Reg.No. : ☐ ☐ ☐ ☐ ☐ ☐

I.Answer all the questions.
II.Use blue pen only.

Time : 01:30:00 Hrs

Total Marks : 65

Part-A

5 x 1 = 5

1) Most commonly used index numbers are

(a) Diffusion index number   (b) price index number   (c) value index number   (d) none of these

2) Most frequently used index number formulae are

(a) weighted formulae   (b) Unweighted formulae   (c) fixed weighted formulae   (d) none of these

3) Laspeyre's index formula uses the weights of the

(a) base year quantities   (b) current year prices   (c) average of the weights of number of years   (d) none of these

4) The weights used in Paasche's formula belong to

(a) the base period   (b) the current period   (c) to any arbitrary chosen period   (d) none of these

5) Variation in the items produced in a factory may be due to

(a) chance causes   (b) assignable causes   (c) both (a) and (b)   (d) neither (a) or (b)

Part-B

5 x 6 = 30

6) Calculate the trend values by four year moving averages method.

Year	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Production	614	615	652	678	681	655	717	719	708	779	757

7) From the following data calculate the price index number by (a) Laspeyre's method (b) paasche's method (c) Fisher's method

Commodity	Base year		Current year	
	Price	Quantity	Price	Quantity
A	5	25	6	30
B	10	5	15	4
C	3	40	2	50
D	6	30	8	35

8) Construct cost of living index for 2000 taking 1999 as the base year from the following data using Aggregate Expenditure method.

Commodity	Quantity(Kg.) 1999	Price	
		1999	2000
A	6	5.75	6.00
B	1	5.00	8.00
C	6	6.00	9.00
D	4	8.00	10.00
E	2	2.00	1.80
F	1	20.00	15.00

9) Calculate the cost of living Index Number using Family Budget method.

Commodity	A	B	C	D	E	F	G	H
Quantity in Base year (unit)	20	50	50	20	40	50	60	40
Price in Base year (Rs.)	10	30	40	200	25	100	20	150
Price in current year(Rs)	12	35	50	300	50	150	25	180

10) Calculate the cost of living index number using Family Budget method for the following data taking the base year as 1995

Commodity	Weight	Price(per unit)	
		1995	1996
A	40	16.00	20.00
B	25	40.00	60.00
C	5	0.50	0.50
D	20	5.12	6.25
E	10	2.00	1.50

Part-C

5 x 10 = 50

11) Construct the price index number from the following data by applying (i) Laspeyre's (ii) Paasche's (iii) Fisher's method

Commodity	1999		1998	
	Price	Quantity	Price	Quantity
A	4	6	2	8
B	6	5	5	10
C	5	10	4	14
D	2	13	2	19

12) Using the following data,construct Fisher's Ideal index and show that it satisfies Factor Reversal test and Time Reversal test.

Commodity	Price		Quantity	
	Base year	Current year	Base year	Current year
A	6	10	50	56
B	2	2	100	120
C	4	6	60	60
D	10	12	30	24
E	8	12	40	36

13) Calculate Fisher's Ideal Index from the following data and show how it satisfies time reversal test and factor reversal test.

Commodity	Base year(1997)		Current year(1998)	
	Price	Quantity	Price	Quantity
A	10	10	12	8
B	8	12	8	13
C	12	12	15	8
D	20	15	25	10
E	5	8	8	8
F	2	10	4	6

14) Calculate the seasonal indices by the method of simple average for the following data.

Year	I quarter	II quarter	III quarter	IV quarter
1985	68	62	61	63
1986	65	58	66	61
1987	68	63	63	67

15) Calculate the seasonal indices for the following data by the method of simple Average

		Quarters		
Year	I	II	III	IV
1994	78	66	84	80
1995	76	74	82	78
1996	72	68	80	70
1997	74	70	84	74
1998	76	74	86	82

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