

- 3 (A) The following results were obtain from 100 students, 7

$$\sum x = 510, \sum x^2 = 2610$$

Test the hypothesis that population mean is 5.

- (B) A cadila drug company develops a new drug, to prevent 7
cold, they choose a random sample of 100 women and 200
men from population, at the end of study 38% women and
51% men caught cold, test the hypothesis that effect of
drug is equal for men and women [use 5% level].

OR

- 3 A result of 880 students of BBA is given below : 440 students 14
fail, 200 secured pass class, 200 had second class and 40 got
first class, The university result proportion is 8 : 5 : 5 : 2
respectively, do you agree with these proportion [use χ^2 test].

- 4 (A) Explain F-test. 7

- (B) A training is given to 10 officers and the improvement 7
in their performance were recorded in terms of score as :

-4, 6, -4, -20, 0, 4, -10, -16, -2, 6

OR

- 4 Set up two way ANOVA table : 14

		Machine			
		A	B	C	D
Worker	40	34	43	42	
	42	36	48	39	
	30	32	40	28	
	39	34	42	49	
	34	38	45	35	

5 (A) Explain Game theory. 7

(B) (i) Write rules to determine saddle point. 7

(ii) Write steps for dominance principle.

OR

5 Find the optimal strategies for player A & B in the following Game, use algebraic method : 14

		Player-B			
		B ₁	B ₂	B ₃	B ₄
Player-A	A ₁	35	65	25	5
	A ₂	30	20	15	0
	A ₃	40	50	0	10
	A ₄	55	60	10	15
