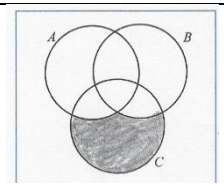
| | | | | | |
|---|---|---|---|---|---|
| **13** (a) | |  | 1 | B1 | Professional judgment required, eg allow double shading if meaning clear. |
| (b) | | $(D \cup E) \cap F$ | 1 | B1 | oe eg $(D \cap F) \cup (E \cap F)$ |
| | | | | | **Total 2 marks** |

| | | | | | |
|---|---|---|---|---|---|
| **14** (a) | | 0.7, 0.2, 0.8, 0.1, 0.9 | 2 | B2<br><br>(B1) | oe, all correct<br><br>2 or 3 or 4 correct probabilities |
| (b) | 0.3 × "0.2" (= 0.06)<br>**or** 0.7 × "0.1" (= 0.07) oe | | 4 | M1 | ft from (a) dep on probabilities being between 0 and 1, **OR** 0.3 × "0.8" (= 0.24) **or** 0.7 × "0.9" (= 0.63) oe |
| | 0.3 × "0.2" + 0.7 × "0.1" (= 0.13) oe<br>**or** "0.06" × 200 (= 12)<br>**or** "0.07" × 200 (= 14) | | | M1 | ft from (a),<br>**OR** 0.3 × "0.8" + 0.7 × "0.9" (= 0.87) oe<br>**or** "0.24" × 200 (= 48)<br>**or** "0.63" × 200 (= 126) |
| | "0.13" × 200 oe **or** "12" + "14" | | | M1 | ft from (a), 200 – "0.87" × 200 oe<br>**or** (1 – "0.87") × 200 **or** 200 – "48" – "126" |
| | | 26 | | A1 | cao |
| | | | | | **Total 6 marks** |