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.Sc., STATISTICS

SEM	CATEGORY	COMPONENT	COURSE CODE	COURSE TITLE
IV	PART-III	CORE-8	U23ST408	ACTUARIAL STATISTICS

Date & Session: 30.04.2025/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.	Calculate the simple interest if the principal amount is 50000 and the rate is 2% for 4 years. a) 4000 b) 400 c) 40000 d) 40
CO1	K2	2.	Find the Compound Interest on Rs. 1000 for two years at 2% per annum. a) 20.2 b) 20.4 c) 40.4 d) 40.2
CO2	K1	3.	If a family's monthly expenses are greater than its income, then it has: a) debt b) Savings c) Interest d)Income
CO2	K2	4.	Any periodical payment of a fixed amount made at a regular interval: a) Annuity b) Installment c) Fee d) Deferred Annuity
CO3	K1	5.	Surrender value is applicable ony in the case of _____insurance. a) fire b) marine c) life d) theft
CO3	K2	6.	The minimum lock in period for unit linked insurance plans a) 1 year b) 2 years c) 4 years d) 5 year
CO4	K1	7.	The term 'Risk' includes: a) Damage to machinery and property b) Impact on the health or life of a person c)Leakage of toxic products into the atmosphere d) All of the above
CO4	K2	8.	The main purpose of having Life insurance is: a) As an avenue for long-term investment b) As a medium for getting income tax benefits from savings c) As a governmental programme for reducing poverty d) None of the above
CO5	K1	9.	In cases where a Life Insurance Agent collects the premium from the policyholder and remits it to the insurer's office, he is acting as an agent of _____ a) IRDA b) the Insurance Company c) the Policyholder d) the broker
CO5	K2	10.	Insurance helps to a) Prevent adverse situations from occurring b) Reduce the financial consequences of adverse situations c) Negate all consequences of adverse situations d) Make assets continuously productive e.

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.	I deposit Rs.250 in a high-earning account paying 9% compound interest and leave it for three years. What will be the balance on the account at the end of that time? **(OR)**
CO1	K3	11b.	Discuss varying rate of interest.
CO2	K3	12a.	Explain the components of life table. **(OR)**
CO2	K3	12b.	Explain annuities and accumulations with example.
CO3	K4	13a.	Explain surrender values and paid up policies. **(OR)**
CO3	K4	13b.	Write briefly industrial assurance.
CO4	K4	14a.	Give a short note on contingent probabilities. **(OR)**
CO4	K4	14b.	Explain about decrement tables.
CO5	K5	15a.	Elaborate on the whole life assurance. **(OR)**
CO5	K5	15b.	Explain about the pure endowment

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.	The value of a computer depreciates at a rate of 20% per annum. A new computer costs £1200. What will be its value after (a) 2 years (b) 6 years (c) 10 years **(OR)**
CO1	K3	16b.	Explain present value and accumulatd value of fixed rate.
CO2	K4	17a.	Explain gompertz-makehamlaws of mortality. **(OR)**
CO2	K4	17b.	Discuss on family income and its benefits.
CO3	K4	18a.	Explain joint life and last survivorship. **(OR)**
CO3	K4	18b.	Explain premium.
CO4	K5	19a.	Write about capital sums on retirement and death. **(OR)**
CO4	K5	19b.	Explain benefits dependent on marriage.
CO5	K5	20a.	Elaborate on net premium for assurance. **(OR)**
CO5	K5	20b.	Explain annuity plans-level annual premium under temporary assurance.