

## SECTION B: PARAGRAPH QUESTIONS AND CALCULATIONS

## Question 1

1.1 Discuss the two basic properties of probabilities

(4 marks)

① THE NUMBER OF SUCCESSES CAN'T BE MORE THAN NUMBER OF POSSIBLE OUTCOMES THEREFORE MAXIMUM VALUE OF  $P=1$

② THE NUMBER OF SUCCESSES HAVE A NEGATIVE VALUE, THEREFORE MINIMUM VALUE IS 0

1.2 Distinguish between **fundamental** and **particular risks**. Give examples of each and motivate why it is necessary to distinguish between these two types of risk (6 marks)

① Fundamental risks - arise from losses that are impersonal in origin & consequence & originate in the economic, political, or social interdependency of society. eg. drought

② Particular risks - losses which have their origin in discrete events which have an essentially personal cause eg. explosion of a pressure tank.

(10 marks)

[TURN OVER]