

| Candidate Name | Centre Number | Candidate Number |
|----------------|---------------|------------------|
| | | |



OXFORD CAMBRIDGE AND RSA EXAMINATIONS

**Advanced Subsidiary General Certificate of Education
Advanced General Certificate of Education**

MEI STRUCTURED MATHEMATICS

4771

Decision Mathematics 1

INSERT

Monday

20 JUNE 2005

Morning

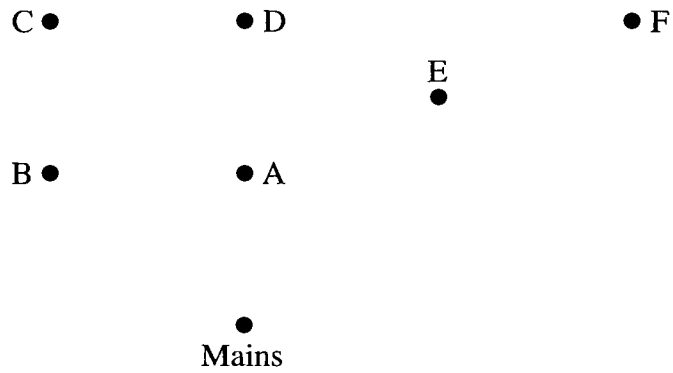
1 hour 30 minutes

INSTRUCTIONS TO CANDIDATES

- This insert should be used in Questions **1, 2** and **4**.
- Write your name, centre number and candidate number in the spaces provided at the top of this page and attach it to your answer booklet.

This insert consists of 4 printed pages.

1 (i)

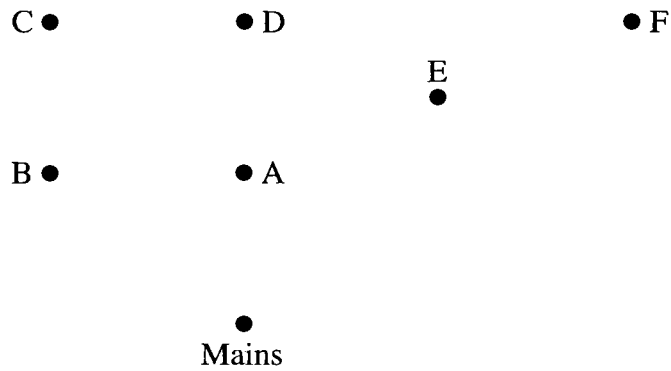


Minimum number of connections: _____

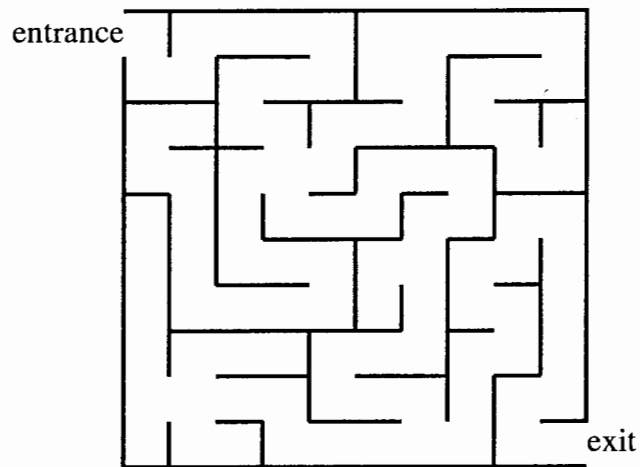
(ii) Minimum number of connections using junction box: _____

(iii) _____

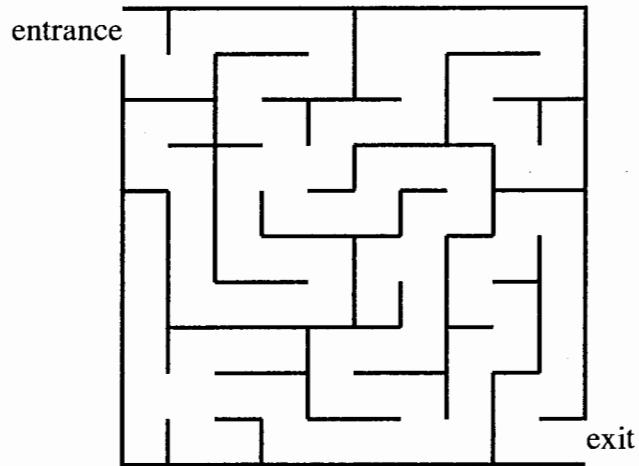
(iv) _____

Spare copy of diagram

2 (i) Janet's route



John's route



(ii) _____

(iii) _____

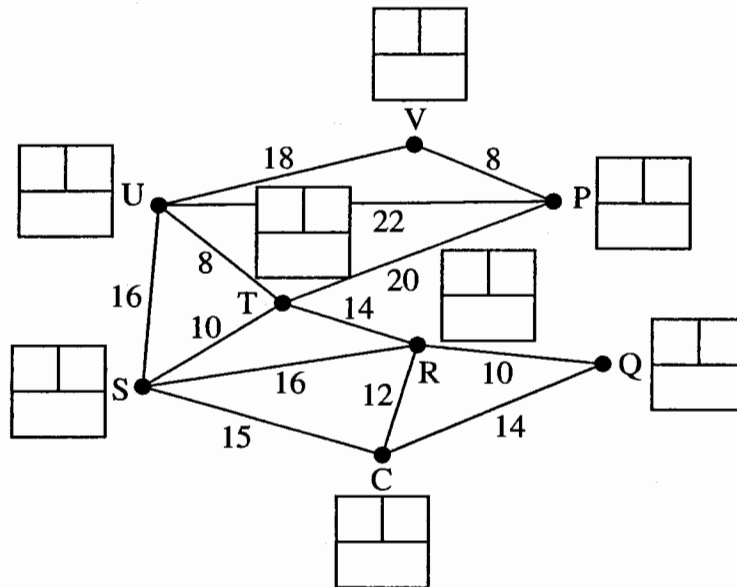
(iv) _____

4 (i)

key: order of labelling →

| |
|--|
| |
| |

 ← label
 ← working values



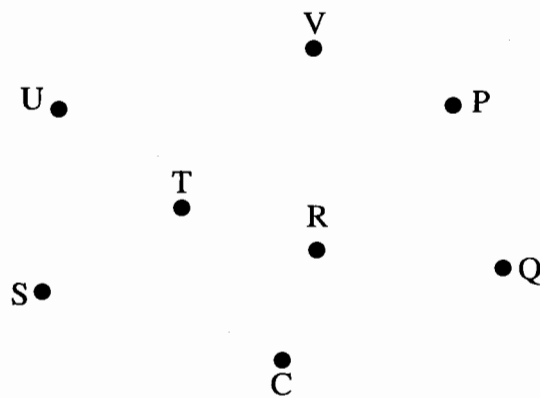
Shortest distances:

| PC | QC | RC | SC | TC | UC | VC |
|----|----|----|----|----|----|----|
| | | | | | | |

Shortest route from P to C: _____

Shortest route from V to C: _____

(ii)



Order of including arcs: _____

Length of connector: _____