

Case: Mr. Roger (Reference date: 1st April, 2014)

Roger, aged 29 years, is working with a multinational company since December 2007. He has approached you, a CFP<sup>CM</sup> 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 FY2014-15):

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 31<sup>st</sup> March, 2014)

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 <sup>1</sup>	:	Rs. 4.90 lakh
Insurance – Money Back policy <sup>2</sup>	:	Rs. 3.00 lakh (Sum assured)
Child Plan – Life insurance <sup>3</sup>	:	Rs. 12.00 lakh (Sum Assured)
Gold ornaments <sup>4</sup>	:	Rs. 4.50 lakh
Equity Mutual Fund schemes <sup>5</sup>	:	Rs. 7.85 lakh
Portfolio of Equity Shares <sup>6</sup>	:	Rs. 3.95 lakh
Bank fixed deposits <sup>7</sup>	:	Rs. 2.50 lakh (Principal, in Angela' name from her business income)
Bank account – Roger	:	Rs. 0.75 lakh

<sup>1</sup> Opened in December, 2008 in the name of Roger

<sup>2</sup> Purchased on 25th October, 2010; 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.

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

<sup>4</sup> Gifted on marriage in November 2008 at then value Rs. 1.75 lakh.

<sup>5</sup> 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 2012.

<sup>6</sup> The Demat account in which Roger is first holder and Angela is second was started in 2010 with last security purchased in May 2013.

<sup>7</sup> Three deposits; Rs. 1 lakh made in July 2011 for 3 years at 9.25% p.a., Rs. 1 lakh made in May 2012 for 2 years at rate 9% p.a. and Rs. 50,000 made in June 2013 for 1 year and 1 day at 8.75% p.a.

Bank account – Angela : Rs. 0.95 lakh

Liabilities:

Home loan<sup>8</sup> : Rs. 15.28 lakh (Principal outstanding)

Car Loan<sup>9</sup> : Rs. 1.62 lakh (Principal outstanding)

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 Stephanie'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 at 10% 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 long-term 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 : 5.50% p.a.

Assumptions regarding economic factors:

1. Inflation : 5.50% p.a.
2. Expected return in Risk free instruments : 6.50% p.a.
3. Real Estate appreciation : 6.00% p.a.

Cost Inflation Index:

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

<sup>8</sup> Home loan of Rs. 17 lakh for a 15-year term taken in April, 2011 at rate of interest fixed for first 3 years at 10% p.a., and floating thereafter at 1.5% above RBI Repo rate.

<sup>9</sup> Car loan of Rs. 5.5 lakh taken in April, 2011 at a fixed interest of 11.5% p.a. for a 4-year term; Car cost Rs. 8 lakh.

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 is an appropriate position for you to next enact? [2 marks]
- A) Specify only achievable financial goals within Roger's financial situation based on the collected information
  - B) Leave unchanged the scope of engagement whether the available information is less or more
  - C) Consider assumptions regarding rates of investment, inflation and tax which 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, while shifting to their proposed new house in 5 years wants to set aside Rs. 15 lakh from the sales proceeds of his existing home towards meeting tax liability, stamp duty and registration charges, and furnishing of new house. You expect the average Repo rate as 6.5% to be maintained by RBI over the next 5 years. What should be the amount of finance needed to buy the proposed new house? [3 marks]
- A) Rs. 62 lakh (approx.)
  - B) Rs. 41 lakh (approx.)
  - C) Rs. 66 lakh (approx.)
  - D) Rs. 52 lakh (approx.)
- 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 observe that Roger has not taken an adequate life cover. You assume that the investments made by the couple would serve to achieve financial goals of their children. You compute the value of additional cover 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. 130 lakh  
B) Rs. 125 lakh  
C) Rs. 110 lakh  
D) Rs. 120 lakh
- 6) You suggest Roger and Angela to have an aggregate insurance cover which would take care of outstanding loans, financial goals of higher education of their children and the annual inflation-adjusted expenses to the extent of 75% of their present household expenses for next 25 years and 50% for the subsequent 20 years. If the claim from insurance along with existing financial assets could be invested to generate 8.5% p.a. return, what approximate additional life cover is required?  
[4 marks]
- A) Rs. 95 lakh  
B) Rs. 90 lakh  
C) Rs. 113 lakh  
D) Rs. 170 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 7% p.a., to be \_\_\_\_\_.  
[3 marks]
- A) Rs. 3.68 crore  
B) Rs. 3.53 crore  
C) Rs. 4.03 crore  
D) Rs. 3.25 crore
- 8) You sensitize Roger and Angela about the assumptions made while working out retirement plan. You inform that even 0.5% fall in expected yield on investing corpus or an equivalent higher inflation post-retirement would adversely impact sustainability of corpus. Also, increasing longevity requires a sufficient cushion for living expenses. You work out the corpus, as proposed, by considering 7% annual yield in a 5% inflationary scenario. For additional cushion, you take yield and inflation at 6.5% and 5.5% respectively, while also considering 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 how much retirement expenses should be curtailed in the first year as a percentage of pre-retirement expenses to retain this cushion?

[5 marks]

- A) Rs. 58 lakh; 43% curtailment
- B) Rs. 123 lakh; 53% curtailment
- C) Rs. 50 lakh; 41% curtailment
- D) Rs. 45 lakh; 29% curtailment

9) Angela is concerned that she would not be able to reinvest her bank fixed deposits maturing between May, 2014 and July, 2014 at attractive interest rates. She does not require the funds in the short and medium term. She asks you better alternatives to invest the matured sums. You suggest her to invest the maturity proceeds in a Mutual Fund scheme investing in long dated (10 years and more) Government Securities. Your investment rationale is: [2 marks]

- A) The Government Securities have no credit risk and are better than bank fixed deposits in this aspect. The investment is expected to give market returns in tune with moderating yields.
- B) This is a high quality safe debt expected to provide better than average debt yields. As the interest rates soften the yields would increase for dated securities thus no reinvestment risk.
- C) This is a play on long duration with interest rates expected to soften in the near future. Also there is least credit risk while locking in to healthy yield.
- D) As the interest rates soften in the future yields on long dated debt would strengthen. This strategy would result in higher income from securities to offset any depreciation in their value.

10) Roger contributes diligently to his PPF account and wants to use the same for accumulating funds for the marriage of his children. You suggest him 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? (Average Interest rate in PPF is presumed to be 8% p.a. for the next 10 years and 7.5% p.a. subsequently) [4 marks]

- A) Mark Rs. 50.7 lakh, 17% shortfall; Stephanie Rs. 63 lakh, 20% shortfall
- B) Mark Rs. 47.2 lakh, 23% shortfall; Stephanie Rs. 58.6 lakh, 26% shortfall
- C) Mark Rs. 52.3 lakh, 14% shortfall; Stephanie Rs. 69.8 lakh, 12% shortfall
- D) Mark Rs. 55.4 lakh, 9% shortfall; Stephanie Rs. 74 lakh, 6% shortfall

11) Roger and Angela do not want to compromise on the quality of their vacation. They do not also wish to set aside immediately an initial sum of more than Rs. 2.5 lakh towards setting up a

feeder fund for vacation. However, they can escalate their annual investments towards the feeder fund by doubling the same every ten years. You advise them to defer their first withdrawal for vacation till the end of financial year 2016-17. You devise an asset allocation for the feeder fund to be set up with return considerations of 11% p.a. in the first ten years, decreasing by 1% each for the two subsequent 10-year periods of investment. The first such annual investment along with the initial sum is to be invested immediately. What should be amount of this annual investment? [5 marks]

- A) Rs. 1,19,700
- B) Rs. 91,100
- C) Rs. 1,30,700
- D) Rs. 98,800

12) For accumulation of the higher education expenses for Mark and Stephanie, you advise Roger to adopt the strategy of investing in Inflation Indexed bonds, each of 10-year maturity. The first such investment of Rs. 10 lakh is to be made immediately. A total of three such series of bonds are chosen for investment, the other two at interval of two years each, while the amount invested in subsequent series is increased by Rs. 5 lakh every time. You estimate real coupon to be 1.5% while considering average inflation of 5% in the whole period. The coupons to be received and the maturity proceeds of bonds are invested in risk free instruments till required for higher education. You find the extent of accumulation to meet the higher education expenses of Mark and Stephanie, which comes to \_\_\_\_\_. [5 marks]

- A) 84% accumulation
- B) 96% accumulation
- C) 91% accumulation
- D) 87% accumulation

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 2011 at the rate of Rs. 225 per share. In May 2014, he transferred these shares privately to his father at the rate of Rs. 430 per share, and incurred brokerage costs at 1%. Calculate his capital gains tax liability for AY 2015-16.

[3 marks]

- A) Rs. 13,620
- B) Rs. 10,340
- C) Rs. Nil
- D) Rs. 20,070

- 15) Roger purchased 1,000 equity shares of face value Rs. 10 each on 10<sup>th</sup> May, 2014 in A Ltd. at Rs. 56. A Ltd. declared 50% dividend with record date being 3<sup>rd</sup> August 2014. On 20<sup>th</sup> October 2014, he transferred 800 shares out of these 1,000 shares, at Rs. 37 per share. He transferred balance 200 shares on 20<sup>th</sup> December 2014 at Rs. 20 per share. During FY 2014-15, Roger also generated long term capital gain of Rs. 76,000 on sale of gold. Determine his capital gains for AY 2015-16.

[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