QUESTION 1: DIVINE CONSULTING

1.1 Calculate the cost of existing ordinary shares:

$P_0 = D_1 \div (r-g)$

$g = (6.60 \div 5.99) - 1$
$= 1.1018-1$
$= 0.1018$

D_0 = EPS (Current) x 40%
= 5.99 x 40%
= R 2.40

$D_1 = 2.4\ (1+0.1018)$
$= 2.4\ (1.1018)$
= R 2.644

$R_s = (D_1 \div P_0) + g$
$kg = (D_1 \div P_0) + g$
$= (R\ 2.644 \div 50) + 0.1018$
$= 0.0529+0.1018$
$= 0.155$
= 15.5%

1.2 Calculate the number of issued shares issued:

R 350 000 ÷ R 50
= 7000 shares

QUESTION 2: BJ AND BROTHERS CC

NPV Approach:	
Project A: Cf0 -R 100 000 Cf1 R 37 500 Cf2 R 37 500 Cf3 R 37 500 Cf4 R 37 500 I/YR 16.36% ***NPV R 4 182.166***	Project B: Cf0 -R 250 000 Cf1 R 170 000 Cf2 R 150 000 Cf3 R 23 000 Cf4 R 43 000 I/YR 16.36% ***NPV R 44 938.81***
IRR Approach:	
Project A: Cf0 -R 100 000 Cf1 R 37 500 Cf2 R 37 500 Cf3 R 37 500 Cf4 R 37 500 ***IRR 18.45%***	Project B: Cf0 -R 250 000 Cf1 R 170 000 Cf2 R 150 000 Cf3 R 23 000 Cf4 R 43 000 ***IRR 28.42%***

2.1 According to the accept/reject project approach, which project is more attractive:

According to the Accept/Reject approach, project B is more attractive. Due to its NPV being greater than zero and Project A's NPV, and due to the IRR being greater than the WACC and Project A's IRR.

2.2 Recommended project to invest funds:

Both are acceptable projects, because both projects have an NPV greater than 0, and an IRR greater than the WACC, however, I recommend that funds be invested in project B, as the NPV of the project, as well as the IRR is greater than that of project A.

QUESTION 3: COMFORT FLOORS

3.1 How many carpets will have to be sold for the company to maintain and net profit of R 9000?

$$EBIT = (P \times Q) - FC - VC$$

$$\text{Net Profit} + \text{Interest} + \text{Tax} = (9.75xQ) - 72000 - (6.75 \times Q)$$

$$(9000 + 1200) \div (1-0.3) = 9.75Q - 72000 - 6.75Q$$

$$10200 \div 0.7 = 3Q - 7200$$

$$14\,571.43 = 3Q - 72\,000$$

$$14\,571.43 + 72000 = 3Q$$

$$\frac{86\,571.43}{3} = \frac{3Q}{3}$$

$$28\,857.14 = Q$$

28 858 carpets will need to be sold for the company to make a net profit of R 9000