Roll No. ....

Y – 3183 (A)
M.A./M.Sc. (Mathematics) (Fourth Semester) (SPECIAL)
EXAMINATION, August 2021
(SECOND CHANCE)
Paper – 404

MATHEMATICS OF FINANCE AND INSURANCE

Time : Three Hours

Note—Attempt *all* questions.

1. Define an Annuity with four examples. Explain types of an annuity completely.

    17/20

2. Explain life annuities and registration of insurance.　　17/20

3. Explain yield of Maturity and Markowitz model.　　17/20

4. State and prove Ito's lemma for several assets.　　17/20

5. Write short notes on—　　17/20

    (i)   Two-step Binomial model

    (ii) Theta.