiased die is rolled on odds in favour of getting multiples of 3.
- 47. Probability of getting atleast 3 Heads in 8 tosses of unbiased coins is.
- 48. If 7:6 are the odd favourites a person. A will alive next 5 years and odds favouring B living for next five year 5:3. Find the probability that atleast one of the alive for next 5 years.
- 49. A bag contains 6 Green and 5 Red balls. What is the probability of getting a Red ball.
- 50. Two dice are tossed. Find the probability that the sum of the face nos. Is divisible by 4 or 3.
- 51. The²different dice are rolled on simultaneously. Find the probability that the sum of face nos is 9.
- 52. Probability that a leap year has 53 Wednesday.
- 53. <mark>A coin is tossed six times. Find the probability of getting heads and tails alternatively.</mark>
- 54. Ram is known to it the target in 2 out of 3 shots. Shyam hits the target 5 out of 11 shots. What is the probability that the target is hit, if both of them tries.
- 55. Two letters are taken from the letters of the word 'HOME'. What is the probability that none of the letter is Vowel.
- 56. Find the chance of getting 7 or 11 if two dice are thrown.
- 57. A bag contains 15 "One Rupee coins", 25 "Two Rupee coins" and 10 "Five Rupee coins". A coin is taken at random. Find the probability that the coin is not one rupee coin
- 58. 3 dice are roled on. Find the probability that atleast one die show face number 6.
- 59. Sum of all probabilities of mutually exclusive and exhaustive is
- a.0 b.1 c.1/2 d.none
- 60. A bag contains 3 White and 5 Red balls. Another bag contains 4 White and 2 Red balls. A ball is chosen from each bag. Find the probability that both balls are white.
- 61. There are 6 positive integers and 8 negative integers. Four integers are taken at a time. They are multipled. What is the possibility that the product is positive.
- 62. A bag contains 4R and 5B balls. Another bag contains 5R and 3B balls. A ball is taken from each bag. Find the probability that one ball is red and another is black.
- 63. 2 Dice are rolled. Find the probability of getting atleast one die which shows face no. 4
- 64. A, B, C are mutually exclusive and exhaustive. P(A)= 2P(B)=3P(C). Find P(B)
- 65. A product has 2 components A and B. Probability that A is defective is 8% and probability that B is defective is 5%. What is the probability that the product is defective? A person bought 1000 units of the product. How many of them are defective?