## Question 1

(ii) Write  $\frac{a^7}{a^3}$  in the form  $a^n$ , where  $n \in \mathbb{N}$ .

Hence or otherwise evaluate  $\frac{11^7}{11^3}$ .

$$\frac{a^7}{a^3}$$

$$\frac{11^7}{11^3} =$$

## Question 2

**2(c)** (i) Using a calculator, or otherwise, find the exact value of  $(4^2)^3$ .

$$(4^2)^3 =$$



## Question 3

**2(c)** Using a calculator, or otherwise, find the exact value of:

|     | 1         |
|-----|-----------|
| (i) | $49^{-2}$ |



Question 4

(ii) Simplify  $\frac{a^5 \times a^2}{a \times a^3}$ . Give your answer in the form  $a^n$ , where  $n \in \mathbb{N}$ .



(iii) Using your answer to part (ii), or otherwise, find the value of  $\frac{6^5 \times 6^2}{6 \times 6^3}$ .



Question 5

(c) (i) Write  $(a^3)^2$  in the form  $a^n$ ,  $n \in \mathbb{N}$ .

(ii) Using your answer from (i) or otherwise evaluate  $(5^3)^2$ .

 $(5^3)^2 =$