Skm's Jashbhai Maganbhai Patel College of Commerce

Programme: F.Y.B.COM. Course: Mathematical and Statistical Techniques-I Semester: I

Sr. No.	Question ₹	Option 1	Option 2	Option 3	Option 4	Correct Answer
1	A ₹ 10 share at 10% premiuim has a market price of ₹	20	0	9	11	11
2	A company declared an annaul dividend of 7%. What is annual dividend of Mr.Mehta if he owns 250 share of company of face value ₹100 each. (Face value of 250 shares= ₹25000)	1750	20	250	2000	1750
3	A dice is thrown what is probability of getting an even prime number	1/6	1	1/3	1/2	1/6
4	A mutual funds showed a changes of 35% during the year 2011-12. if the NAV on 1-April-2011 was ₹70 , then what is NAV on 31- March-2012	45.5	124.5	94.5	24.5	94.5
5	A share at 10% premiuim then what is it's market price	90	110	200	100	110
6	Arithemtic mean of 10 observation where sum of the 10 observation is 360 is given by	36	350	3600	20	36
7	For the given pay-off table what is best course of action on the basis of Maximax Criteria Act\ state of nature: P Q R A 23 12 10 B 10 20 30	A	R	B	C	B
8	For the given pay-off table what is best course of action on the basis of Maximin Criteria Act\ state of nature: P Q R A 10 30 40 B 10 20 50	B	P	C	A	A
9	From a pack of well shuffeled deck in how many ways we select two face cards	12	1	6	4	6
10	How many 4 digit number can be form by using 2,4,5,7,8 and 9	90	300	360	100	360
11	how many different words can be formed by using letters of words "TABLE"	120	25	1	5	120
12	If P(A)= 0.4, P(B)= 0.6 and P(A ∩B) = 0.24 then what is P(A/B)	0	0.6	1	0.4	1
13	If A and B are two independent event then what is the probability of P (A U B) where P(A)= 0.3 and P(B)= 0.4	0.12	0	1.2	1	0.12
14	If a share is available at par value, then its market value is	equal to it's dividend	100	10	equal to it's face value	equal to it's face value
15	If arithmetic mean of group I is 25 of size 10 and arithmetic mean of other group II is 35 of size 15 then what is the combined mean of group size 25	525	775	31	29	31
16	If Coeifficient of mean deviation is 0.8 and arithmetic mean is 150 then what is the value of mean deviation	1.2	18750	120	187.5	120
17	If E(x) = 2.5 then what is E(5x-7)	55.5	69.5	5.5	19.5	5.5
18	If P(A U B) = 0.8, P(A) = 0.8, P(B) = 0.5 what is P(A ∩B)	0.3	0	0.8	0.5	0.5
19	If P(AU B)= 0.35 the what is P(AUB)'	0.25	1	1.35	0.65	0.65
20	If Smallest value of observation is 20 and highest value is 80 then what is coefficient of range	2	30	0.5	100	0.5
21	If Standard deviation is 25.8 and arithmetic mean is 60 the what is coefficient of variation	43	90	232.56	15.48	43
22	If two coins are tossed simultanously what is the probability of getting both as tail	3/4	1/4	4	1/2	1/4
23	If weighted mean of the items : food , clothings, rent, others is 600 and ∑wx = 9000 then what is sum of the weights of the given items	150	15	6	1000	15

24	In decision making which of the following criteria come under uncertainty with probability	Maximin	EMV	Maximax	Minimax	EMV
25	In decision tree which criteria is using to find the best course of action	Miaximin	EMV	Laplace	EOL	EMV
26	In how many ways 3 boys and 2 girls be seated in a row so that they are alternate	6	3	3! 2!	5!	3!2!
27	In how many ways a football team of 11 players can be selected from a squard of 15 pplayers.	15	2730	11	1	2730
28	In which criteria we are constructing regret table	EOL	Decision tree	EMV	Laplace	EOL
29	Let Min. $z = 10x + 20y$ subject to $x + y \leq 2$, $2x + y \leq 4$; $x , y \geq 0$ the feasible region is	unbounded	Quadrilatral	bounded	triangle	triangle
30	Let X be a random variable and E(x)= 1.5 , E(x2)= 2.25 the what is V(x)	1	0.75	2.5	0	0
31	Let $z= 2x+3y$ subject to $3x +2y \geq 6$; $x+2y \geq 4$, $x,y \geq 0$ at which point z value is maximum	x=4, y= 2	x=4, y=6	x=0, y=3	x= 4, y= 0	x= 4, y= 0
32	Market capatalisation of a company is calculated by multiplying the number of outsatnding shares by	face value of each share	dividend yeild	10	current market value of each share	current market value of each share
33	Objective function of L.P.P. is	a function to be optimised	non-negative value of variables	a constant	relation between the variab	a function to be optimised
34	Rahul invested 10000 in a mutual fund when NAV was ₹250 and entry load was at 2.5%. What is purchase price per unit.	56.25	303	256.25	6.25	256.25
35	Region represented by $x \geq 0, y \geq 0$	origin	third quadrant	X-axis	First quadrant	First quadrant
36	The amount required to buy 100 units of scheme having an entry load of 2% and NAV of ₹30	3000	6000	3060	3600	3060
37	The management of a companyis faced problems of choosing one of three products A,B and C for manufacturing. If EMV(A)= 26, EMV(B)= 19.5 and EMV(C)= 16 then which product they will choose for manufacturing?	B	P	A	C	A
38	The optimistic decision maker will use the principle of	Minimax	Laplace	Maximin	Maximax	Minimax
39	The shares for which the dividend and the return of capital is paid after paying preference shareholder are not called	Common shares	equity shares	Bonus shares	oedinary shares	Bonus shares
40	There are 20 people in a group , if all shakes handswith ine another, then how many hand shakes are possible?	190	40	435	380	190
41	There are how many types of decision making situations.	two	four	one	three	three
42	To find the best course of action on the basis of Laplace criteria we will choose which of the value among the average payoff calculated for the each course of action.	maximum	minimax	minimum	maximax	maximum
43	What decision will taken on the basis of EOL criteria if EOL(Oil)= 25, EOL(Ghee)=36 and EOL(Dalda)=40	Ghee	Nuts	Dalda	Oil	Oil
44	What is mean or expectaion of random variable x for the given data (x,P(x)): (1, 0.2), (2, (0.03), (3, 0.02),(4, 0.25), (5,0.5)	3.82	1.5	1	15	3.82
45	What is mode of the data if mean= 6 and median= 12	50	6	24	12	24
46	What is probability of selecting red card from a well shuffeled pack of 52 cards.	26/52	26	13/52	1/52	26/52
47	What is Quartile deviation if first and third quartilr is 25 and 11	25	7	14	11	7
48	What is the median of the given observation: 12, 20, 10, 18, 17, 11, 9, 10	10	23	11	11.5	11.5
49	What is the value of first quartile for the given data : lower class limit=40, upper class limit= 50, corresponding frequency of quartile class interval is 10 where cumulative frequency is45 and total frequency is 200	39.85	40	35	45	45
50	What is, The difference between the total assets and total liabilities of mutual fund, divided by the number of units outstanding	Net Assets Value	Market Value	Net Profit	Assets per unit	Net Assets Value