ED-2762

B.Sc./B.Sc. B.Ed. (Part-III)
Examination, 2022

(Old Course)

MATHEMATICS

Paper - III (C)

Application of Mathematics in Finance and Insurance

Time : Three Hours]　　　[*Maximum Marks* : 50

Note : Answer any **two** parts from each question. All questions carry equal marks.

Unit-I

1. (*a*) What is Financial Management ?

   (*b*) Difference between speculation and gambling.

   (*c*) What do you mean by present value of annuity ?

DRG_269_(3)　　　　　　　　　*(Turn Over)*

Unit-II

2. (*a*) Distinguish between Annual Rate of Return and Internal Rate of Return.

   (*b*) Difference between Risk and Uncertainty.

   (*c*) Explain the measurement of return under uncertainty situations.

Unit-III

3. (*a*) What do you mean by bond valuation ?

   (*b*) What do you mean by financial derivatives and explain features ?

   (*c*) Explain call and put option.

Unit-IV

4. (*a*) How can we compute the premium of life insurance for a fixed duration ?

   (*b*) Explain cost and benefits of insurance to the society.

   (*c*) What is the difference betweem peril and risk ?

Unit-V

5. (*a*) Explain the general insurance by using Poisson distribution.

(Continued)

(*b*) How can we use compound claim density function ?

(*c*) Explain claim of reinsurance.

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