Roll No. ....

Final New Syllabus
Paper - 6 B
Financial Services & Capital Markets

NOV 2020

Total No. of Case Study Questions – 5 | Total No. of Printed Pages – **24**

Time Allowed – **4** Hours | Maximum Marks – **100**

FMY

Answers to questions are to be given only in English except in the case of candidates who have opted for Hindi Medium. If a candidate has not opted for Hindi Medium, his/her answers in Hindi will not be valued.

The question paper comprises **five** case study questions. The candidates are required to answer any **four** case study questions out of **five**.

Answers in respect of Multiple Choice Questions are to be marked on the OMR Answer Sheet only.

Answers to other questions to be written in the descriptive type answer book. Answer to MCQs, if written in the descriptive type answer book will not be evaluated.

Candidates may use calculator

Case Study No. – 1

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ABC Ltd. is a conglomerate which operates in multiple sectors such as manufacturing, chemicals, real estate, retail & EPC. It is listed on NSE as well as BSE. The COVID-19 pandemic has resulted in significant uncertainty in its flagship business. It is further worsened due to elevated debt levels, although free cash flow in pre-COVID-19 situation was sufficient to allay any concerns on the debt servicing.

Given these scenarios, the Board of Directors of ABC Ltd. in a duly constituted meeting, has announced to raise funds through Rights Issue, primarily to repay

Marks

debt and strengthen the balance sheet. The details of the Rights Issue are as below :

(i) Record Date – 15th May, 2020

(ii) Ratio – 1 : 10

(iii) Issue opening date – 20th May, 2020

(iv) Price – ₹ 1,000 to be paid in two installments of ₹ 300 and ₹ 700 on application and in May 2021 respectively.

Category of Shareholders	**% of shares held as on the record date**	**No. of shares (Cr)**
Promoters	48%	240
FIIs	25%	125
DIIs	12%	60
Retail shareholders	10%	50
IEPF (Investor Education & Protection Fund)	2%	10
GDRs	3%	15
Total	**100%**	**500**

The current EPS is ₹ 50 and cum-rights price is ₹ 1,400.

The cost of debt is 12% and effective tax rate is 20%.

Risk free rate of 1 year T Bill is 6%.

15 out of 20 analysts covering ABC Ltd. have consensus price target of ₹ 1,800 in next 1 to 1.5 years. The remaining five have set the target price in the range of ₹ 1,600 to 1,750.

GDRs are not listed on the permitted jurisdictions as per SEBI guidelines for issue of permissible instruments hence may have to be renounced by the current holders in the market. ABC is also considering to invest in a

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restaurant business. The CFO has informed the Board that such business would require less investment as negative working capital would be a permanent feature.

Multiple Choice Questions : 2×5 =10

1.1 What is the minimum period for which a Rights Issue must remain open for subscription ?

(A) 7 days (B) 15 days

(C) 6 months (D) 1 year

1.2 What is the minimum level of subscription for successful rights issue ?

(A) 100% (B) 75%

(C) 80% (D) 90%

1.3 Calculate the theoretical ex-rights price for the above Rights Shares.

(A) 1363 (B) 1100

(C) 1063 (D) 700

1.4 Negative working capital in the context of a restaurant business would be

(A) good as it would release fund with the rise in the level of operation and it is natural for such business.

(B) bad as it would require investment with the rise in the level of operation.

(C) neutral as creditors would charge extra interest

(D) None of the above

Marks

1.5 Assume that ABC Ltd's fully paid shares is traded at ₹ 1,390 and Right Entitlement's (RE's) closing price as on 25th May was ₹ 400. Which one of the following is correct about pricing of RE ?

(A) it is traded at a discount of ₹ 10

(B) it is traded at a premium of ₹ 10

(C) it is traded at a discount of ₹ 32

(D) it is traded at a premium of ₹ 32

1.6 The CFO of ABC Ltd. has asked you to prepare a document to be circulated to the Project Team highlighting the temporary relaxations granted by the SEBI in the context of COVID-19 pandemic along with the recent reforms and new mechanism unveiled by the SEBI for Rights Entitlements (REs). Prepare a short note with key relaxations and new mechanism for REs. **2**

1.7. Determine number of Rights Shares to be allotted to the applicants mentioned below based on Allotment Waterfall and preferential ranking with appropriate justification. **4**

(a) Mr. A holds 1500 shares as on 15th May, 2020 and has applied for 100% of his entitlement and in addition, he has applied for 100 more Rights Entitlements (REs) as 'additional shares'.

(b) Mr. B bought 200 Rights Entitlement from the market and has applied for the same. In addition to these REs, he has also applied for 200 more REs as 'additional shares'.

(c) Mr. C bought 800 shares from market on 16th May, 2020 and wants to apply for 80 Rights Entitlement.

1.8 List various options available to raise money for a listed entity from its equity shareholders. Explain with three reasons as to why Rights Issue is one of the preferred modes of raising funds from equity shareholders. 4

1.9 You father owns 1000 shares of ABC Ltd. and has approached you to take your opinion on whether he should subscribe to the Rights Issue. Evaluate whether it is beneficial to subscribe to Rights Issue from the perspective of EPS, market price of rights shares and analyst's views on the price. 5

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Case Study No. – 2

Reliable Footwears Ltd. has imported $ 25 million worth raw material from USA for the manufacturing of their new line of footwear. You are the Transaction Banking Head of Sunshine Bank and Reliable is one of your key clients. The CFO of Reliable has approached you to understand the best option to finance the import transaction to optimise overall cost of financing. Assume that above discussion took place on 1st October, 2019.

(i) Terms of credit – 30 days from the invoice date and the payment will be due on 1st November, 2019.

(ii) The operating cycle for Reliable is 6 months.

(iii) The MCLR rates and spread for various tenor in effect are given below. Reliable is classified as SB-5 credit rating customer as per bank's credit policies and due diligence. It has working capital facility of ₹ 500 crores from the bank.

Tenor	Existing MCLR (%)
Overnight	8.05
One month	8.05
Three months	8.10
Six months	8.25
One year	8.50
Two years	8.80
Three years	9.00

Marks

Credit Category	Spread (%)
SB-1	1.50
SB-2	2.00
SB-3	2.50
SB-4	3.00
SB-5	4.00
SB-6	6.00
SB-7	7.00

(iv) The spot USD-INR exchange rate is 68 as of the discussion date i.e. 1st October, 2019.

(v) USD LIBOR rates for various tenor are :

Period	3 month	1 month	6 month	12 month
LIBOR Rate (%)	2.5955	2.4934	2.6691	2.7300

(vi) Bank charges spread of 150 bps for SB-5 category trade credit borrower.

(vii) The letter of credit charges are 1% p.a. on the LC amount.

(viii) The prevailing forward premium on USD-INR for 12 month period is 6%.

(ix) As per RBI prevalent Trade Credit Policy, for non-capital goods, the maximum limit of Buyer's credit per transaction is $ 50 Mn and the duration can be up to 1 year or operating cycle, whichever is less. The All-in-Cost ceiling for Trade Credit is 6 months benchmark rate + 250 bps spread.

Reliable also has export business. Despite best efforts of the management it has not achieved the desired level, and so far they have not made profit due to higher marketing cost. The management is trying to increase volume in order to register profit in export business. The pre-shipment and post-shipment finance are being managed well to optimize cost. Recently, Reliable has received a purchase order and the customer is ready to give a Red Clause Letter of Credit (L/C).

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Further, the CFO of Reliable wants to protect the credit risk of an investment made in BB rated bond of P Ltd. Due to sudden change in macro-economic conditions, the CFO expects that P Ltd. may default. But considering high coupon rate, the CFO does not want to dispose of the investment made in the bond of P Ltd. The CFO is considering credit default swap an instrument to achieve the objective of protection of credit risk.

Multiple Choice Questions : 2×5 =10

2.1 Post-shipment finance is considered

(A) more risky than pre-shipment finance

(B) less risky than pre-shipment finance

(C) just as risky as pre-shipment finance

(D) risk-free borrowing instrument in export finance

2.2 Determine which of the following is not a Bank Financing Facility :

(A) Overdraft

(B) Bill discounting

(C) Packing credit

(D) Corporate bonds

2.3 Which one of the following is incorrect with respect to credit default swap ?

(A) CDS is more like an option.

(B) CDS does not allow the protection buyer to move credit risk off-balance sheet without actually disposing off the asset.

(C) Total Return Swap (TRS) transfers both credit and market risk but the CDS only transfers credit risk.

(D) Multiple default baskets provide protection against the default of all of the reference assets in the basket and do not terminate after the first default.

Marks

2.4 Factoring is mainly relevant for management of

(A) Inventory

(B) Accounts receivables

(C) Vendor payables

(D) Cash management

2.5 Which of the following risk is not managed by bank treasury ?

(A) Credit risk

(B) Liquidity risk

(C) Market risk

(D) Sovereign risk

2.6 (A) Based on the information given, evaluate working capital finance in INR and buyer's credit in USD. Suggest to the CFO, which option is better and why ? **6**

(B) What would be the impact on debt equity ratio if buyers credit option is selected by Reliable ? **1**

2.7 The CFO has asked you to illustrate the Credit Default Swap by way of a diagram. Also, explain three parties and two types of assets that are involved in a Credit Default Swap. **6**

2.8 Illustrate a transaction involving a Red clause Letter of Credit (L/C) by way of a diagram ? **2**

Marks

Case Study No. – 3

Genius is the education technology start-up on a mission to democratise the access to quality education of school going students in India by building an online education platform.

India has ~250 mn school going students in K12 segment in India. There are 1.5 mn schools in India out of which government runs ~70% of these schools while the remaining are run by private bodies. 85% of the schools are in rural area as against only 15% in urban cities. 10% of these K12 segment uses some or the other form of technology products/solutions which will eventually grow to 120 mn by 2023 end as per report of a renowned consulting agency. Overall spend on school education by all stakeholders is \$ 40 bn out of which in-school and out-of school expenditure ratio is 40 : 60 which will become equal by 2023 after growing by 100%. Average per student spend on technology i.e. out-of school expenditure is \$ 200 p.a. as of now and expected to grow to \$ 250 p.a. by 2023. Average per school spend on technology products and solutions is \$ 4000 and \$ 16000 per school p.a. in Government and private school respectively, and is expected to grow by 100% and 50% respectively by 2023.

Genius has built the interactive and animated content in 3D for entire K12 segment across 22 state boards, CBSE, ICSE & 15 languages as well. It has strong 250 people team to build and curate the content which is aligned to the school syllabus. They have gamified the education learning process with peer-to-peer contest, leader-board on Pan India basis and prizes for weekly contest winners. This approach has resulted in higher engagement on the Genius App of 80 minutes per day with 1 mn students using the app on a daily basis. They have almost 20 mn question bank with personalized algorithm to provide individual feedback and learning path suitable for each student.

Their business model relies on viral marketing based on word of mouth, social media and other electronic medium. Typical conversion rate is 2% for every registered users to paid users. The average price of Genius package is \$ 150 p.a. Cost of conversion for each user is average \$ 90 p.a. It expects to grow at 50% p.a. until 2023. Their monthly expenses are \$ 75,000 out of which \$ 60,000 is for content creation and direct expenses related to operations. It will increase @ 50% p.a. balance \$ 15,000 are towards corporate overheads and will increase by 40% p.a.

Genius also attempts to sell combined package for multiple years in one go i.e. 8th to 10th standard content is sold as a package. This is driven by the zero cost lending by empanelled NBFCs. Such package sales constitute 40% of total revenue and have average duration of 3 years. Genius has experienced default rates of 10% p.a. in this segment. Genius accounts for entire package revenue in the year of sales.

The COVID-19 pandemic has accelerated adoption of technology products and solutions by schools, coaching classes, teachers, parents and students. The schools mainly were not convinced with the idea of content on such technology based platforms but now have been forced to adopt and adapt quickly. Genius has identified this opportunity and has been working on a platform named 'School Management' as a one-stop solution for all needs to run a school online. It aims to target schools with this platform and compete with existing large players in this space. They will build a freemium model here as well and pricing is yet not finalized but will be based on feedback from schools.

There are few start-ups operating in the similar space and have received massive funding. The top 3 players alone have garnered \$ 800 mn of funding out of total \$ 1.2 bn funding received till date across 100 + start-ups in technology space. In

Marks

the last 3 years, ~500 start-ups in technology based education space shut down due to extreme competition and lack of funding. The top 3 players have 20 mn registered users out of 25 mn users. The highest funded player has Annual Run Rate (ARR) of \$ 100 Mn, yet to break even and has secured last funding at 2 bn valuation. Investors across segment are very bullish about the sector and have been pumping money in the entire value chain.

Genius has raised a seed round 1 year back of \$ 1 mn at pre-money valuation of \$ 10 mn from two renowned angel investors. Both of them belong to school education sector and are well networked in the fraternity.

Genius is looking to raise \$ 10 mn in pre-series A round now with pre-money valuation of \$ 100 mn. Genius plans to spend \$ 10 mn on development & marketing of School Management Platform expansion (40%), growth (30%) and balance for 30% on improvement in the content and tech platform.

Founder of Genius, Gaurav is an IIT alumnus with 10 years of experience at global investment bank. Another co-founder, Mr. Shashank Rane is a veteran in education technology space and has worked with well known Education Software Company for 15 years.

Multiple Choice Questions : **2×5 =10**

3.1 Please find one method to raise funds which is inconsistent out of the options given below :

(A) Private Equity

(B) Venture Capital

(C) IPO

(D) Management Buyout

Marks

3.2 What is the hurdle rate ?

(A) Maximum rate which a PE should achieve

(B) Cost of Capital

(C) Minimum rate which PE should achieve for LPs before sharing of profits

(D) Return on investment

3.3 Start-up has ₹ 10,000 of share capital of 1000 shares. VC wants to invest ₹ 4,000 with 400 shares. What is the post-money valuation ?

(A) 1400

(B) 10000

(C) 14000

(D) 400

3.4 Early stage firm will most likely to receive funding from :

(A) VC Firm

(B) PE Firm

(C) Sovereign Wealth Fund

(D) Bank

3.5 The right by which majority of shareholders shall bind the minority shareholders in the event of sale or transfer of shares is known as

(A) Oppressive

(B) Anti-dilution

(C) Drag along

(D) Domination

Marks

3.6 You are an analyst at Unicorn Venture Partners who is evaluating an opportunity to invest in Genius's pre-series A round. Your firm typically make investment upto \$ 1 mn as an initial investment and expects a minimum 10 × returns on exit with 2-3 years of investment holding period. Prepare an investment Memo for the meeting with partners which would cover all aspects given below :

(A)	Problem, Solution and Market sizing	4
(B)	Financial projections & key operational metrics	4
(C)	Valuation and Exit opportunity	3
(D)	Recommendation including key risks	4

Marks

Case Study No. – 4

You are a Financial Advisor. Mr. Suyash, 25 years old, is your client and he has invested ₹ 10 lakhs across multiple equity stocks in the anticipation of making quick returns. In the recent month, there has been wide spread panic in the market leading to 10% correction in the NIFTY. With this correction, Suyash is staring at a loss of ₹ 3 lakhs.

He has found out about Mutual Fund Systematic Investment Plan (SIP) from his friends and has approached you for your opinion.

Multiple Choice Questions :

2×5 =10

4.1 In case of Index Fund Scheme of ETF, total expense ratio shall not exceed _____ of the daily net assets.

(A) 1%

(B) 1.25%

(C) 1.5%

(D) 0.5%

4.2 Real estate asset as per real estate mutual fund scheme includes

(A) Vacant land

(B) Agriculture land

(C) Deserted property

(D) Identified immovable property with no encumbrances

4.3 Sharpe ratio measures _____ and Treynor ratio measures _____.

(A) Total risk, Systematic risk

(B) Unsystematic risk, Credit risk

(C) Total risk, Unsystematic risk

(D) Liquidity risk, Credit risk

Marks

4.4 A mutual fund in India is constituted in the form of _____.

(A) A public trust formed under the Principles of Mutuality

(B) An investment company according to special amendment to the Banking Regulation Act, 1949.

(C) A public trust created under the Indian Trusts Act, 1882

(D) A public company incorporated under the Companies Act, 1956

4.5 Mahesh invested ₹ 4 lakhs on 20th Feb, 2018 in an equity mutual fund scheme at NAV of ₹ 28.25 per unit. The scheme declared dividend of ₹ 5 per unit, the record date being 31st September, 2018. The prevailing NAV at the end of October 2019 of the scheme is ₹ 22.35 per unit. If he sells all the units of the scheme today, what would be the total gains ?

(A) Loss of ₹ 12,744

(B) Gain of ₹ 25,785

(C) Gain of ₹ 70,796

(D) Loss of ₹ 83,540

4.6 Explain the benefits of investing in Mutual funds. Additionally, explain the concept of SIP and its benefits. 4

4.7 Mr. Suyash has prepared following data of 4 open ended mutual funds based on internet research. Review the following information and correct wherever required. 4

Marks

Sr. No.	Parameters	Emerging Equity Fund	Nifty ETF	Liquid Fund	Gilt Fund
1	Benchmarks	Nifty 50	Nifty Mid Cap 100	Nifty Gilt fund	Nifty Liquid Index
2	Ideal Investment Horizon	5 years and above	3 years and above	1 year and above	1-15 days
3	Investment Philosophy	Tracks Nifty 50 Stocks	Invests in Mid Cap Stocks	Invests on G-Sec	Invests in Money Market Instruments
4	Risk Category	Low Risk	Moderately High Risk	Moderate Risk	High Risk

4.8 Suyash has shortlisted funds listed below for SIP and has shared additional information on the same. 7

Parameters	Equity Blue Chip Fund	Equity Infra Fund
Expense ratio	2.26%	1.5%
Annualized Alpha (5 year)	6.40%	5%
Returns (1 year)	12%	20%
Benchmark Returns	5%	13%
Standard Deviation	12%	27%
Beta	0.5	0.8
Portfolio Turnover Ratio (PTR)	53%	30%
Fund Manager Experience in MF Industry	20 years	5 years
Fund Inception	10 years	6 years

Marks

Risk free returns are 6%. Please advise him based on the evaluation of the performances of these funds with help of parameters given above :

(1) Fund performance against a Benchmark

(2) Fund history

(3) Fund Expense Ratio

(4) Risk Adjusted Returns

(5) Average Maturity and Duration

(6) Fud's Alpha and Beta

(7) Portfolio Turnover Ratio (PTR)

 Marks

Case Study No. – 5

You are a Group Treasurer of Tesla Star Ltd., a leading infrastructure player in India with interests in EPC, roads, airports and ports construction projects.

The group is in expansion mode and details of next project are as below :

1. Capital Assets - ₹ 1,000 crores

The suggested scheme of financing by the project consultant appointed by the Board committee is as below :

1. Long term debt @12% fixed rate – ₹ 750 crores
2. Rights issue of ₹ 250 crores
3. Short term working capital demand loan facility @ 10% fixed rate - ₹ 150 crores

The expected duration of the project is 5 years. This financing scheme is recommended by the consultant and you need to validate the same and propose alternative structure based on additional information given below :

As per the lending bank, the equity contribution stipulation for such projects is minimum 10% of the capital cost. The debt covenants have stipulated the cap of 2:1 on debt equity ratio which is similar to industry standards.

Projects financials are as below (₹ in crores)

Particulars	Year 1	Year 2	Year 3	Year 4	Year 5
Sales	1,100	1,250	1,400	1,500	1,600
Other income	150	200	250	300	400
Total income	**1,250**	**1,450**	**1,650**	**1,800**	**2,000**
Materials	700	750	775	800	850
Labour	100	150	200	250	300
Other expenses	50	75	90	100	150
Total expenses	**850**	**975**	**1,065**	**1,150**	**1,300**

Marks

PBDIT	400	475	585	650	700
Depreciation	150	150	150	150	150
PBIT	**250**	**325**	**435**	**500**	**550**
Interest on long term debt	45	81	63	45	27
Interest on short term debt	8	13	8	3	-
PBT	**197**	**231**	**364**	**452**	**523**
TAX @ 35% (approx.)	69	81	128	158	183
PAT	**128**	**150**	**237**	**294**	**340**

10% sales p.a. are going to be denominated in USD.

Long Term Debt	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**
Opening	-	750	600	450	300
Additions	750	-	-	-	-
Repayment*	-	150	150	150	150
Closing	750	600	450	300	150
Interest @ 12% on average outstanding	45	81	63	45	27

Short Term Debt	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**
Opening	-	150	100	50	-
Additions	150	-	-	-	-
Repayment*	-	50	50	50	-
Closing	150	100	50	-	-
Interest @ 10% on average outstanding (approx.)	8	13	8	3	-

**Above repayments are indicative and may vary as per alternative chosen by the student.*

The risk-free return on 365 days T-Bill, 5 years GOI Bonds and 10 years GOI bonds are 7%, 7.5% and 8% respectively. The companies in the infrastructure space have been earning ~13% return on such projects since last one year. The relevant company assets beta is estimated to be 1.8.

The financials of Tesla Star as on 31st March, 2020 and the last 2 years are given below :

Particulars	31st March, 2020 (₹ crores)	31st March, 2019 (₹ crores)	31st March, 2018 (₹ crores)
Liabilities			
Equity capital	100	100	100
Reserves	1,200	1,000	950
Long term loan (12%)	1,000	800	500
Short term loan (9%)	500	300	100
Other liabilities	200	150	50
Total	**3,000**	**2,350**	**1,700**
Assets			
Non-Current Assets	1,500	1,200	1,000
Cash & Bank	300	200	100
Investments	500	300	200
Other Current Assets	700	650	400
Total	**3,000**	**2,350**	**1,700**

The Long-Term Funds under the External Commercial Borrowing (ECB) route is available in foreign currency across tenors as per extant RBI policy for infrastructure projects. The yield curve for USD denominated debt is as below :

2 Year Treasury Yield – 1.5%

3 Year Treasury Yield – 1.55%

10 Year Treasury Yield – 1.45%

Marks

The bankers have been quoting a spread of 2% on the relevant tenor treasury yield.

The approximate hedging cost for one year in USD-INR is 5.45% p.a.

The last quoted yields in Indian Fixed Income Market for various debt instruments are as below :

Duration	Instrument	Yield for respective credit ratings (%)	Credit rating
6 months	CP	7.5% - 7.7%	AAA, AA
1 year	CP	8% - 8.20%	AAA, AA
1 year	Corporate Bond	9% - 9.20%	AAA, AA
3 years	Corporate Bond	9.4% - 9.55%	AAA, AA
5 years	Corporate Bond	9.75% - 9.9%	AAA, AA
3 years	Bank Term Loan	11% - 11.25%	AAA, AA
5 years	Bank Term Loan	12% - 12.25%	AAA, AA
1 year	Short Term Credit	10% - 11% (fixed)	AAA, AA

Last time CRA has given rating of AAA for short and long term facilities of Tesla Star Ltd.

Multiple Choice Questions :

5.1 Eligibility requirements for an IPO mandates assessment of following parameters. **2×5 =10**

(A) Net worth, Operating profits and Net tangible assets

(B) Share capital, Profit after tax and Net monetary assets

(C) Net worth and Gross debt

(D) Net profit and Net fixed assets

Marks

5.2 In which of the technique, time value of money is not considered ?

(A) Payback period

(B) Net present value

(C) Internal Rate of return

(D) Accounting Rate of return

5.3 Normal structure of treasury operations does not involve

(A) Front office

(B) Back office

(C) Mid office

(D) Central office

5.4 Which one of the below is not an interest rate risk ?

(A) Yield curve risk

(B) Repricing risk

(C) Basis risk

(D) Translation risk

5.5 Reverse Repo and Repo are defined as

(A) Reverse repo is the rate at which commercial banks lend to RBI and Repo is the rate at which RBI lends to Commercial Banks.

(B) Reverse repo is the rate at which commercial banks borrow from RBI and Repo is the rate at which RBI borrows from Commercial Banks.

(C) Reverse repo is the rate at which commercial banks lend to other commercial banks and Repo is the rate at which RBI lends to Government.

(D) Repo is the rate at which commercial banks lend to government and reverse repo is the rate at which RBI lends to Commercial Banks.

Marks

5.6 Calculate the 'Base NPV' of the project without capital structure suggestions by the consultant. 3

5.7 Calculate cost of equity and recommend whether to go ahead with suggested capital structure by the consultant along with reasons. 2

5.8 Suggest various sources of funds along with duration of such funding based on the information given, which can be tapped by Company for this project to optimise the overall cost of capital. Also, explain relevant conditions precedent for suggested funding sources and eligibility of company for the same. 5

5.9 Calculate the 'Adjusted NPV' based on your recommendations. 5
