

SFM

ICAI May 22 Question Paper Analysis (New Syllabus)

Question 1B

Sanjay Saraf Sir

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Useful links

CA Final SFM | Revisionary Po cast Series

<https://forum.sseigforum.com/question-category/sfm-revisionary-podcast-ca-final/>

CA Final SFM Marathon

<https://www.youtube.com/watch?v=26QWA4CfMfk&list=PLP3KuMma5JaosdjPUHNc2ulHYtE2t3L-n>

CA Final SFM Challenger Series

<https://youtube.com/playlist?list=PLP3KuMma5JaqPpUmAstplpMIRcGEjSx6D>

Complete SFM Revision Playlist

https://youtube.com/playlist?list=PLP3KuMma5JaoYQubuNJfyXzqS-ca2_uqr

CA Final SFM New Type of Sums

<https://www.youtube.com/watch?v=NpQLuVrAE38&list=PLP3KuMma5JaqCwyPksNjQSqOAjRQsbmck>

| Q. no. | Broad Topic | Sub Topic | Marks | Percentage | Sanjay Sir's Comments |
|--------|-------------|-----------------------|-------|------------|--|
| 1(a) | FOREX | CURRENCY OF BORROWING | 8 | 6.67% | <p>This is a repeated sum from past papers. It had been done in class comprehensively. I am amazed to see the second part of this sum where they talk about company wanting to hedge and expenses involved in hedging of 30,000. Forward rate is already given in the question. So when we are going for the foreign branch offer, we are already hedging ourself. Has ICAI people completely lost it when they talk about hedge in the second part of the question. Anyways, they perhaps wanted to just showoff their capacity to change existing sums...</p> <p>Maza Liziye</p> <p><i>Original sum</i> mein equipment Japan se import kar rahe the.....import cost 3400 lakh yen tha....yaha import cost \$15000 hai. Waha exchange rate ajib tarah se diya tha(₹100 = yen 340)...yaha exchange rate sarifai se diyahai...₹75/\$. Ofcourse additional hedging expenses 30000 deke bewakofoo k najar me hosiar bana hai but buddhimano ki najar me chomu bana hai...and bewakofoo ka sankhya kafi jyada hai.</p> <p>The sum is repeated from the past. Similar sum present in SSEI Study Mat - Book No. 1, Problem 53, Page No. 69</p> |
| 1(b) | DERIVATIVES | OPTION BASICS | 8 | 6.67% | <p>Personally, I have always regarded this question as one of the most stupidest. The only brains required in this sum is to understand that options have a non – linear pay off. So you cannot use the expected share price to calculate the expected pay off. They have added a fourth part to the question and it has a simple solution.</p> <p>Maza Liziye</p> <p>I have always wondered who designed 2nd part of the question...usko noble prize milna chahiye...</p> <p>The sum is repeated from the past. Similar sum present in SSEI Study Mat - Book No. 2, Problem 38, Page No. 43</p> |

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|------|-------------------------------|-------------------------------|---|-------|---|
| 1(c) | INTEREST RATE RISK MANAGEMENT | INTEREST RATE RISK MANAGEMENT | 4 | 3.33% | <p>This is a new theory question from IRRM...I had covered it in a dictated manner in my first batch of the new syllabus in 2017-18. However I found that the student community was not ready to dig so much – that too in theory and so I left focusing on it. I really like this attitude from ICAI...they are getting inside individual chapters and setting theory questions from there. For banks, net interest income (NII) is one of the core parameters that banks need to protect and enhance. Hence a whole lot of risk management disciplines have emerged to hedge NII.</p> <p>Maza Liziye</p> <p>Sir par aaptoh bole the sara theory easy aayega...</p> <p>Jhoot.....maine bola tha theory usually comes from the following chapters-</p> <p>Chapter 1 – Financial Policy and Corporate Strategy Chapter 2 – Risk Management Chapter 6 – Securitization Chapter 11 – Interest Rate Risk Management Chapter 14 – Startup Finance</p> <p>From these chapters, any theory can come and not the one which is popular. So, you got to work hard if you wish to cover all eventualities. Also, theory may come from other chapters...those who not hankering for 100/100 may focus only on the above chapters.</p> |
| 2(a) | MUTUAL FUND | MUTUAL FUND | 8 | 6.67% | <p>I am sure all of you remember this question based on back calculation. First five parts of the sum are repeated. Sixth part is a formality. Obviously, we will choose fund C and E(r) 15% per annum. The seventh part involves exit load which obviously gets deducted from ending NAV and that is used to calculate return once again.</p> <p>The sum is repeated from the past. Similar sum done in SFM Revision Series and SFM Dawn series 2022</p> |

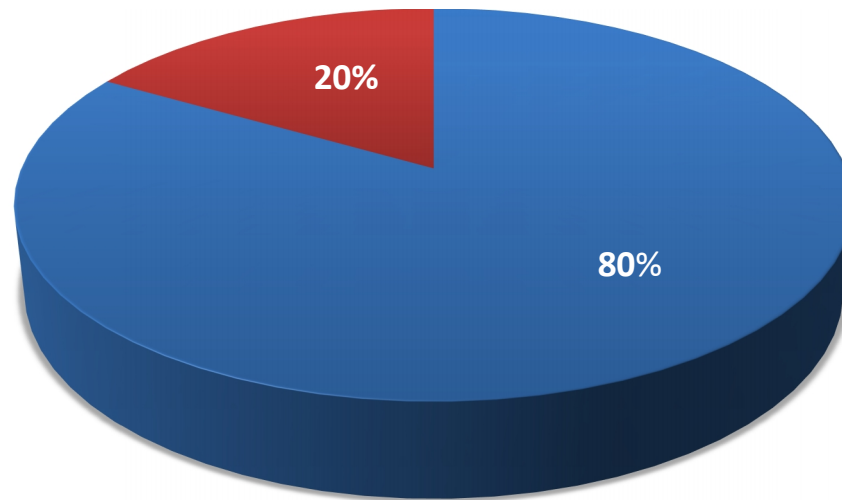
| | | | | | |
|-------------|---|---|---|-------|--|
| 2(b) | EQUITY VALUATION | FCFF | 8 | 6.67% | <p>There is just this one sum of FCFE in the past papers and it is repeated...is there a dearth of problems on FCFE. Anyways everyone would have enjoyed.</p> <p>The sum is repeated from the past. Similar sum present in SSEI Study Mat - Book No.2, Problem 65, Page No 92.</p> |
| 2(c) | FINANCIAL POLICY AND CORPORATE STRATEGY | FINANCIAL POLICY AND CORPORATE STRATEGY | 4 | 3.33% | <p>It's a standard theory from chapter 1.</p> <p>This question is present in sheet of SFM Theory shared by SSEI</p> |
| 3(a) | FOREX | ADR/GDR | 8 | 6.67% | <p>Typical sum on calculating cost of GDR. In the last portion of the sum, we are supposed to compare that with cost of debt funds which I think is not an apple to apple comparison. Moreover tax rate is missing.</p> <p>The sum is repeated from the past. Similar sum present in SSEI Study Mat - Book No.1, Problem 6, Page No. 10.</p> |
| 3(b) | PORTFOLIO MANAGEMENT | AMBIGUOUS | 8 | 6.67% | <p>I hope people do remember this question marked by me as ambiguous. In this question we had to calculate beta by the least squares method of regression rather than similar sums of this type where we use CAPM to backout beta.</p> <p>The sum is repeated from the past. Similar sum present in SSEI Study Mat - Book No.1, Problem 4, Page No 5.</p> |
| 3(c) | INTERNATIONAL FINANCIAL MANAGEMENT | INTERNATIONAL FINANCIAL MANAGEMENT | 4 | 3.33% | <p>This type of theory was very popular in old SFM. Its included in my optional classes. Foreign bond means "Issue karne wala firangi" and convertible you obviously know.</p> <p>This question is present in sheet of SFM Theory shared by SSEI</p> |
| 4(a) | EQUITY VALUATION | FCFF | 8 | 6.67% | <p>Good sum on FCFF (atleast better than the stupid sum on FCFE) but it is yet a repeated sum from the past.</p> <p>The sum is repeated from the past. Similar sum present in SSEI Study Mat - Book No.1, Problem 45, Page No 64.</p> |

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|------|-------------------------|-------------------------|---|-------|---|
| 4(b) | MUTUAL FUND | MUTUAL FUND | 8 | 6.67% | <p>This sum as you all know is frequently repeated in past papers. However, they have included information on interim dividend and bonus. Bonus of 1:10 is fine – the fund has additional 2500 shares of XYZ. Interim dividend is confusing because you never know whether ICAI solution will consider this dividend in addition to the RS 8,00,000 dividend given in the question or they will take it to be included in 8,00,000. Accordingly, I have provided two solutions.</p> <p>The sum is repeated from the past. Similar sum present in SSEI Study Mat - Book No.3, Problem 4, Page No 193.</p> |
| 4(c) | SECURITIZATION | SECURITIZATION | 4 | 3.33% | <p>Most popular repeated theory.</p> <p>The question is repeated from the past. It is present in SSEI Study Mat - Book No.3, Page No 58.</p> |
| 5(a) | MERGERS AND ACQUISITION | MERGERS AND ACQUISITION | 8 | 6.67% | <p>Repeated sum marked as ambiguous in class due to the second part.</p> <p>The sum is repeated from the past. Similar sum present in SSEI Study Mat - Book No.3, Problem 34, Page No. 328.</p> |
| 5(b) | EQUITY VALUATION | EMA | 8 | 6.67% | <p>Sums on EMA have become very frequent and I am sure you had prepared the same. The formula for the exponent $(2/n+1)$ was revised by me as compared to the earlier formula $(2/n)$. Hence it is necessary to remain updated. And you know how smartness is required in writing the answer to the third part.</p> <p>The sum is repeated from the past. Similar sum present in SSEI Study Mat - Book No.2, Problem 69, Page No 97.</p> |
| 5(c) | RISK MANAGEMENT | RISK MANAGEMENT | 4 | 3.33% | <p>Typical theory from chapter 2 RM.</p> <p>The question is repeated from the past. It is present in SSEI Study Mat - Book No.3, Page No 49.</p> |
| 6(a) | PORTFOLIO MANAGEMENT | CORRELATION | 8 | 6.67% | <p>Calculation of correlation – an eight column table as we use to do so many times in class. Of course you can apply other versions of the stats formula as ICAI often does.</p> <p>The sum is repeated from the past. Similar sum present in SSEI Study Mat - Book No.1, Problem 28, Page No.46.</p> |

| | | | | | |
|------|-----------------|-----------------|---|-------|---|
| 6(b) | IRR | CAP AND FLOOR | 8 | 6.67% | <p>This question on cap and floor was specifically marked as important in class. Infact, doubt on this question has been asked on Q forum atleast 10 times.</p> <p><i>The sum is repeated from the past. Similar sum present in SSEI Study Mat - Book No.2, Problem 11, Page No. 100.</i></p> |
| 6(c) | STARTUP FINANCE | STARTUP FINANCE | 4 | 3.33% | <p>Typical theory on angel investors/startup.</p> <p><i>The question is repeated from the past. It is present in SSEI Study Mat - Book No.3, Page No 81.</i></p> |

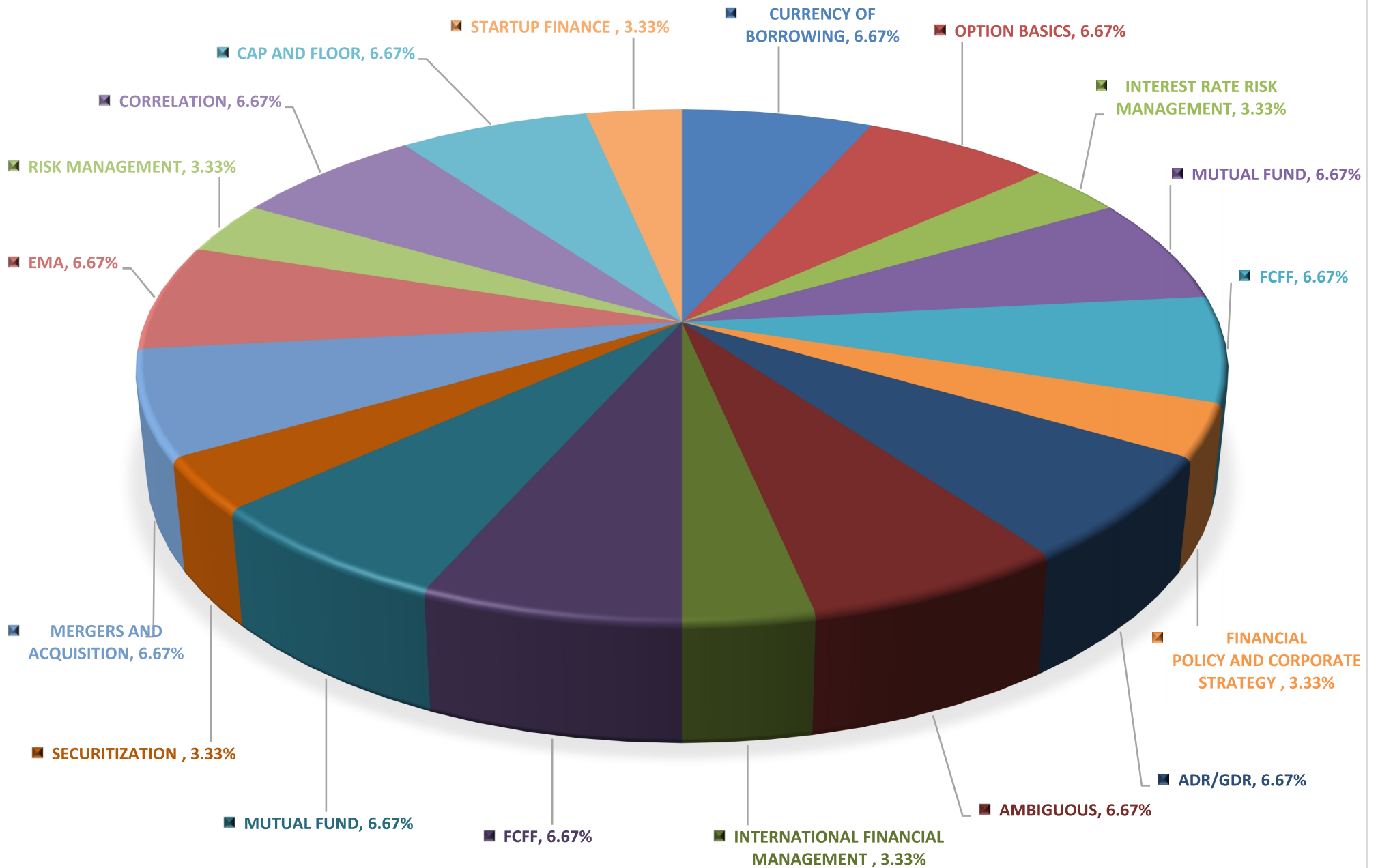
| | | |
|--------------------------|------------|---------------|
| Practical Portion | 96 | 80.00% |
| Theory Portion | 24 | 20.00% |
| Total | 120 | 100% |

SFM Paper - Component Analysis (Macro)



■ Practical Portion ■ Theory Portion

SFM PAPER - COMPONENT ANALYSIS (MICRO)



Question 1.

- b.** You had purchased a 3 month call option on the Equity shares of Satya Ltd for a premium of ₹ 30 each, the current market price of the share is ₹ 560 and the exercise price is ₹ 590. You expect the price range between ₹ 540 to ₹ 640.

The expected share price of Satya Ltd and related probability is given below :

| | | | | | | |
|-------------------|------|------|------|------|------|------|
| Expected price(₹) | 540 | 560 | 580 | 600 | 620 | 640 |
| Probability | 0.10 | 0.15 | 0.05 | 0.35 | 0.20 | 0.15 |

Compute the followings :

- i.** Expected share price at the end of 3 months,
- ii.** Value of call option at the end of 3 months, if the exercise price prevails,
- iii.** In case the option is held to its maturity, what will be the expected value of the call option ?
- iv.** Find out the price of the shares quoted at the stock exchange to get the value of the call option as computed in (iii) above.

Answer:

i. Expected Share Price

$$= ₹540 \times 0.10 + ₹560 \times 0.15 + ₹580 \times 0.05 + ₹600 \times 0.35 + ₹620 \times 0.20 + ₹640 \times 0.15$$

$$= ₹54 + ₹84 + ₹29 + ₹210 + ₹124 + ₹96 = ₹597$$

ii. Value of Call Option

$$= ₹590 - ₹590 = \text{Nil}$$

iii. If the option is held till maturity the expected Value of Call Option

| Expected price (X) | Value of call (C) | Probability (P) | CP |
|--------------------|-------------------|-----------------|-------------|
| ₹540 | 0 | 0.10 | 0 |
| ₹560 | 0 | 0.15 | 0 |
| ₹580 | ₹0 | 0.05 | ₹0 |
| ₹600 | ₹10 | 0.35 | ₹ 3.5 |
| ₹620 | ₹30 | 0.20 | ₹ 6 |
| ₹ 640 | ₹50 | 0.15 | ₹ 7.5 |
| Total | | | ₹ 17 |

iv. The share price on expiration must be ₹ 590 + ₹ 17 = ₹ 607

Sanjay Sir's Comment:

Personally, I have always regarded this question as one of the most stupidest. The only brains required in this sum is to understand that options have a non – linear pay off. So you cannot use the expected share price to calculate the expected pay off. They have added a fourth part to the question and it has a simple solution.



Maza Liziye

I have always wondered who designed 2nd part of the question...usko noble prize milna chahiye...

The sum is repeated from the past. It is present in SSEI Study Mat - Book no. 2, Problem 38, page no. 43

Original Sum

PROBLEM – 38

You as an investor had purchased a 4 month call option on the equity shares of X Ltd. of ₹ 10, of which the current market price is ₹ 132 and the exercise price ₹ 150. You expect the price to range between ₹ 120 to ₹ 190. The expected share price of X Ltd. and related probability is given below:

| | | | | | |
|--------------------|-----|-----|-----|-----|-----|
| Expected Price (₹) | 120 | 140 | 160 | 180 | 190 |
| Probability | .05 | .20 | .50 | .10 | .15 |

Compute the following:

- Expected Share price at the end of 4 months.
- Value of Call Option at the end of 4 months, if the exercise price prevails.
- In case the option is held to its maturity, what will be the expected value of the call option?

SOLUTION :-

i. Expected Share Price

$$= ₹120 \times 0.05 + ₹140 \times 0.20 + ₹160 \times 0.50 + ₹180 \times 0.10 + ₹190 \times 0.15$$

$$= ₹6 + ₹28 + ₹80 + ₹18 + ₹28.50 = ₹160.50$$

ii. Value of Call Option

$$= ₹150 - ₹150 = \text{Nil}$$

iii. If the option is held till maturity the expected Value of Call Option

| Expected price (X) | Value of call (C) | Probability (P) | CP |
|--------------------|-------------------|-----------------|-----|
| ₹ 120 | 0 | 0.05 | 0 |
| ₹ 140 | 0 | 0.20 | 0 |
| ₹ 160 | ₹ 10 | 0.50 | ₹ 5 |
| ₹ 180 | ₹ 30 | 0.10 | ₹ 3 |

| | | | | |
|--------------|-------|------|------|-------------|
| | ₹ 190 | ₹ 40 | 0.15 | ₹ 6 |
| Total | | | | ₹ 14 |

Alternatively, it can also be calculated as follows:

Expected Value of Option

| | |
|---------------------------|----------------|
| $(120 - 150) \times 0.1$ | Not Exercised* |
| $(140 - 150) \times 0.2$ | Not Exercised* |
| $(160 - 150) \times 0.5$ | 5 |
| $(180 - 150) \times 0.1$ | 3 |
| $(190 - 150) \times 0.15$ | 6 |
| | 14 |

* If the strike price goes below ₹ 150, option is not exercised at all.