<u>The Poisson distribution – 2021 A2 Nov S2</u>

١.	Nov/2021/Paper_9709/61/No.2 The number of enquiries received per day at a customer service desk has a Poisson distribution with mean 45.2. If more than 60 enquiries are received in a day, the customer service desk cannot deal with them all.
	Use a suitable approximating distribution to find the probability that, on a randomly chosen day, the customer service desk cannot deal with all the enquiries that are received.
	<u> </u>

2.	Nov/2021/Paper_9709/62/No.5 In a certain large document, typing errors occur at random and at a constant mean rate of 0.2 per page.				
	(a)	Find the probability that there are fewer than 3 typing errors in 10 randomly chosen pages. [2]			
	(b)	Use an approximating distribution to find the probability that there are more than 50 typing errors in 200 randomly chosen pages. [4]			

(c)	Find the probability that the total number of typing and formatting errors in 20 randomly chose pages is between 8 and 11 inclusive.

In the same document, formatting errors occur at random and at a constant mean rate of 0.3 per page.