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Answer no.	Answer	Marks
Ans1	B	1
Ans2	D	1
Ans3	B	1
Ans4	C	1
Ans5	D	1
Ans6	A	1
Ans7	C	1
Ans8	A	1
Ans9	B	1
Ans10	D	1
Ans11	D	1
Ans12	A	1
Ans13	C	1
Ans14	A	1
Ans15	C	1
Ans16	B	1
Ans17	D	1
Ans18	B	1
Ans19	A	1
Ans20	B	1

Marks Each)

Ans21	For correct proof	2
Ans22	For correct figure, given, to prove For correct proof OR For correct figure, given, to prove For correct proof	1 1 1 1
Ans 23	$A + B = 90°$ AND $A - B = 30°$ $A = 60°$ and $B = 30°$ OR $Y \times (\sqrt{3}/2) + (\sqrt{3}/2) - 1 = \sqrt{3}/2$ $Y = 2/\sqrt{3}$	1 1 1 1
Ans24	AD = AF , BD = BE , CE = CF NOW AB = AC AD + DB = AF + FC AF + BE = AF + CE	 1 1
Ans25	Class mark Frequency product 10 7 70 30 P 30P 50 10 500 70 9 630 90 13 1170 TOTAL 39+P 2370 + 30P Mean = 54 P = 11	1 1
	SECTION-C (3 Marks Each)	
Ans26	HCF(48,80,144) = 16 Number of rooms required for French = 48/16 = 3 Number of rooms required for Hindi = 80/16 = 5 Number of rooms required for English = 144/16 = 9 Minimum number of rooms required = 3 + 5 + 9 = 17	2 1
Ans27	Finding sum and product of zeroes(correct) $\alpha + \beta = -2/k$ and $\alpha\beta = -15/k$ $\alpha 2 + \beta 2 = (\alpha + \beta)2 - 2\ \alpha\beta = 34$ $17k2 - 15k - 2 = 0$ $17k2 - 17k + 2k - 2 = 0$ $K = -2/17$ or $k = 1$	 1 1 1

Ans28	Let length of shorter side = x cm Length of longer side = (x + 17)cm By Pythagoras theorem (25)2 = x2 + (x + 17)2 X2 + 17x – 168 = 0 X2 + 24x – 7x – 168 = 0 X = -24 or 7 X = 7 Shorter side = 7cm Longer side = 24cm (OR) FoR correct answer Distance from gate B = 5m Distance from gate A = 12m	1 1 1 3
Ans29	For (step wise marking) of correct proof	1+1+1
Ans30	For correct proof	3
Ans31	Area grazed by Buffalo = (<A/360) X π (7)2 Area grazed by Cow = (<B/360) X π (7)2 Area grazed by Horse = (<C/360) X π (7)2 Total area = π (7)2 x (<A + <B +<C)/360 =77m2 (OR) Central angle = 60° Area of 1 segment = 77.47cm2 Area of 6 designs = 6 x 77.47 = 464.82cm2 Total cost of designs = 0.35 x 464.82 = Rs 162.687	1 1 1 1 1 1
Ans 32	Let unit place = x , Ten's place = y Condition 1 (10x + y) + (10y + x) = 66 X + y = 6 (1) Condition 2 x – y = 2 (2) Y – x = 2 (3) Case 1 solving (1) and (2) X = 4 and y = 2 Case 2 solving (1) and (3) X = 2 and y = 4 So two such numbers are possible (OR) For each correct graph drawing Coordinates of vertices (0,2) (6,0) , (0,-4)	 1 1 2 1

Ans33	(a) For given / To prove / fig. For correct proof (b) For given / To prove / fig. For correct proof	1 2 1 1

Ans34	For correct Figure Height of multi-storyed building Distance between two buildings OR For correct Figure For correct calculation of time	1 2 2 1 4
Ans35	using correct median formula a=9 b=16	2 1 ½ 1 ½
Ans36	(1) A P is 4,5,6,…. A12 = 15 7 seats on his left (2) S20 = 270 (3) Difference between height of 1st row and 15th row = 1050 – 70 = 980cm Or Height of section = height of row 1 to row20 = 20 x 70 = 1400cm	 1 1 2
Ans37	(1) Q(4,4) and R(8,3) Distance QR = $\sqrt{17}$ (2) NO, as by mid point formula mid point of P and R is (5,4) (3) Correct ratio 1:2 OR Correct point (3/4 , 0)	1 1 2
Ans38	i) The slant height of the conical part is $17.5m$. (ii) The floor area of the tent is $616m^2$. (iii) (a) The area of the cloth used for making the tent is $1474m^2$ Total volume = Volume_cylinder + Volume_cone ≈ 1,570.8 + 686.4 ≈ 2,257.2 m^3.	1 1 2