1.

$DSO = \frac{AR}{Sales/365} = \frac{AR}{\frac{1000}{365}}$=40.55; AR =111.10m

$2 = \frac{CA-Inventory}{CL} = \frac{Cash+AR}{CL} = \frac{100+111.10}{CL}$; CL=105.5m

$3 = \frac{CA}{CL} = \frac{CA}{105.5}$; CA=316.5m

TA= CA+FA=316.5+283.5=600m

ROA=$\frac{NI}{TA} = \frac{50}{600} = 8.33\%$

$ROE = ROA\frac{TA}{Equity} \Longrightarrow 12\% = \frac{50}{600}\frac{600}{Eq}$; Equity = 416.67

Total Assets = Total Liabilities; 600=105.5+416.67+Long term debt; LTL=77.83m (1 mark each)

Marks have been given if the working is proper. No marks for merely writing the answer

2. CFo=50,000+10,000+2,000= $62,000 — 2 marks
Depreciation = 60,000/5=12,000 — 1 mark
Operating Cash Flow

Cost Reduction	20,000
Less Depreciation	12,000
EBT	8,000
Less Tax (40%)	3,200
EAT	4,800
CFAT	16,800

2 marks

Non Operating cash flow. Book Value =60,000-36,000=24,000
Sale Price = 30,000. Profit = 6,000; Tax (40%)= Rs.2,400
Sale Price less tax plus WC recovery = 30,000-2,400+2,000=$29,600 — 2 marks
$NPV = \frac{16800}{1.1^1} + \frac{16800}{1.1^2} + \frac{16800+29600}{1.1^3} - 62{,}000$=$2017 — 2 marks
NPV +ve should be purchased

3. Value of 25L at retirement = 25(1.10)^10=64.84L — 2 mark
Value of 6L increasing at 5% at retirement = 6(1.05)^10=9.77L — 2 mark
PV of an annuity of 9.77 Lacs growing at 5% at retirement = 147.76 — 2 marks
FV of annuity = AxFVIFA(10%,10years)
AxFVIFA(10%,10years) +64.84 = 147.76 — 2 marks
A=5.20 Lacs — 1 mark

Answers could be different if you have assumed different inflation rates

4.

$k_e = \frac{2.5*1.06}{12.50} + .06 = 27\%$ 4 marks

$r = \frac{1}{3} * 10 + \frac{2}{3} * 27 = 21.33$ 3 marks

Some answers could be different if you have assumed different tax rates

$NPV = \frac{5}{0.2133-.05} - 25 = 5.61 million$ 3 marks