

"SocialSpark," a popular online fashion retailer, has been using social media to promote its latest clothing line. Their social media team has tracked engagement metrics (likes, shares, comments) and analysed past campaign performance (descriptive and diagnostic analytics). Predictive models indicate a potential decline in user engagement for their upcoming summer collection campaign based on current trends and historical data. The marketing manager wants to optimize their social media strategy to maximize reach, engagement, and sales conversions for this crucial campaign. They are looking for data-driven recommendations on content strategy, audience interaction, and advertising spend to ensure a successful launch of the summer collection campaign.

- a) Define prescriptive analytics in the context of SocialSpark's situation.

(2 marks)

- b) Describe **THREE (3)** specific recommendations that prescriptive analytics could offer "SocialSpark" to improve their upcoming summer collection campaign's performance, given the prediction of declining engagement.

(6 marks)

- c) Describe **TWO (2)** two potential challenges "SocialSpark" might face in implementing prescriptive analytics recommendations in their fast-paced social media environment, and suggest one way to address each challenge.

(4 marks)