Full marks =21/100

(Q NO 8)

Where is the formulae of Payback period?

12/20

i)

# Pay back Period

Project A

| year | cash flows | |
|---|---|---|
| 0 | 150,000 | |
| 1 | 45000 | 105 |
| 2 | 45000 | 60 |
| 3 | 45000 | 15 |
| 4 | 45000 | -30 |
| 5 | 45000 | |
| 6 | 45000 | |

Project A pay back Period $= 3 + \frac{15}{45}$

A pay back Period = 3.33 year

Project B

| year | cash flow $000 | Pay back $000 |
|---|---|---|
| 0 | 150 | - |
| 1 | 75 | 75 |
| 2 | 60 | 15 |
| 3 | 30 | -15 |
| 4 | 30 | |
| 5 | 30 | |
| 6 | 30 | |

Pay back Period = $2 + \frac{15}{30}$

| Project B payback period = 2.5 |
|---|

(ii)

All values in $000

NPV = 7 ✓

NPV = Pv cash inflow − PV of cash outflow

Project A

$$NPV_A = \frac{45}{(1+10\%)} + \frac{45}{(1+10\%)^2} + \frac{45}{(1+10\%)^3} + \frac{45}{(1+10\%)^4} + \frac{45}{(1+10\%)^5} + \frac{45}{(1+10\%)^6} - 150$$

$NPV_A = \$45.986$ M ✓

Project b

$$NPV = \frac{75}{(1+10\%)^1} + \frac{60}{(1+10\%)^2} + \frac{30}{(1+10\%)^3} + \frac{30}{(1+10\%)^4} + \frac{30}{(1+10\%)^5} + \frac{30}{(1+10\%)^6} - 150$$

$$= 196.36 - 150$$

$NPV_B = \$46.360$

(iii)

NPV with 9%

All values in $'000

$$= 45\left(\frac{1-\frac{1}{(1+9\%)^6}}{9\%}\right) - 150$$

$$= 201.866 - 150$$ ✓

$NPV_A = \$51.866$

Project B

$$= \frac{75}{(1+9\%)^1} + \frac{60}{(1+9\%)^2} + \frac{30}{(1+9\%)^3} + \frac{30}{(1+9\%)^4} + \frac{30}{(1+9\%)^5} + \frac{30}{(1+9\%)^6}$$

$$- 150$$

✓

$$= 201.112 - 150$$

$NPV_B = 51.112$

(iv)

IRR

All values in $'000 and x is IRR

$IRR_A$ =

$$150 = \frac{45}{(1+x\%)^1} + \frac{45}{(1+x\%)^2} + \frac{45}{(1+x\%)^3} + \frac{45}{(1+x\%)^4}$$

$$\frac{45}{(1+x\%)^5} + \frac{45}{(1+x\%)^6}$$

✓

$IRR_A = 19.90\%$

✓

$IRR_B$

$$150 = \frac{75}{(1+IRR\%)^1} + \frac{60}{(1+IRR\%)^2} + \frac{30}{(1+IRR\%)^3} + \frac{30}{(1+IRR\%)^4}$$

the process for calculation of IRR is not understanable & again where is the formulae?

$$\frac{30}{(1+IRR\%)^5} + \frac{30}{(1+IRR\%)^6}$$

$IRR = 22.711\%$

# Rank

| Rank | $NPV_{10\%}$ | payback Period | IRR |
|---|---|---|---|
| 1 | B | B | B |
| 2 | A | A | A |

Where is a conclusion?

i) in Term of NPV Project B gives more cash flow as compare To B Thats why Project B NPV is higher Than a

ii) in Term of Payback Period. Project B pay all cash or cost in first 2 years but Project A Takes 3 years. So Project B better

iii) in Term of IRR Project B has more capacity to give Return as compare To a.

Q NO 5)

Mr. Abdullah for Tax
year June 30, 2009

lack of good presentation

9/20

| | | |
|---|---|---|
| Income fo | | Rs 000 |
| Income from Salary | | |
| Basic salary | | 300 |
| Dearness allowance | | 25 |
| conveyance allow | | 30 |
| less Medical | 10 | 0 |
| 10% of basic salary | 30 | |
| Cash and clothing allowance | | 5 |
| salary of watch man | | 36 |
| Leave fare assistance | | 45 |