

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

23 JANUARY 2006

Afternoon

1 hour 30 minutes

INSTRUCTIONS TO CANDIDATES

- This **insert** should be used in Questions **2, 5** and **6**.
- 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 5 printed pages and 3 blank pages.

2 (i)

Step	List 1	List 2	A	B	List 3
1	2, 34, 35, 56	13, 22, 34, 81, 90, 92			
3	34, 35, 56	22, 34, 81, 90, 92	2	13	

(ii) _____

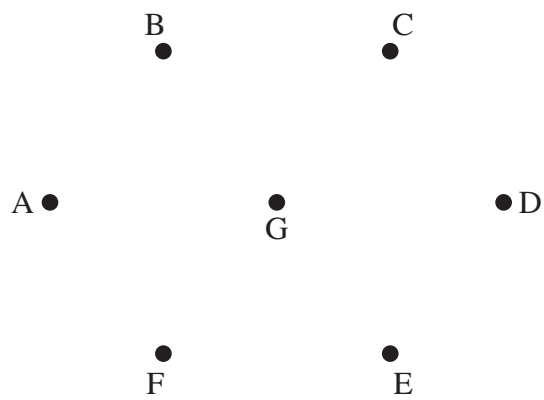
(iii) _____

(iv) _____

4

5 (i)

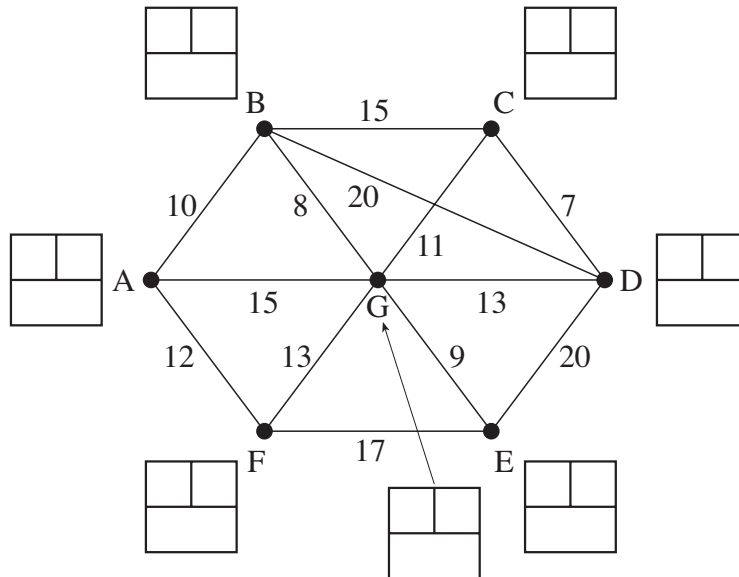
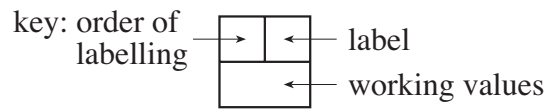
	A	B	C	D	E	F	G
A	–	10	–	–	–	12	15
B	10	–	15	20	–	–	8
C	–	15	–	7	–	–	11
D	–	20	7	–	20	–	13
E	–	–	–	20	–	17	9
F	12	–	–	–	17	–	13
G	15	8	11	13	9	13	–



Length: _____

Application: _____

(ii)



Route: _____

Length: _____

(iii)

6

6 (iv)

Random numbers for simulating type of customer:

3, 7, 8, 6, 4, 5, 1, 8, 4, 1

Random numbers for simulating time at till for customers buying fuel:

2, 4, 1, 2, 9, 8, 4, 2, 5, 4

Random numbers for simulating time at till for customers not buying fuel:

63, 32, 73, 22, 91, 45, 47, 36, 81, 52

(All times are in minutes.)

Customer number	Inter-arrival time	Arrival time in queue	Type of customer	Arrival time at till	Time taken at till	Departure time	Total time queuing and paying
1	1	1					
2	0.5						
3	3.5						
4	3						
5	1						
6	0.5						
7	1.5						
8	2						
9	2						
10	0.5						