

Case: Mr. Roger (Reference date: 1st April, 2016)

Roger, aged 29 years, is working with a multinational company since December 2010. He has approached you, a CFP^{CM} practitioner, for preparing his Financial Plan. He is staying in his own house at Ahmedabad. His wife Angela, aged 31 years, is a fashion designer. She has set up a boutique on rent and earned a net profit of Rs. 5.5 lakh in the previous financial year. They have a son, Mark of age 4 years, and a year old daughter, Stephanie. Roger is also supporting his parents to the extent of Rs. 20,000 per month. They stay at their ancestral house at Surat. The family's monthly house hold expenses are Rs. 40,000 p.m. (excluding insurance premium and EMIs). Roger normally gets 10% increase in his gross salary year-on-year in the beginning of every financial year, apart from bonus. The bonus for the previous financial year at Rs. 3.3 lakh (net of tax) is agreed to be credited to his account at the end of this month. He has taken a family floater policy for Health Insurance involving an annual premium of Rs. 16,268 and a total cover of Rs. 15 lakh.

Roger's monthly salary (for FY2016-17):

Basic Salary	:	Rs. 60,000
DA (forming part of Salary)	:	50% of Basic salary
House Rent allowance	:	Rs. 18,000
Transport Allowance	:	Rs. 5,000
Medical Reimbursement	:	Actual expenses up to Rs. 1,250 per month
Executive Allowance	:	Rs. 10,000

Couple's Current Assets & Liabilities (As on 31st March, 2016)

Assets:

House	:	Rs. 75.00 lakh (Current market value, purchase cost Rs. 50 lakh)
Car	:	Rs. 4.00 lakh (Depreciated value)
Public Provident Fund - PPF ¹	:	Rs. 4.90 lakh
Insurance – Money Back policy ²	:	Rs. 3.00 lakh (Sum assured)
Child Plan – Life insurance ³	:	Rs. 12.00 lakh (Sum Assured)
Gold ornaments ⁴	:	Rs. 4.50 lakh
Equity Mutual Fund schemes ⁵	:	Rs. 7.85 lakh
Portfolio of Equity Shares ⁶	:	Rs. 3.95 lakh
Bank fixed deposits ⁷	:	Rs. 2.50 lakh (Principal, in Angela's name from her business income)
Bank account – Roger	:	Rs. 0.75 lakh
Bank account – Angela	:	Rs. 0.95 lakh

Liabilities:

Home loan ⁸	:	Rs. 15.28 lakh (Principal outstanding)
Car Loan ⁹	:	Rs. 1.62 lakh (Principal outstanding)

¹ Opened in December, 2010 in the name of Roger

² Purchased on 25th October, 2012; annual premium paid Rs. 14,798; 20-year policy with 20% of sum assured payable on survival on 5th, 10th and 15th years and the balance on maturity.

³ Purchased when Mark was 2 year old; term of 15 years; annual premium Rs. 41,374

⁴ Gifted on marriage in November 2010 at then value Rs. 1.75 lakh.

⁵ Three schemes; current assets value in one scheme is Rs. 2.5 lakh, in second Rs. 3.5 lakh with monthly Systematic Investment Plan (SIP) of Rs. 10,000; the third is Equity Linked Saving scheme, invested Rs. 1 lakh in March 2014.

⁶ The Demat account in which Roger and Angela are respectively first and second holders was started in 2012 with last security purchased in May 2015.

⁷ Three deposits; Rs. 1 lakh made in July 2013 for 3 years at 9.25% p.a., Rs. 1 lakh made in May 2014 for 2 years at rate 9% p.a. and Rs. 50,000 made in June 2015 for 1 year and 1 day at 8.75% p.a.

⁸ Home loan of Rs. 17 lakh for a 15-year term taken in April, 2013 at rate of interest fixed for first 3 years at 10% p.a., and floating thereafter at 1.5% above RBI Repo rate.

⁹ Car loan of Rs. 5.5 lakh taken in April, 2013 at a fixed interest of 11.5% p.a. for a 4-year term; Car cost Rs. 8 lakh.

Goals:

1. Accumulate in a fund, higher education expenses of Mark and Stephanie. Expenses at their respective age of 18 years are Rs. 4 lakh p.a. (current cost) required for four years, cost escalation 8% p.a.
2. Marriage expenses of Rs. 10 lakh (current cost) for each child at around their respective age of 25 years, cost escalation 9% p.a.
3. Retirement corpus at Roger's age of 58 years to sustain 70% of pre-retirement household expenses, inflation adjusted, till his lifetime and 70% of then expenses till Angela's expected life.
4. A bigger house valued at Rs. 1 crore today, 5 years from now by disposing of the current house and foreclosing the loan, the expected appreciation of current house from now onwards is 5% p.a.
5. Build a separate fund for vacation expenses of Rs. 1.5 lakh p.a. (current cost) starting from next year and continuing up to Roger's retirement, cost escalation 7%. A suitable lump sum is to be invested immediately with regular investments and an annual withdrawal strategy.

Life Parameters:

Roger's expected life	:	75 years
Angela's expected life	:	80 years

Assumptions regarding pre-tax returns on various asset classes:

1) Equity & Equity MF schemes/ Index ETFs	:	11.00% p.a.
2) Balanced MF schemes	:	9.00% p.a.
3) Bonds/Govt. Securities/ Debt MF schemes	:	7.00% p.a.
4) Liquid MF schemes	:	5.50% p.a.
5) Gold & Gold ETF	:	6.50% p.a.
6) Real Estate appreciation	:	7.00% p.a.
7) Bank/Post Office Term Deposits (> 1 year)	:	7.25% p.a.
8) Public Provident Fund/EPFO	:	8.00% p.a.

Assumptions regarding economic factors:

1) Inflation	:	5.00% p.a.
2) Expected return in Risk free instruments	:	6.00% p.a.

Cost Inflation Index:

1981-82	100	1987-88	150	1993-94	244	1999-00	389	2005-06	497	2011-12	785
1982-83	109	1988-89	161	1994-95	259	2000-01	406	2006-07	519	2012-13	852
1983-84	116	1989-90	172	1995-96	281	2001-02	426	2007-08	551	2013-14	939
1984-85	125	1990-91	182	1996-97	305	2002-03	447	2008-09	582	2014-15	1024
1985-86	133	1991-92	199	1997-98	331	2003-04	463	2009-10	632	2015-16	1081
1986-87	140	1992-93	223	1998-99	351	2004-05	480	2010-11	711	2016-17	1125

Questions:

- 1) Before beginning work on Roger's Financial Plan, you have drafted a document outlining the "Scope of Engagement" and sought Roger to mutually define and determine the activities that may be necessary to pursue. Roger asked you about relevance of such a document. In the context of Financial Planning Profession, you explain about the "Letter of Engagement" as a _____.

[2 marks]

- A. professional requirement under Code of Ethics of FPSB India
- B. professional requirement under Practice Guidelines of FPSB India
- C. necessary legal requirement as per Contract Act 1872
- D. document for his personal record

- 2) You have finished analysis of Roger's financial situation and risk profile. Which of the following is the next appropriate step in the financial planning?

[2 marks]

- A. Specify financial goals which can be achieved within Roger's financial situation based on the information collected
- B. Fix the scope of engagement based on the available information already collected
- C. Consider such assumptions of investment returns, inflation, tax rates, etc as to maximize the chances of achieving Roger's goals
- D. Identify other issues that may potentially impact Roger's ability to achieve financial goals

- 3) Roger wants to estimate the amount of finance needed to buy the proposed new house after 5 years. This could be arrived at by utilizing the net amount from the sale proceeds of his existing house after 5 years. The outgoings from such proceeds would be the outstanding loan amount and a sum of Rs. 20 lakh towards meeting capital gains tax liability on existing house and the statutory charges, furnishing expenses of new house. You expect the average Repo rate of 6.5% to be maintained by RBI over the next 5 years.

[3 marks]

- A. Rs. 65 lakh
- B. Rs. 80 lakh
- C. Rs. 75 lakh
- D. Rs. 62 lakh

- 4) You give a quick look at the assets and liabilities of the couple, and before drawing a comprehensive picture of adequate insurance protection and a strategy to achieve the same, you suggest to take cover on an immediate basis, which is _____.

[2 marks]

- A. They must take Mortgage Redemption Insurance or an equivalent term insurance to cover outstanding loans
- B. They must take Accident Insurance
- C. They must take Critical illness insurance
- D. They must take Unit Linked Insurance Policies for their financial goals

- 5) You compute the value of additional life cover for Roger by considering current household expenses, required inflation adjusted to the extent of 80% until Angela's age of 55 years and 60% of then expenses for the remaining period of her expected life by considering investment in debt MF schemes. This cover required to be taken as term insurance exclusive of the Child plan comes to _____.

[3 marks]

- A. Rs. 120 lakh
- B. Rs. 130 lakh
- C. Rs. 220 lakh
- D. Rs. 100 lakh

- 6) Roger's ideal life cover has to be estimated which in case of any exigency will first repay the outstanding loans and the remaining would be invested along with the couple's existing financial assets. Such combined corpus would be invested in a 7.5% p.a. return instrument to sustain the family's living expenses and the specific financial goals of higher education of their children. The living expenses need to be taken as inflation-adjusted to the extent of 80% of their present household expenses for next 25 years and 60% for the subsequent 30 years. What should be this ideal cover?

[4 marks]

- A. Rs. 140 lakh
- B. Rs. 165 lakh
- C. Rs. 180 lakh
- D. Rs. 330 lakh

- 7) Roger and Angela wish their retirement corpus, as proposed, to also have a provision of gifting Rs. 50 lakh to each of their children and an additional Rs. 25 lakh towards charity to an Old Age Home at Roger's age of 70 years. The sums are at absolute values then. They also wish to provide in the corpus an additional Rs. 10,000 per month (current costs) towards healthcare after Roger's age of 70 years. You estimate the required corpus, considering the same shall be invested in investment yielding 6.5% p.a., to be _____.

[3 marks]

- A. Rs. 3.53 crore
- B. Rs. 3.20 crore
- C. Rs. 3.78 crore
- D. Rs. 3.67 crore

- 8) You sensitize Roger and Angela about the parameters considered post-retirement: investment return 6.5% p.a., inflation 5% p.a., and specified longevity while working out retirement corpus. You inform that even marginal fall in expected yield or rise in inflation post-retirement, and a slightly longer life span would adversely impact sustainability of corpus. You work out the revised corpus by considering 6% annual yield, 5.5% inflation, 5 years more in Roger's longevity and 2 years more in Angela's longevity. What additional funds need to be accumulated by Roger's retirement age? Alternately, by what percentage the retirement expenses should be curtailed to retain this cushion?

[5 marks]

- A. Rs. 57 lakh; 44% curtailment
- B. Rs. 14 lakh; 33% curtailment
- C. Rs. 129 lakh; 55% curtailment
- D. Rs. 26 lakh; 36% curtailment

9) As the rates in bank fixed deposits would be headed lower in the near future, you advise Angela to invest the FD maturity proceeds in a Mutual Fund scheme investing in long dated Government Securities. Your investment rationale, theoretically, is:

[2 marks]

- A. Invested for more than one year, the debt oriented Mutual Fund scheme would result in tax efficient return, though pre-tax return may match with bank FD.
- B. With softening interest rates, the price of long dated Government Securities would also fall, thus better yield profile of such securities.
- C. This is a play on long duration with expected moderate trend in interest rates, thus scheme return though capital appreciation is expected.
- D. Higher actual income would be expected from the scheme with strengthening yield as the interest rates fall in the future.

10) Towards the marriage goal of the children, you suggest Roger to make maximum permissible subscriptions to his account towards the end of every financial year and extend the account twice beyond initial maturity for terms of 5 years each with similar subscriptions. The third term of 5 years is maintained without further contribution. Roger shall withdraw about 50% of accumulation for the marriage expenses of Mark and the remaining for the marriage expenses of Stephanie. What are the expected individual withdrawals and shortfalls in meeting the marriage expenses?

[4 marks]

- A. Mark Rs. 51.5 lakh, 16% shortfall; Stephanie Rs. 64.8 lakh, 18% shortfall
- B. Mark Rs. 49.4 lakh, 19% shortfall; Stephanie Rs. 62.2 lakh, 21% shortfall
- C. Mark Rs. 52.3 lakh, 14% shortfall; Stephanie Rs. 65.9 lakh, 17% shortfall
- D. Mark Rs. 45 lakh, 26% shortfall; Stephanie Rs. 56.7 lakh, 28% shortfall

11) Roger and Angela will set aside immediately a sum of Rs. 10 lakh towards setting up a fund for vacation. They will start contributing annual investments beginning April 2017 till age 57 of Roger. Such annual investment will be doubled in 10th installment and again in 20th installment. The withdrawal from the fund towards vacation will begin on annual basis from April 2018. You devise an asset allocation for the vacation fund to yield 11% p.a. in the first ten years, decreasing by 1.5% sequentially in the subsequent 10-year period, and the remaining period thereafter. What should be the amount of initial annual investment?

[5 marks]

- A. Rs. 1,82,500
- B. Rs. 133,600
- C. Rs. 1,27,900
- D. Rs. 120,600

12) For the higher education expenses for Mark and Stephanie, Roger starts accumulating funds with monthly investment of Rs. 20,000 in an aggressive asset allocation yielding 12% p.a. After 7 years the allocation is moderated to yield 9% p.a. and the accumulated funds invested at this rate for the next 5 years, while the investment is raised to Rs. 40,000 p.m. The strategy is to shift the funds accumulated after 12 years to risk free instruments from which distribution towards higher education is drawn as proposed. What would be the shortfall expected after 12 years in following this strategy?

[5 marks]

- A. Rs. 38.70 lakh
- B. Rs. 18.80 lakh
- C. Rs. 7.60 lakh
- D. Rs. 22.60 lakh

13) Roger asks for your guidance regarding different modes of tax efficient estate planning which can help in creating and distributing family assets. You opine that a Trust would be a more appropriate option because_____

[2 marks]

- A. there is no taxation applicable on trust income
- B. they have fixed rate of tax which is far lower than tax rates for individual assesseees
- C. future capital gains tax on assets transferred to trust could be lower
- D. all future earnings from assets transferred to trust are exempt

14) Roger had purchased 500 equity shares of X Ltd., listed in stock exchanges in India and abroad in April 2012 at the rate of Rs. 225 per share. He intends to transfer today all the shares at a price of Rs. 460 per share privately to his father in an off-market deal. Calculate his capital gains tax liability for AY 2017-18.

[3 marks]

- A. Rs. 15,470
- B. Rs. 12,100
- C. Rs. Nil
- D. Rs. 24,200

15) Roger purchased 1,000 equity shares of face value Rs. 10 each on 10th May, 2016 in ABC Ltd at Rs. 56. The Company declared 50% dividend with record date being 3rd August 2016. On 20th October 2016, he transferred 800 shares out of these 1,000 shares, at Rs. 37 per share. He transferred balance 200 shares on 20th December 2016 at Rs. 20 per share. During FY 2016-17, Roger also generated long term capital gain of Rs. 76,000 on sale of gold. Determine his capital gains for AY 2017-18.

[5 marks]

- A. LTCG Rs. 57,600
- B. LTCG Rs. 53,600
- C. LTCG Rs. 76,000; STCL Rs. 18,400
- D. LTCG Rs. 76,000; STCL Rs. 22,400