

## COMPUTER SCIENCE TRIPOS Part IA – 2022 – Paper 2

### 5 Software and Security Engineering (rja14)

- (a) Describe briefly one positive and one negative effect that social networks and other modern communication platforms may have on the personal safety of their users. [4 marks]
- (b) Suppose social networks are partly replaced by virtual reality, in which users have binocular headsets that provide the illusion of being immersed in a different 3D universe. Do any arguments from psychology suggest that the positive and negative effects from your answer to Part (a) are likely to increase or decrease as a result? [6 marks]
- (c) You have joined a startup whose goal is to move beyond virtual reality to augmented reality, and supply software for augmented-reality spectacles that overlays text and graphics on the real world as the user views it. Your responsibility is product safety. Describe the safety policy you will set and the software development methodology you will adopt to ensure that the product delivers it as far as reasonably practical. [10 marks]