



SDCFA/SDCAF204

**II Semester B.Com. (F & A) (A & F) Dogroo Examination,
June/July - 2026
(SEP Schemo F+R)
COMMERCE
Bumastics**

Time : 3 Hours

Maximum Marks : 80

Instructions :

Answers should be written in English only.

SECTION - A

Answer any Five questions out of seven questions. Each question carries Two marks. (5×2=10)

1. a) What is an irrational number? Give two examples.
b) If the product of two numbers is 1764 and their HCF is 7, find their LCM.
c) Write any two sources of collecting primary data.
d) Calculate mode using empirical relationship, if Mean = 30 and Median = 28.
e) Find the mean proportional between 4 and 16.
f) Define Regression with example.
g) Solve for x: $5(8x+3)=9(4x+7)$

SECTION - B

Answer any Three questions out of five questions. Each question carries Six marks. (3×6=18)

2. Solve using formula method : $4x^2-12x+9=0$.
3. Find the HCF of 108, 288 and 360 by division method.
4. In a sample survey about coffee habits in two cities, the following information was received. City 1 : Female were 50 %. Total coffee drinkers were 65% and male non-coffee drinkers were 30% City 2: Male were 60%. Male non-coffee drinkers were 40% and female coffee drinkers were 20%. Represent the above data in a tabular form.

[P.T.O.]



5. Calculate arithmetic mean for the following data using step deviation method:

Marks	10	20	30	40	50	60	70	80	90
No. of students	7	18	15	25	30	20	16	7	2

6. Compute Standard Deviation and its coefficient from the following data : 45, 110, 78, 70, 52, 75, 64, 98

SECTION - C

Answer any Three questions out of five questions. Each question carries Fourteen marks. (3×14=42)

7. A and B together can complete a work in 12 days. B and C together can complete it in 15 days, and C and A together can complete it in 20 days. Find in how many days can A, B and C individually complete the work.

8. Compute quartile deviation and its coefficient using the following data.

Wages	0-10	10-20	20-30	30-40	40-50
No. of workers	8	30	40	12	10

9. Calculate Karl Pearson's correlation coefficient for the following data:

Marks in										
Income Tax	35	37	28	42	48	54	65	40	35	50
Marks in										
Statistics	60	55	75	70	80	35	65	35	50	60

10. Solve the following equation by elimination method : $x+y=15$, $3x-y=21$

11. A survey was conducted to study the relationship between sales (X) and advertisement (Y) and the following results were obtained.

**Sales (in cores of Rs.) Advertisement expenses
(in Laksh of Rs.)**

Mean	115	120
Standard Deviation	10	15

Coefficient of correlation(r) = 0.75

- a) Calculate the two regression equations.
b) Find the likely sales when advertisement expense is Rs. 110 lakhs.



(3)

SDCFA/SDCAF204

SECTION - D

Answer any One of the following questions. Each question carries 10 marks.
(1×10=10)

12. a) The incomes of A and B are in the ratio 3:4 and their expenditures are in the ratio 5:6. If A saves Rs. 900 and B saves Rs. 1,200, find their monthly incomes.

(OR)

- b) Marks scored by 8 participants in a beauty contest assigned by two judges are given below. Calculate the rank correlation coefficient.

Marks by Judge - I	53	98	95	81	70	81	65	81
Marks by Judge - II	25	47	82	76	53	61	57	70
