laHkkO;rk

cgqi;kZ;h iz”u

1) nksu uk.;kaph tksMh QsdY;koj ,d Nki feG.;kph laHkkO;rk -------

,o<h vkgs-

a) 0 b) 1 c) $\frac{1}{3}$ d) $\frac{1}{2}$

mRrj: $\frac{1}{2}$

mdy nksu uk.kh Qsd.ks pk uequk vodk”k]

s = { HH, HT , TH , TT }

n (S) = 4

?kVuk A : ,d Nki feG.ks-

A = { HT , TH } ∴n (A) = 2

∴P (A) = $\frac{n(A)}{n(S)} = \frac{2}{4}$

$= \frac{1}{2}$

2) 52 iRR;kaP;k dWVe/kwu jfld ps iRrs feG.;kph laHkkO;rk fdrh vlsy-

a) $\frac{1}{4}$ b) $\frac{3}{4}$ c) $\frac{1}{13}$ d) $\frac{12}{13}$

mRrj: $\frac{1}{4}$

mdy: ,dw.k iRrs = 52, bfLidps iRrs = 13

$\therefore$ P (bfLidps iRrs) = $\frac{13}{52}$

$= \frac{1}{4}$

3) ,d Qklk Qsdyk rj 3 is{kk ygku la[;k ;s.;kph laHkkO;rk ---- ------ vlrs-

a) $\frac{1}{3}$ b) $\frac{1}{2}$ c) $\frac{1}{4}$ d) $\frac{2}{3}$

mRrj: $\frac{1}{3}$

mdy: bFks S = {1 ,2 ,3,4,5,6}

$\therefore$ n (S) = 6

E = (3 is{kk ygku la[;k) = { 1 , 2}

$\therefore$ n(E) = 2

$\therefore$ P (E) = $\frac{n(E)}{n(s)} = \frac{2}{6} = \frac{1}{3}$

4) 10 uk.kh ,dkp osGh Qsdyh rj ,dw.k fdrh ?kVuk feGrhy ?

a) 1024 b) 512 c) 100 d) 10

mRrj: 1024

5) [kkyhyiSdh dks.krh ?kVusph laHkkO;rk vlw “kdrs ?

a) -0.4 b) 1.004 c) $\frac{18}{23}$ d) $\frac{10}{7}$

mRrj: $\frac{18}{23}$

mdy: dks.krhgh ?kVusph laHkkO;rk d/khp ,dkis{kk tkLr o _.k ulrs-

6) rhu uk.kh ,dkposGh Qsdyh vlrk lxGs Nkis feG.;kph laHkkO;rk -----

--------- vlsy

a) 1 b) $\frac{1}{2}$ c) $\frac{1}{4}$ d) $\frac{1}{8}$

mRrj: $\frac{1}{8}$

mdy: bFks $S = \{HHH, HHT, HTH, THH, HTT, THT, TTH, TTT\}$

$n(s) = 8$

lxGs Nkis feG.ks $= A = \{ HHH\}$

$\therefore n(A) = 1$

$\therefore P(A) = \frac{n(A)}{n(S)} = \frac{1}{8}$

7) 52 iRR;kP;k dWVe/kwu yky jaxkP;k jktk ps iRrs feG.;kph laHkkO;rk -----

----- vlsy

a) $\frac{1}{26}$ b) $\frac{1}{13}$ c) $\frac{1}{14}$ d) $\frac{1}{2}$

mRrj: $\frac{1}{26}$

mdy: ,dw.k iRrs = 52

n (S) = 52

B = yky jaxkP;k jktkaps iRrs = 2

∴ n (P) = 2

∴ P (B) = $\frac{n(B)}{n(S)} = \frac{2}{52}$

= $\frac{1}{26}$

8) 52 iRR;kaP;k dWVe/kwu ulysys iRrs feG.;kph laHkkO;rk -------- vlsy-

a a) $\frac{3}{13}$ b) $\frac{10}{13}$ c) $\frac{7}{13}$ d) $\frac{4}{13}$

mRrj: $\frac{10}{13}$

mdy: ,dw.k iRrs = 52 ∴n(S) = 52

A = ,dw.k fp= vlysys iRrs = 12

B = fp= ulysys iRrs = 52 – 12 = 40

∴ n (B) = 40

∴ P (B) = $\frac{n(B)}{n(S)} = \frac{40}{52} = \frac{10}{13}$

9) ,dk BksdG;ke/;s 5 ;s.;kph laHkkO;rk fdrh vlsy ?

a a) $\frac{1}{6}$ b) $\frac{5}{6}$ c) $\frac{1}{3}$ d) $\frac{1}{2}$

mRrj: $\frac{1}{6}$

mdy: bFks S = [1,2,3,4,5,6]

$\therefore n(S) = 6$

5 feG.;kph laHkkO;rk = $\frac{1}{6}$

10) SOCIETY ;k “kCnkaph v{kjs ,dk jkaxsr lyx Bsoyh vkgsr -;krhy Loj

feG.;kph laHkkO;rk ---------- vlsy-

a a) $\frac{1}{7}$ b) $\frac{2}{7}$ c) $\frac{3}{7}$ d) $\frac{4}{7}$

mRrj: $\frac{3}{7}$

mdy: ,dw.k v{kjs = 7

Lojkaph la[;k = 3 ------- ($\because$ O , I , E gs Loj vkgsr)

P (Loj feG.ks) = $\frac{3}{7}$

11) 3 rs 20 Øekadkps dkMZ ,dk fi”kohr Bsoys vkgsr vkf.k rs iw.kZi.ks la[;k

felGys vkgsr- fi”kohrwu 1 dkMZ ;k–fPNd in~/krhus dk<yk vlrk

R;krwu le la[;k feG.;kph laHkkO;rk ---------- vlsy-

a a) $\frac{1}{20}$ b) $\frac{1}{3}$ c) $\frac{1}{4}$ d) $\frac{1}{2}$

mRrj: $\frac{1}{2}$

mdy: ,dw.k dkMZ = 18

le la[;k vlysys dkMZ = 4,6,8,10,12,14,16,18,20

= 9

$\therefore$P (le la[;k) = $\frac{9}{18} = \frac{1}{2}$

12) 3 uk.kh Qkls ,dkposGh Vkdys rj ,dw.k ?kVuk ---------- vlrhy-

a) 6 b) 18 c) 81 d) 216

mRrj: 216

13) MAHIR ;k “kCnkrwu O;atus feG.;kph laHkkO;rk ------ vlsy-

a a) $\frac{2}{5}$ b) $\frac{3}{5}$ c) $\frac{4}{5}$ d) 1

mRrj: $\frac{3}{5}$

mdy: MAHIR ;k “kCnkar ,dw.k v{kjs 5 vkgsr-

M, H, R v”kh 3 O;atus vkgsr-

P (O;atus feG.ks) = $\frac{3}{5}$

14) ,d eqyxh vls xf.kr ekaMrs dh rh ykWVjhrhy ifgys c{khl ftad.;kph

“kD;rk $\frac{8}{100}$ v”kh vkgs- tj 6000 frdhVs fodyh xsyh vlrhy rj R;krhy

fdrh frdhVs frus fodr ?ksryh vlrhy ?

a) 400 b) 750 c) 480 d) 240

mRrj: 480

mdy: frdhVs fodysyh la[;k = $\frac{8}{100} \times 6000$

$= 8 \times 60$

$= 480$

15) ;ksX; fjrhus filysY;k 52 iRR;kaP;k dWVe/kwu ,d iRrk dk<yk rj rks

iRrk bfLidps 7 feG.;kph “kD;rk ---------- vlsy-

a a) $\frac{1}{26}$ b) $\frac{1}{52}$ c) $\frac{3}{52}$ d) $\frac{1}{13}$

mRrj: $\frac{1}{52}$

mdy: ,dw.k iRrs = 52

bfLid 7 os iRrk = 1

$\therefore P$ (bfLid 7 iRrk)= $\frac{1}{52}$

16) ,dk fi”kohr 3 yky vkf.k 5 dkGs psaMw vkgsr-cWxsrwu 1 psaMw ;k–fPNd

in~/krhus dk<yk vlrk]dk<ysyk psaMw yky vlsy ;kph laHkkO;rk ----- vlsy-

a a) $\frac{3}{8}$ b) $\frac{1}{2}$ c) $\frac{5}{8}$ d) $\frac{3}{4}$

mRrj: $\frac{3}{8}$

mdy: ,dw.k psaMw = 3 +5 = 8

n(S) = 8

A = yky psaMw vl.ks = 3

∴ n(A) = 3

∴ P (A) = $\frac{n(A)}{n(S)} = \frac{3}{8}$

17) ,dk eqykdMs ,d Qklk vkgs-T;kps 6 i`'BHkkx osxosxG;k v{kjkauh n"kZfoys

vkgsr-rs [kkyhyizek.ks fnys vkgs] A , B , C, D, E, F tj Qklk Qsdyk

rj D feG.;kph laHkkO;rk ---------- vlsy-

a a) $\frac{1}{4}$ b) $\frac{1}{2}$ c) $\frac{1}{3}$ d) $\frac{1}{6}$

mRrj: $\frac{1}{6}$

mdy: uequk vodk"k = S = { A, B, C, D, E, F}

∴n (S) = 6

∴ P (D feG.;kph “kD;rk) = $\frac{1}{6}$

18) ;ksX; fjrhus filysY;k 52 iRR;kaP;k dWVe/kwu ,d iRrk dk<yk- rks iRrk

,Ddk ulsy ;kph laHkkO;rk ---------- vlsy-

a a) $\frac{1}{13}$ b) $\frac{2}{13}$ c) $\frac{12}{13}$ d) $\frac{4}{13}$

mRrj: $\frac{12}{13}$

mdy: ,dw.k iRrs = 52

∴n(S) =52

,dw.k ,DD;kaph la[;k = 4

Q = ,Dds ulysY;k iRR;kaph la[;k = 52−4 = 48

∴n (Q) = 48

∴P (Q) = $\frac{n(Q)}{n(S)}$ = $\frac{48}{52}$ =$\frac{12}{13}$

19) ,d uk.ks nksunk Qsdys vlrk] nksUgh Nkis feG.;kph laHkkO;rk----------

---------- vlsy

a a) $\frac{1}{2}$ b) $\frac{1}{3}$ c) $\frac{1}{4}$ d) $\frac{1}{6}$

mRrj: $\frac{1}{4}$

mdy: uequk vodk”k = S = { HH, HT , TH , TT }

,dw.k “kD; fu’iRrhph la[;k = 4

visf{kr fu’iRrh la[;k (nksUgh Nki feG.ks) = 1

∴ nksUgh Nkis feG.;kph laHkkO;rk = $\frac{1}{4}$

20) ,[kknh ?kVuk ?kMw “kdr ulsy rj R;kph laHkkO;rk ---------- vlsy

a a a) 1 b) 34 c) 12 d) 0

mRrj: 0

mdy: ?kVuk ?kMw “kdr ukgh-

21) ,[kknh ?kVuk ?kM.;kph “kD;rk Qkjp deh vlrs- R;kph laHkkO;rk -------

--- P;k toG vlrs-

a) 0.0001 b) 0.001 c) 0.01 d) 0.1

mRrj: 0.0001

22) LraHk tqGok vkf.k [kkyhy i;kZ;kae/kwu ;ksX; i;kZ; “kks/kk-

1.	fuf”pr ?kVusph laHkkO;rk	A.	$\frac{1}{2}$
2.	v”kD; ?kVusph laHkkO;rk	B.	0
3.	A vkf.k B ;k iwjd ?kVuk vkgsr-	C.	1
			D.P(B) = 1 –P(A)
			E.P (A) = P (B)

a) (1) → (A), (2) → (B), (3) → (C),

b) (1) → (B), (2) → (A), (3) → (C),

c) (1) → (C), (2) → (B), (3) → (E),

d) (1) → (C), (2) → (B), (3) → (D),

mRrj: (1) → (C), (2) → (B), (3) → (D),

23) T;k iz;ksxkr loZ laHkkO; Qfyrs vxksnj ekghr vlrkr, i.k R;kaiSdh

dks.kR;kgh Qfyrkcn~ny fuf”pr Hkkdhr vki.k d: “kdr ukgh- loZ Qfyrs

lR; vl.;kph “kD;rk leku vlrs]v”kk iz;ksxkyk ---------- vls Eg.krkr-

aa) uequk vodk”k b)izkfFked ?kVuk c) ;k–fPNd iz;ksx d) ;kiSdh ukgh-

mRrj: ;k–fPNd iz;ksx

24) T;k iz;ksxkr leku ifjfLFkrhe/;s ,dkp fu‘iRrhph fdaok fu.kZ;kaph

iqujko`Rrh gksrs rsOgk R;k iz;ksxkyk ---------- Eg.krkr-

aa) ;k–fPNd iz;ksx b)laHkkO; iz;ksx c) izkFkfed iz;ksx d) fu.kkZ;d iz;ksx-

mRrj: fu.kkZ;d iz;ksx

25) ?kVuk E lkBh] P (E) + P (E) = q rj ----------

a) o≤ q ≤1 b) o < q ≤ 1 c) o < q < 1 d) ;kiSdh ukgh-

mRrj: ;kiSdh ukgh

mdy: P (E) + P (E) = 1

∴ q = 1.

26) ,d ek.kwl 4 iSdh 3 osGk [kjs cksyrks- rks ,d Qklk Vkdrks vkf.k R;koj 6

lksMwu osxGh ,d la[;k ;srs- i.k rj la[;k 6 vkgs vls rks lkaxrks R;kph

laHkkO;rk dk<k-

a) $\frac{3}{4}$ b) $\frac{1}{4}$ c) $\frac{1}{2}$ d) 1

mRrj: $\frac{1}{4}$

mdy: tsOgk 6 oxGrk brj ,d la[;k ;srs- vkf.k rks ek.kwl lkaxrks dh rh

la[;k lgk vkgs- ;kpk vFkZ rks ek.kwl [kksVs cksyr vkgs-

laHkkO;rk = $1 - \frac{1}{4}$

= $\frac{1}{4}$

27) 00, 01, 02 ---------- 99 la[;k vlysY;k 100 frdhVkad/kwu ;k–fPNd

in~/krhus 1 frdhV fuoMys- letk x gh la[;kaph csjht vkgs vkf.k y gs

la[;kps mRiknu vkgs] rj $x = 9$ vkf.k $y = 0$ ph laHkkO;rk ---------- vlsy-

a) $\frac{2}{17}$ b) $\frac{3}{27}$ c) $\frac{1}{50}$ d) $\frac{1}{25}$

mRrj: $\frac{1}{50}$

mdy: la[;kph csjht $= 9$ vkf.k la[;kps mRiknu $= 0$

$\therefore$ la[;k ,dr 09 fdaok 90 vlsy-

$\therefore$ vko"k;d laHkkO;rk $= \frac{2}{100} = \frac{1}{50}$

28) ukWu – yhi o"kkZr 53 lkseokj vl.;kph laHkkO;rk ------- vlsy

a) $\frac{3}{4}$ b) $\frac{1}{4}$ c) $\frac{1}{7}$ d) 1

mRrj: $\frac{1}{7}$

mdy: ukWu – yhi o"kkZrhy fnolkaph la[;k $= 365$

laiw.kZ vkBoM;kaph la[;k $= 52$ ($52 \times 7 = 364$)

mjysY;k fnolkaph la[;k $= 1$

gk fnol lkseokj vl.;kph laHkkO;rk $= 53$

lkseokjkaph laHkkO;rk $= \frac{1}{7}$

29) ;ksX; fjrhus filysY;k 52 iRR;kaP;k dWVe/kwu ,d iRrk ;k–fPNd in~/kfruh dk<yk- dkGh jk.kh feG.;kph laHkkO;rk dk<k-

a) $\frac{1}{13}$ b) $\frac{1}{52}$ c) $\frac{1}{26}$ d) 1

mRrj: $\frac{1}{26}$

mdy: dkMZ dk<.;kP;k ,dw.k ekxkZph la[;k = 52

dkGh jk.kh dk<.;kP;k ekxkZaph la[;k = 0

dkGh jk.kh feG.;kph laHkkO;rk = $\frac{2}{52} = \frac{1}{26}$

30) tj rhu osxGh uk.kh ,d= Qsdyh] rj nksu Nki feG.;kph laHkkO;rk dk<k-

a) $\frac{1}{8}$ b) $\frac{3}{8}$ c) $\frac{1}{2}$ d) 1

mRrj: rhu uk.kh ,d= Qsdyh-

mdy: uequk vodk”k = S = {HHH, HHT,HTH,THH,TTT, TTH,THT,HTT}

n(S) = 8

2 Nkis ,d= vlysyh la[;k = 3

2 Nkis feG.;kph laHkkO;rk = $\frac{3}{8}$

31) fu:i{kikrh Qklk Vkdyk]rj le la[;k feG.;kph laHkkO;rk dk; vlsy ?

a) $\frac{1}{8}$ b) $\frac{3}{8}$ c) $\frac{1}{2}$ d) 1

mRrj: $\frac{1}{2}$

mdy: ,dw.k fu"iRrh = S = {1,2,3,4,5,6} ∴n(S) =6

visf{kr fu'iRrh = A = { 2 ,4,6} ∴ n(A) =3

∴ P (A) = $\frac{n(A)}{n(S)} = \frac{3}{6} = \frac{1}{2}$

32) tj ftadysY;k [ksGkph laHkkO;rk 0.3 vlsy rj gkjysY;k [ksGkph laHkkO;rk

dk; vlsy -

a) 1 b)0.7 c)0.3 d) 99.7

mRrj: 0.7

mdy: ftadysY;k [ksGkph laHkkO;rk = 0.3

∴gkjysY;k [ksGkph laHkkO;rk

= 1 – ftadysY;k [ksGkph laHkkO;rk

= 1 – 0.3

= 0.7

33) ,d Qklk ,dnk Vkdyk vlwu 3 is{kk ygku la[;k feG.;kph laHkkO;rk-----

----- vlsy-

a) $\frac{1}{3}$ b) $\frac{3}{8}$ c) $\frac{1}{6}$ d) 1

mRrj: $\frac{1}{3}$

mdy: ,d Qklk ,dnk Vkdyk = s = { 1, 2, 3, 4, 5, 6}

n(S) = 6

∴ 3 is{kk ygku la[;k = B = { 1,2} ∴ n(B) = 2

∴ P(B) = $\frac{n(B)}{n(S)}$ = $\frac{2}{6} = \frac{1}{3}$

34) dks.krh la[;k laHkkO;rk Eg.kwu n”kZfork ;s.kkj ukgh ?

a) 23% b) 1.5 c) 15% d) 0.7

mRrj: 1.5

mdy: dks.kR;kgh ?kVusph laHkkO;rk gh 0 rs 1 fdaok 0% rs 100% ;k njE;ku

vlrs-

35) ,d Qklk Qsdyk rj ojP;k i`‘BHkkxkoj 3 is{kk deh la[;k ;s.;kph

laHkkO;rk dk; vlsy ?

a) $\frac{1}{6}$ b) $\frac{1}{3}$ c) $\frac{1}{2}$ d) 0

mRrj: $\frac{1}{3}$

36) 1 rs 100 e/khy fuoMysY;k la[;k eqG la[;k vl.kkÚ;k ?kVusph laHkkO;rk

dk; ?

a) $\frac{1}{5}$ b) $\frac{6}{25}$ c) $\frac{1}{4}$ d) $\frac{13}{50}$

mRrj: $\frac{1}{4}$

mdy: n (S) = 100

fuoMysY;k la[;k ewG la[;k vkgsr gh ?kVuk A v"kh ekuw

∴ ?kVuk A ={2,3,5,7,11,13,17,19,23,,29,31,37,41,43,47,53, 59,61,67,71,73,79,83,89,97}

∴ n (A) = 25

∴ $P(A) = \frac{n(A)}{n(S)} = \frac{25}{100} = \frac{1}{4}$

37) ,dk fi"kohr 40 dkMZ vkgsr-izR;sd dkMZoj 1 rs 40 vad vkgsr-R;krwu

;k–fPNd in~/krhus 1 dkMZ dk<ys vlwu dk<ysY;k dkMZoj ;s.kkjh la[;k

5 P;k iVhr vlsy ;kph laHkkO;rk dk<k-

a) $\frac{1}{5}$ b) $\frac{3}{5}$ c) $\frac{4}{5}$ d) $\frac{1}{3}$

mRrj: $\frac{1}{5}$

38) tj n(A) = 2, P (A) = 15, rj n(S) = ?

a) 10 b) $\frac{5}{2}$ c) $\frac{2}{15}$ d) $\frac{1}{3}$

mRrj: $\frac{2}{15}$

39) ?kVuk E ph laHkkO;rk +E ?kVuk ulysyh laHkkO;rk = ----------

a) 0.5 b) 0.25 c) 0.75 d) 1

mRrj: 1

40) ---------- gh ?kVusph laHkkO;rk ;sÅ “kdr ukgh v”kk ?kVusyk ---------- Eg.krkr-

a) 0,v”kD; ?kVuk b) 1,fuf”pr ?kVuk

c) 1,izkFkfed ?kVuk d) 0,;k–fPNd iz;ksx

mRrj: 0,v”kD; ?kVuk

41) ,[kknh ?kVuk ?kM.;kph laaHkkO;rk ---------- vkgs v”kk ?kVusyk -------- Eg.krkr-

a) 0,v”kD; ?kVuk b) 1,fuf”pr ?kVuk

c) 1,izkFkfed ?kVuk d) 0,;k–fPNd iz;ksx

mRrj: 1,fuf”pr ?kVuk

42) ,[kkn;k iz;ksxkrhy loZ izkFkfed ?kVukaph csjht ---------- vlrs-

a) 0.5 b) 0.25 c) 0.75 d) 1

mRrj: 1

43) ,[kkn;k ?kVusph laHkkO;rk o is{kk tkLr fdaok leku vkf.k ---------- is{kk

ygku fdaok R;kP;k leku vlrs-

a) 0,1 b) 0,100 c) 1,100 d) 0.5,1

mRrj: 0,1

44) [kkyhyiSdh dks.krh ?kVusph laHkkO;rk ukgh ?

a) $\frac{2}{3}$ b) -1.5 c) 15% d) 0.7

mRrj: -1.5

mdy: dkj.k ?kVusph laHkkO;rk gh “kwU;kis{kk eksBh fdaok leku vlrs-

45) tj $P(E) = 0.05$ vlsy rj E ulysY;k ?kVusph laHkkO;rk dk; vlsy?

a) 0.95 b) 9.95 c) 99.95 d) 1

mRrj: 0.95

mdy: E ulysY;k ?kVusph laHkkO;rk $= 1 - P(E)$

$= 1 - 0.05 = 0.95$

46) ;k–fPNd iz;ksxkr]”kD; vl.kkÚ;k loZ fu‘iRrhaP;k lapkyk ---------- Eg.krkr-

a) uequk vodk”k b) fuf”pr ?kVuk c) v”kD; ?kVuk d) iwjd ?kVuk

mRrj: uequk vodk”k

47) ,[kknh ?kVuk ?kM.;kph laHkkO;rk Qkjp deh vlrs R;kph laHkkO;rk ----------

---------toG vlrs-

a) 0.0001 b) 0.001 c) 0.01 d) 0.1

mRrj: 0.0001

48) fof”k"V ?kVusph laHkkO;rk VDdsokjh Eg.kwu O;Dr dsyh tkrs rh---------- vlw

“kdrs-

a)100 is{kk deh b) 0 is{kk deh c) 1 is{kk tkLr d) dks.krhgh iw.kZ la[;k

mRrj: dks.krhgh iw.kZ la[;k

49) ,d Qklk Vkdyk vlrk lgk is{kk tkLr la[;k feG.;kph laHkkO;rk --------

---------- vlsy-

a) 1< 0 b) > , 1 c) 0 d) ;kiSdh ukgh-

mRrj: 0

50) 1 rs 50 e/kwu fuoMysyh la[;k fo"ke vl.;kph laHkkO;rk ---------- vlsy-

a) 30% b) 80% c) 50% d) 100%

mRrj: 50%