

AQA – Statistical sampling – AS Mathematics P2**1. June/2020/Paper_2/No.14**

A retail company has 5200 employees in 100 stores throughout the United Kingdom.

The company recently introduced a new reward scheme for its staff.

The management team wanted to sample the staff to find out their opinions of the new scheme.

Three possible sampling methods were suggested:

- | | |
|----------|----------------------------------------------------------------------------------|
| Method A | Choose 100 people who work at the largest store |
| Method B | Choose one person at random from each of the 100 stores |
| Method C | List all employees in alphabetical order and assign each a number from 1 to 5200 |
- Choose a random number between 1 and 52
- Choose this person and every 52nd person on the list thereafter.

(a) Give one **disadvantage** of using Method A compared with using Method B.

[1 mark]

(b) Give one **advantage** of using Method B compared with using Method C.

[1 mark]

(c) (i) Identify the method of sampling used in Method C.

[1 mark]

(c) (ii) Give a reason why Method C does **not** provide a random sample.

[1 mark]

2. June/2019/Paper_2/No.11

A survey is undertaken to find out the most popular political party in London.

The first 1100 available people from London are surveyed.

Identify the name of this type of sampling.

Circle your answer.

[1 mark]

simple random

opportunity

stratified

quota