Dr. B.B. HEGDE FIRST GRADE COLLEGE , KUNDAPURA

Internal Assesment Examination : May, 2024

Roll No. | C | M | 2 | 1 | 2 | 4 | 8 | | Class & Section : III BCOM 'D'

Course : Advanced Financial Management Date of Exam: 27/05/2024

INSTRUCTIONS TO CANDIDATES

1. Write your Roll No. only in the space provided for the purpose and nowhere else.
2. Write your answer on both sides of the paper by using blue or black ink only.
3. Do not leave any pages unused except at the end of all the answers.
4. Write the correct question number on the left hand margin at the beginning of each answer.
5. Handover your answer book personally to the Room Invigilator before leaving the Examination Hall.

Date : 27/5/24 Dr. Deepa **Name & Initial of the Invigilator**

Marks Obtained
40.

Principal
Dr. B.B. Hegde First Grade College
Kundapura -576201

Date: 30/05/2024 AKSHAY **Name & Signature of the Valuer**

Section-A

1) Risk is expressed differently by different people.

Risk is a condition in which there is a possibility of an adverse reaction from outcome that is expected or hoped so for.

2

2) Assumption of Net Income Approach

* It is a relevance model, that changes in debt & equity structure can effect the value of the firm & cost of capital.
* If debt (~~use~~) portion is increased, the value of the firm is also increase & overall cost of capital is decreased.
* If debt portion is decreased, the value of the firm decreases & the overall cost of capital increases.

10

3) standard deviation indicates risk factor associated with the particular project (~~to be~~) in which the company coants to invest.

It is calculated by (~~find~~) making square root of variance i.e $\sqrt{\text{variance}}$

2

4) Difference b/w leveraged & unleveraged capital structure

* leverage capital structure means capital structure which includes both debt & equity combination.

unleverage capital structure means capital structure with no debt funds.

2) levered capital structure can gain tax benefits whereas unlevered structure cannot gain tax benefits as they dont have debt funds.

2

5) calculation of Expected NPV

NPV	probability	Expected NPV
8000	0.3	2400
12,000	0.3	3600
14,250	0.2	2850
20,000	0.2	4000
Expected NPV ⟶		12,850

2

6) calculation of value of equity & Market value of the firm

PIR	Amt
Net operating Income / EBIT	200,000
(-) Interest (10,00,000 × 6%)	60,000
NI	140,000

overall capitalisation rate	10%
value of the firm (V) = $\frac{EBIT}{Ko}$	
$= \frac{2,00,000}{0.10}$	20,00,000
Market value of equity (S) = V - D	
= 20,00,000 - 10,00,000	10,00,000
cost of equity (K_e) = $\frac{EBIT - Int}{V - D} \times 100$	
$= \frac{1,40,000}{10,00,000} \times 100$	14%

section-B

9) (Calculate)

Working note:-

PIR	NO debt	40% debt	50% Debt
Fund requirement (30,00,000)			
Debt fund (30,00,000 × 40%) (30,00,000 × 60%)	-	12,00,000	18,00,000
Interest rate (K_d)	-	12%	14%
Eq capitalisation rate (K_e)	5%	16%	18%

calculation of value of the firm & overall cost of capital

PIR	I - No Debt	II - 40% Debt	III - 60% Debt
Net operating Income	5,00,000	5,00,000	5,00,000
(-) Interest (18,00,000 × 12%) (18,00,000 × 14%)	–	1,44,000	2,52,000
NI	5,00,000	3,56,000	2,48,000
eq capitalisation rate	5%	16%	18%
Market value of eq $S = \frac{NI}{ke}$	$\frac{5,00,000}{0.05}$	$\frac{3,56,000}{0.16}$	$\frac{2,48,000}{0.18}$
	1,00,00,000	22,25,000	13,77,778
(+) Market value of Debt	–	18,00,000	18,00,000
Value of the firm →	1,00,00,000	34,25,000	31,77,778
overall cost of capital $k_o = \frac{EBIT}{V} \times 100$	$\frac{5,00,000}{1,00,00,000} \times 100$	$\frac{5,00,000}{34,25,000} \times 100$	$\frac{5,00,000}{31,77,778} \times 100$
	5%	14.60%	15.73%

10) calculation of Expected Net present value

calculation of Expected value

project x			project z		
CF(x)	P	PX	CF(x)	P	PX
8,50,000	0.2	1,70,000	6,00,000	0.2	1,20,000
4,00,000	0.5	2,00,000	5,00,000	0.5	2,50,000
1,00,000	0.3	30,000	1,00,000	0.3	30,000
	EV →	4,00,000		EV →	4,00,000

calculation of Expected NPV

PIR	project x	project z
Expected value	4,00,000	4,00,000
	x	x
P.V factor	4.100	4.100
GPV = EV x P.V F		
= 4,00,000 x 4.100	16,40,000	16,40,000
(-) Initial cash outlay	6,00,000	5,00,000
Expected NPV →	11,40,000	11,40,000

section - C

11) a) calculation of Expected NPV

project Asunrise

NPV(x)	P	PxNPV	x-EV	$(x-EV)^2$	$(x-EV)^2 \times P$
30,000	0.10	3000	-60,000	3600000000	360000000
60,000	0.40	24,000	-30,000	900000000	360000000
1,20,000	0.40	48,000	30,000	900000000	360000000
1,50,000	0.10	15,000	60,000	3600000000	360000000
	ENPV→	90,000			1440000000

project skyline

x	P	Px	x-EV	$(x-EV)^2$	$(x-EV)^2 \times P$
30,000	0.20	6000	-60,000	3600000000	720000000
60,000	0.30	18000	-30,000	900000000	270000000
1,20,000	0.30	36,000	30,000	900000000	270000000
1,50,000	0.20	30,000	60,000	3600000000	720000000
		90,000			1980000000

b) standard deviation

project sunrise

$SD = \sqrt{\text{variance}}$

$= \sqrt{1440000000}$

$= 37947.33$

project skyline

$SD = \sqrt{\text{variance}}$

$= \sqrt{1980000000}$

$= 44497.19$

c) co-efficient of variation

project A sunrise

$$C.V = \frac{\sigma}{EV} \times 100$$

$$= \frac{37,947.33}{90,000} \times 100$$

$$= 42.16\%$$

project - B skyline

$$C.V = \frac{\sigma}{EV} \times 100$$

$$= \frac{44,491.19}{90,000} \times 100$$

$$= 49.44\%$$

Comment:-

project sunrise is preferrable because its cv is lesser than project skyline.

13

Section-B

7) Types of Risk in capital Budgeting

capital Budgeting means investment decision in a long term asset or project. There are several risks which effect the cash flows, so the business should manage and analyze the risk factor.

some major risks are as follows.

- 1) project specific risk:-

The variability in the cash flows due to factor specific to that project only is known as project specific risk.

2) competition risk :-

The variability in the cash flows due to the action of competitors is called as competition risk.

3) Market risk :-

Market risk occurs due to certain market conditions such as economic downterms, interest rate fluctuations, changes in exchange rates etc which effect the cash flow of the of the project.

4) Financial risk :-

Financial risk mainly arises due to inadequate cashflow in the organisation to meet the obligation. It is mainly because of changes in interest rates, inflation credit market etc.

5) operational risk :-

It arises due to failure of policies & crent of the business. some of operational risks ~~such as~~ are production issue, issue of supply chain management, logistics etc.

6) International risk :

These type of risk involves changes in foreign currency rates, forcign etc rates etc.

5