G. VENKATASWAMY NAIDU COLLEGE (AUTONOMOUS), KOVILPATTI – 628 502.

UG DEGREE END SEMESTER EXAMINATIONS – APRIL 2025.
(For those admitted in June 2023 and later)

PROGRAMME AND BRANCH: B.Com., PROFESSIONAL ACCOUNTING

SEM	CATEGORY	COMPONENT	COURSE CODE	COURSE TITLE
III	PART – III	ELECTIVE GENERIC - 3	U23PA3A3	BUSINESS MATHEMATICS AND STATISTICS

Date & Session:26.04.2025 /AN   **Time : 3 hours**   **Maximum: 75 Marks**

Course Outcome	Bloom's K-level	Q. No.	SECTION – A (10 X 1 = 10 Marks) Answer **ALL** Questions.
CO1	K1	1.	If A is 25 less than B then what will be the value of (2B-A)/A? a) 5/4　　　　b) 3/2　　　　c) 3/4　　　　d) 5/3
CO1	K2	2.	Two ratio 384: 480 in its simplest form is ____. a) 3:5　　　　b) 5:4　　　　c) 4:5　　　　d) 2:5
CO2	K1	3.	Calculate the simple interest if the principle amount is 50000 and the rate is 2% for 4 years. a) 4000　　　　b) 400　　　　c) 40000　　　　d) 40
CO2	K2	4.	What is the simple interest formula? a) SI = PTR/100　　b) SI = PNR/100　　c) SI = PTN/100　　d) SI = PTR/100
CO3	K1	5.	The difference between the highest and the least number is _____. a) Range　　　　b) Mode　　　　c) Median　　　　d) Mean
CO3	K2	6.	Which of the following is the measure of dispersion. a) Range　　　　b) Median　　　　c) Mean　　　　d) Mode
CO4	K1	7.	The value of correlation coefficient is always ____. a) +1　　　　b) -1　　　　c) 0　　　　d) + or - 1
CO4	K2	8.	If one of the regression coefficient is negative the other ___. a) Must be negative　b) must be positive　c) Must be equal　d) none of the above
CO5	K1	9.	Index number is a _____. a) Ratio　　　　b) Multiplier　　　　c) Divisor　　　　d) all of these
CO5	K2	10.	A movement in the time series that repeats over a period of 6 months is known as _____. a) Secular trend　　b) Seasonality　　c) Cyclical trend　　d) irregular trend

Course Outcome	Bloom's K-level	Q. No.	SECTION – B (5 X 5 = 25 Marks) Answer **ALL** Questions choosing either (a) or (b)
CO1	K3	11a.	Write the Types of Compounded Ratio. **(OR)**
CO1	K3	11b.	Find the duplicate ratio of the following 　a) 4:9　b) 8:27　c) 2:3　d) 4:6
CO2	K3	12a.	If Rs.450 amount to Rs,504 in 3 years at simple interest what will Rs.650 amount in 2 years and 6 months . the interest rate being the same in both case. **(OR)**
CO2	K3	12b.	Find the amount of compound interest on Rs.10,500 at 8% for 3 years.
CO3	K4	13a.	Calculate the mean.

X	0-10	10-20	20-30	30-40	40-50
F	5	8	10	8	9

(OR)

CO3	K4	13b.	Calculate the Harmonic mean.					
			Value	3	7	11	13	17
			Frequency	3	11	19	8	4

CO4	K4	14a.	Analyse the Difference between Correlation and Regression.					
			(OR)					
CO4	K4	14b.	Calculate the rank Correlation.					
			Statistics (X)	93	75	65	50	80
			Mathematics(Y)	85	60	73	40	90

CO5	K5	15a.	Find a 4 Years moving Average from the following data								
			Year	1991	1992	1993	1994	1995	1996	1997	1998
			Sales	301	454	393	414	424	464	466	492

(OR)

CO5	K5	15b.	From the following data construct on index for 2015 taking 2016 as base		
			Commodity	**2015(Price)Rs.**	**2016(Price)Rs.**
			A	100	140
			B	80	120
			C	160	180
			D	220	240
			E	40	40

Calculate Simple Aggregative Method.

Course Outcome	Bloom's K-level	Q. No.	**SECTION – C (5 X 8 = 40 Marks)** **Answer ALL Questions choosing either (a) or (b)**					
CO1	K3	16a.	Write the Types of Proportion.					
			(OR)					
CO1	K3	16b.	Monthly income of A and B are in the ratio of 5:6 and the expenses in the ratio of 4:5. If each sale Rs.200 per month. Find out the Income.					
CO2	K4	17a.	Find the principal if the difference between S.I and C.I is Rs.122 at 5% p.a in 3 years.					
			(OR)					
CO2	K4	17b.	Analyse the types of Annuity.					
CO3	K4	18a.	Find the Quartile Deviation and Co- Efficient of Quartile deviation. 28,32,18,16,42,12,39					
			(OR)					
CO3	K4	18b.	Calculate the standard deviation from the following data					

X	6	7	8	9	10	11	12
F	3	6	9	13	8	5	4

CO4	K5	19a.	Find the Karl Pearson's co-efficient of correlation from the following data.

X	12	9	8	10	11	13	7
Y	14	8	6	9	11	12	13

(OR)

CO4	K5	19b.	Find the Regression Equations

X	10	12	15	23	30
Y	14	17	23	25	21

CO5	K5	20a.	Calculate simple average relative method		
			Commodity	**2000(Price)Rs.**	**2001Price)Rs.**
			A	60	130
			B	30	80
			C	40	85
			D	50	25
			E	80	75
			F	120	55

(OR)

CO5	K5	20b.	Construct the following Fixed base Index to Chain base Index					
			Year	2005	2006	2007	2008	2009	2010
			FBI	150	180	120	160	200	210