

Compilation of Exam-5 Case Study Released by FPSB-India

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For



By



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Case Study Released By FPSB India

For the Month of	Case -1	Case-2
March'08	Sahil Gupta	Ragini Mehta
April'08	Arvind & Sudha Verma	
June'08	Satish Gupta	Abhishek Sawant
July'08	Rananjoy Majumder	Raghuveer Singh
August'08	Rakesh Gupta	Prasoon Bharti
October'08	Marc Amaranath	
November'08	Gunjan Bhide	Dr. B K Mishra
December'08	Umang	Charu Saxena

Case Study: Sahil Gupta

Today is 15th March, 2008. Sahil Gupta, aged 44 years, with life expectancy 70 years, is a small time medical store owner in Nashik city. He has acquired a profit sharing counter (50:50) in the nursing home of a renowned doctor. The doctor is running the establishment for the last 8 years. In this set up, legal ownership of the medical store is with the doctor while Sahil works over there as a care taker. Sahil's wife Namrata, is a housewife, aged 40 years, and has a life expectancy of 72 years. The couple has two kids Aniket (16 years) and Akhil (10 years). Aniket is studying in 10th while Akhil is studying in 4th. Sahil is himself a Graduate and had earlier served in a pharmaceutical company as a medical representative for approx. 10 years. After separation from this company, he started his own wholesale business of medicines but could not sustain for long due to lack of working capital, and shut down his operations in the first two years only. Somehow he managed to get this existing profit sharing counter in the nursing home.

Of late, Sahil is facing a problem in his business relations with the doctor who is no longer willing to share the profits of his medical store with Sahil. Apart from this business problem, Sahil is suffering from poor health. He is a severe diabetic person with many other incidental diseases. Sahil's parents are senior citizens, and live in a separate house in a nearby locality. Their only source of income is by way of interest payments received from their joint Senior Citizen Savings Scheme account. Sahil's younger brother, who is self-employed, is living with his parents.

Sahil has recently shifted to his new house. Sahil has poured all his savings into the construction of this house, and has not taken any loan for this activity. Sahil does not have health / life insurance. He owns a second hand Maruti Zen, which he recently exchanged for his old Maruti 800.

Sahil had invested Rs. 1,00,000 to buy 100 shares of a listed company, Sutluj Software, in the year 1995-96. The Company had issued Bonus shares in the ratio 1:1 in the year 2000-01. Sahil also subscribed to the Company's Rights issue of one share for every four shares held at a price of Rs. 500 per share in the Year 2003-04. Sahil has also invested Rs. 4,00,000 in an Agriculture land at his native village Goraya in 2000-01. Goraya has a population of about 12,000 and the nearest urban place is at a distance of 4 km.

On getting reference from one of his friends, Sahil has contacted you, a practicing Certified Financial Planner, for helping him prepare a Financial Plan for his family. He has submitted his current financial information as follows:

1. Sources of Income
 - By way of profit sharing in the sales from Medical Store (Monthly Sale Rs. 2 lakh)
 - Interest from Post Office MIS account Rs. 3,000 p.m. **
 - ** Jointly in the names of Aniket & Akhil

2. Expenditure
 - Family Household Living Expenses Rs. 15,500 p.m.
 - Car Expenses Rs. 1,000 p.m.
 - Medical Expenses Rs. 3,000 p.m.
 - Tour & Travel Expenses Rs. 3,000 p.m.

3. Recurring Investments
 - Post Office RD in Aniket's name Rs. 2,400 p.m.
 - Post Office RD in Akhil's name Rs. 1,200 p.m.
 - Pension scheme of an Insurance Company Rs. 2,000 p.m.
 - Deposit in a daily collection scheme operated by a Rs. 300 per day

Nationalized Bank

4. Fixed Assets/Investments	Current Market Value
Residential House	Rs. 25 lakh
Car	Rs. 1.25 lakh
Gold ornaments with Namrata	Rs. 5 lakh
Ownership right in Medical Store	Rs. 10 lakh
Agriculture Land	Rs. 10 lakh
Equity shares	Rs. 5 lakh

Sahil's goals and aspirations in descending priorities

1. To start a new business in case of discontinuance of the present business
2. To ensure an income stream in case of disturbance in his current business
3. To continue current recurring investments up to maximum possible extent
4. To create an education fund for higher education for his children
5. To provide better health care of the couple
6. To create a marriage fund for his both kids
7. To retire at the age of 55 due to average health
8. To buy a new mid-size car
9. To go abroad on a family trip at least once

Current Economic scenario

1. Inflation is currently 12% p.a. and is likely to remain the same.
2. RBI has raised the interest rates twice and current risk free interest rate is at 10% p.a.
3. Cost Inflation index for 1995-96 is 281, 2000-01 is 406, 2003-04 is 463 and 2007-08 is 551.

Questions

16) While interacting with you, Sahil came to know about your investing style, viz. Direct Equity investment and some schemes of Mutual Funds. He wants to know whether you can manage some of his money in your investments and assign him appropriate share in the profits thereof. As per FPSB Code of Ethics is it possible for you? (2)

- A) Yes
- B) Yes, but with prior permission from FPSB against a written proposal letter from Sahil
- C) Yes, but with a proper written agreement in which all terms and conditions must be stipulated in advance
- D) No**

17) During identification of new business opportunities, one of Sahil's friends has offered him a business proposal. In this proposal a partnership firm consisting of two partners, Sahil and his friend, shall take the franchise of a reputed pathology lab in which their investment and profit sharing ratio shall be equal. Franchise rights shall be valid for 5 years and the project requires an upfront investment of Rs. 30 lakh for required infrastructure. This may be sold to the company after 5 years, applying straight line depreciation @10% p.a.

The projected profits from the firm are as follows:

Year 1 →	2.20 lakh
Year 2 →	4.14 lakh
Year 3 →	6.17 lakh
Year 4 →	6.50 lakh
Year 5 →	7.70 lakh

Sahil wants to know what IRR he shall earn on his investment from this project. (5)

- A) 3.24%
- B) 8.65%**
- C) 12.08%
- D) 16.44%

18) Sahil's father, while returning from a local post office, became a victim of hit-and-run motor accident and suffered grievous injuries. Though the FIR was lodged, the identity of the motor vehicle could not be ascertained. Sahil had to bear the total medical expenses. You have suggested Sahil that his father can take the benefit of "Solatium Fund Scheme" of the Government of India. What maximum amount can be claimed by Sahil under this scheme? (3)

- A) Rs. 50,000
- B) Rs. 25,000**
- C) Rs. 12,500
- D) Rs. 10,000

19) You have ascertained that Sahil needs a life insurance of at least Rs. 20 lakh on top priority. At his age, a term insurance plan for a 10-year term is available for annual premium of Rs. 18,250 and for a term of 15 years the same is available for an annual premium of Rs. 19,850. Though Sahil has health problems he is not much concerned about the cost of recurring treatment as he is in the same industry. He is, however,

concerned of getting 'nil' survival benefits in case of term insurance policies, though he can currently ill afford a high premium for endowment or 'with profit' type of policies. A 'return of premium' policy for a term of 10 years for Rs. 20 lakh sum assured would annually cost Rs. 1,48,200 for his profile. He wants to know which among the following would be the most appropriate policy for him in the current circumstances. (3)

- A) **Sahil should take the term plan for 15 years, which will take care of his liabilities in this period in case he dies prematurely.**
- B) Sahil should take the term plan for 10 years only as the premium outflow here is the least.
- C) Sahil should take the 'return of premium' policy which would yield Rs. 20 lakh to provide for his liabilities when he is around 55 years of age.
- D) Sahil should take 10-year term policy along with a 10-year 'return of premium' policy to the extent of Rs. 10 lakh to optimize on premium payment while getting survival benefits.
- 20) The market value of Sahil's residential property is assessed at Rs. 25 lakh. He purchased the plot 5 years ago for Rs. 2.5 lakh. He started construction last year and incurred a sum of Rs. 12.5 lakh. The land prices in that area have appreciated by 150% over the five year period and the cost of construction over the previous year has gone up by 35%. You have advised Sahil to insure his house property. Sahil wants to know for what approximate amount he should insure his house property. (3)
- A) Rs. 15 lakh
- B) **Rs. 17 lakh**
- C) Rs. 23 lakh
- D) Rs. 25 lakh
- 21) Sahil's Pension policy, which he started a few years ago, has attained a value of Rs. 1.53 lakh as per current valuation. Sahil and you have estimated that upon vesting, at the age of 55 years, to get a monthly pension of Rs. 12,465 for 15 years in annuity due mode and 'no return of purchase price', the corpus required on vesting will be Rs. 13.13 lakh. However, Sahil wants that this corpus of Rs. 13.13 lakh should be available to him or his survivors when the pension payment period is over. By what amount the current contribution to the pension scheme should be increased to get the same desired pension along with corpus? (5)
- A) Rs. 3,290
- B) **Rs. 1,290**
- C) Rs. 609
- D) Rs. 3,555
- 22) Sahil wants to accumulate retirement funds in one of the government schemes. His friend has suggested him 'New Pension Scheme' of the Government of India, which is effective from 01-01-2004. Sahil wants to know whether the said scheme has provisions whereby he can also start investing in this Scheme in near future. (3)
- A) **Yes**
- B) No
- C) The Scheme is only for Senior Citizens
- D) The Scheme is only for Government employees
- 23) Sahil has informed you that his previous employer has not paid gratuity due to him till this date. Sahil now wants to know if any remedy is available to him in this matter. (3)

- A) **Sahil can move an application to the Controlling Authority which may further forward it to the District Collector for recovery of the same from the company.**
- B) Sahil can go to Civil Court and file a recovery suit against the company.
- C) Sahil can go to Labor Court and file a recovery suit against the company.
- D) Sahil can file a police complaint against his previous employer and get a cheating case registered.
- 24) Sahil's parents are maintaining a joint Senior Citizen Saving Scheme in which Sahil is the sole nominee. Sahil wants to know about the status of the account after the demise of either of his parents. Which of the following is not appropriate in this context? (2)
- A) The surviving parent may operate the account alone.
- B) The surviving parent can receive the amount payable and close the account.
- C) **Sahil, being the nominee, will automatically replace the deceased parent in the joint account with the surviving parent.**
- D) The account may be continued for the remaining term with the surviving parent as the only holder and Sahil as the nominee.
- 25) Sahil wants to go abroad on a family vacation tour. A professional tour company is offering him an attractive tour package in which the company is offering him to pay only 10% amount upfront which is Rs. 10,000 while the remaining amount may be repaid in 60 EMIs of Rs. 2,875 each. Sahil wants to know the approximate rate of interest being charged to him on this offer. (3)
- A) 18% p.a.
- B) 25% p.a.
- C) **29% p.a.**
- D) 32% p.a.
- 26) Sahil is being offered an upfront royalty of Rs. 10 lakh by the doctor, in whose premises he is currently running his medical store, in lieu of leaving his rights and vacating the premises. Sahil wants to know how many months' income from his medical store will the royalty payment compensate, if the net profit on sales from the medical store is 40% and the royalty received is invested in a 10% p.a. yielding investment. Assume all profits are withdrawn at the end of every month from the firm. (3)
- A) 12 months
- B) 13 months
- C) 25 months
- D) **28 months**
- 27) Sahil has informed you that his Post Office MIS account is maturing next month. He wants to know whether this account can be extended further and, if so, for what duration? (2)
- A) **Cannot be extended.**
- B) Can be extended for 24 months.
- C) Can be extended for 60 months.
- D) Can be extended for 72 months.
- 28) Sahil wants to liquidate immediately some of his assets for investing in fresh business opportunities. As he would have large cash with him and it may take about 2 months before the same is invested in business

- purposes, Sahil wants to know the ideal investment option for this money for this short period. Your suggestion would be _____.
- (2)
- A) he should invest this money in a Bank FDR
 B) he should invest this money in Long Term Bonds
C) he should invest this money in the Liquid Funds Scheme of a Mutual Fund
 D) he should invest this money in Equity Growth Scheme of a Mutual Fund
- 29) Sahil has informed you that the joint MIS account of Aniket & Akhil was opened from the sale proceeds of some gold ornaments which were gifted to Namrata by Sahil's father. Sahil wants to know the tax treatment of the interest income received from this account?
- (3)
- A) Interest income shall be taxable in the hands of Sahil.
 B) Interest income shall be taxable in the hands of Namrata.
C) Interest income shall be taxable in the hands of Sahil's father.
 D) Data insufficient to ascertain the taxability of the interest.
- 30) Sahil's father-in-law is a well established businessman and Namrata is their only child. He wants to include Sahil as a member in their HUF. Is it possible?
- (2)
- A) Yes
B) No
 C) Yes, but with prior permission from IT department
 D) Yes, but first Sahil's father-in-law should prepare a non recoverable Will in favor of Sahil
- 31) Sahil wants to mobilize funds for his business by selling the entire shares of Sutluj Software at the prevailing market price of Rs. 2,000 per share through a recognized Stock exchange. What is the Capital Gain tax liability for Sahil on sale of these shares?
- (3)
- A) Rs. 54,832
B) Nil
 C) Rs. 38,000
 D) Rs. 34,832
- 32) Sahil has received an offer to sell his agriculture land for Rs. 11,00,000. What is the Long Term Capital Gain Tax liability for Sahil in case he sells the land before 31st March 2008?
 (Ignore surcharge and education cess.)
- (3)
- A) **Long Term Capital Gain Tax of Rs. 1,11,430.**
 B) Nil because Sahil has sold agricultural land which is not a capital asset.
 C) Long Term Capital Gain Tax of Rs. 70,000.
 D) Long Term Capital Gain Tax of Rs. 1,10,000.

Sahil Gupta Solutions

16)	D)				
17)	B)	Initial Investment=	30/2	-15	lakh
		Year 1 profit=	2.2/2	1.1	lakh
		Year 2 profit=	4.14/2	2.07	lakh
		Year 3 profit=	6.17/2	3.085	lakh
		Year 4 profit=	6.5/2	3.25	lakh
		Year 5 profit=	7.7/2+(30*.5)/2	11.35	lakh
		IRR=		8.65%	

- 18) B)
 19) A)
 20) B)

The insurance of house/flat should ideally be taken at the current construction cost, as the land is not perishable in case of fire or other natural calamities.

The cost incurred a year ago = Rs. 1250000
 Cost escalation in construction over the last one year 35%
 Current cost of construction = Rs. **1687500**

21) B)
 Step 1 : Find the growth rate of annuity post-retirement
 PV at 55= -1313000
 pmt= 12465
 FV= 0
 n= 15*12= 180
 mode=begin
 R= 0.6667% pm
RATE(180,12465,-1313000,0,1)

Step 2 : Find PV with FV of Rs 13.13 lakh, same PMT and growth post-retirement as found in Step 1

PV at 55= -1710015 **PV(0.67%,180,12465,1313000,1)**
 pmt= 12465
 FV= 1313000
 n= 15*12= 180
 mode=begin
 R= 0.66671%

Step 3 : Find growth rate pre-retirement with PV Rs. 1.53 lakh, FV of Rs 13.13 lakh, PMT Rs. 2,000

PV -153000
 pmt= -2000
 FV at 55 = 1313000
 n= 11*12= 132
 mode= End
 R= 1.1557% **RATE(132,-2000,-153000,1313000,0)**

Step 4 : Find PMT with PV Rs. 1.53 lakh, FV of Rs 13.13 lakh and growth rate pre-retirement as found in Step 3

PV -153000
 pmt= -3,290 **PMT(1.1557%,132,-153000,1710015,0)**
 FV at 55 = 1,710,015
 n= 11*12= 132
 mode= End
 R= 1.1557%

Therefore, additional monthly investment required = **1289.71 3289.71-2000**

- 22) A)
- 23) A)
- 24) C)
- 25) C)

Upfront Payment=10%= 10000
 So Loan amount90%= 90000
 Deferment period= 5 Years
 After 5 years EMI for next 5 years= 2875 pm

Rs. 90,000 is the PV of annuity of Rs. 2,875 payable per month for 60 months

PV 90000
 PMT -2875
 NPER 60
 Rate ? **2.44% RATE(60,-2875,90000,0,0)**

Therefore, Annual Rate of Interest =

29% $2.44\% * 12$

26) D)

Current Monthly Sale at Medical Store=

Profit Margin=

Sahil Share in the Profit=

So His monthly profit=

Royalty being offered by doctor=

Discount Rate=

200000 lakh

40%

50%

40000 $200000 * 40\% * 50\%$

10 lakh

10%

So N=

28 Months

$NPER(10\%/12, 40000, -10 * 100000, 0, 0)$

27) A)

28) C)

29) C)

30) B)

31) B)

32) A)

The cost incurred in acquiring the land in 2002-2001 = Rs.

Cost inflation index 2000-2001 =

Cost inflation index 2007-2008 =

400000

406

551

Indexed cost of the land (for Capital Gain Tax purposes) =

$542857 \frac{400000 * 551}{406}$

Sale Proceeds from the land in 2007-2008 =

1100000

Amount of Capital Gain Tax =

557143 $1100000 - 542857$

Capital Gain Tax @ 20%

(without surcharge and education cess)

111429 $557143 * 0.2$

Case Study: Ragini Mehta

Ragini Mehta, a sports celebrity has turned 23 today. She has recently won an international event in Badminton which has got her a lot of recognition worldwide. Endorsing her achievement, Govt. of India has announced a cash award of Rs 1 crore for her. A lot of advertisement companies are also following her for endorsement of their brands. Ragini's father, Mr. Tarun Mehta, is serving Indian Air Force and is currently posted in New Delhi. Her mother is a house wife. The family stays in a government bungalow in New Delhi. Ragini is the only child of her parents. Before her recent achievement at international level, she was National Badminton champion for three years in a row. Her father has been managing her financial affairs, which includes endorsement money from various sports companies and advertisements. Tarun now wants to consult a qualified person to prepare a financial plan for Ragini. He has approached you, a practicing Certified Financial Planner, for creating a structured Financial Plan for her. During discussions he has submitted the following information:

1. Ragini's Income Sources: (In INR)

Income from sports activity	100-150 lakh p.a.
Income from endorsements and advertisements	200-300 lakh p.a.
Income from her investments	30-50 lakh p.a.

2. Ragini's Expense Variables

Salary to coach	25 lakh p.a.
Salary to staff	25 lakh p.a.
Maintenance of a fully equipped sports gym	24 lakh p.a.
Maintenance /operating cost of her cars	15 lakh p.a.
Travelling expenses – Ragini & staff	40 lakh p.a.

3. Ragini's Professional Aspirations
 - To win All-England Championship in 2010 and gold medal in the next Olympic Games
 - To set up a world class sports training centre in New Delhi at a later stage
 - To acquire an international sports goods manufacturing company

4. Ragini's Personal/Social Aspirations
 - To start an NGO for providing free education to poor children
 - To set up a charity fund for sponsoring talented sports girls for training and participation in competitions

5. Tarun's Aspirations about Ragini
 - To get her married at the age of 30
 - To buy a spacious bungalow for her in New Delhi in the next five years
 - To build a world class training center admeasuring approx. 20,000 sq. ft to enable Ragini to train young sportspersons post her retirement, tentatively at the age of 30. The land for the same has already been purchased. The cost of construction and fixed equipments is currently estimated at Rs. 350 per sq. ft and is expected to grow year on year @ 18%.

- Tarun also wants to secure Ragini's financial future by way of an annual stream of income from her age of 40. He wants to suitably invest the rent received from commercial properties every year so as to build a corpus for the same.
- Tarun wants to review an offer of investment in a Pension Scheme for Ragini. The annual contribution required is Rs. 6 lakh. The scheme has various options, viz. Growth, Balanced and Protector which have annual all-inclusive charges of 2.5%, 1.5% and 1%, respectively, charged at year-end corpus. The Scheme has given historical return of 12% for Growth fund, 8% for balanced fund and 6% for Protector fund. The investible amount in the Pension Scheme is 70% of the premium in the first year, 80% in the second year and 90% in the third year. Thereafter, 100% of the premium is invested from the fourth year onwards.

6. Current Net Worth Statement of Ragini Mehta (as of today)

Sources of Funds	(Rs. Lakh)
Ragini's Capital Account	1361.60
Gross Total	<u>1361.60</u>
Application of Funds	
Fixed Assets	
Office Infrastructure	80.50
Sports Gym.	176.00
Cars & Vehicles	60.50
Freehold commercial properties in New Delhi	<u>650.00 (Market Value)</u>
	<u>967.00</u>
Current Assets	
Equity Investments	115.00
Investments in Mutual Fund.	45.00
Bank FDRs	26.00
MF Liquid Funds	24.00
Post Office NSCs	44.00
Capital Account in a partnership firm.	67.00
Cash & Bank Saving Account Balance	5.60
Physical Gold Investment	65.00
Investment in ULIPs	<u>3.00</u>
	<u>394.60</u>
Gross Total	<u>1361.60</u>

Notes:

1. After her recent international achievement, a reputed market research firm has estimated her advertisement brand value to the tune of approx Rs. 10 Crore in the current year.
2. For her recent achievement, Government of India has announced a cash award of Rs. 1 crore for her which is yet to be received and not included in her net worth statement.
3. Market Value of Ragini's freehold commercial properties is presumed to appreciate at a CAGR of 11%. Such properties yield an annual rent of 6% of Market Value.
4. The average rate of Inflation is expected to be 8% p.a. throughout.

Questions:

- 1) Tarun wants to know whether he is entitled to deal with you on behalf of Ragini for preparation and execution of her Financial Plan. As per FPSB Code of Ethics, what is the correct option in this context? (2)
- A) Tarun cannot represent Ragini on such matters as the assets are in her name.
 - B) All investments should first be transferred in Tarun's name. Only afterwards Tarun can deal with you.
 - C) You can verbally cross check with Ragini and if she has no objection, you can deal with Tarun.
 - D) **You should seek written authority from Ragini before start of discussions or draft of letter of engagement.**
- 2) For Ragini's training center, Tarun plans to start the work when Ragini completes age of 30. Tarun wants to know what funds need to be set aside, in the beginning of every year, starting now, in a zero tax investment vehicle returning CAGR of 12%, so as to cover the cost of construction & fixed equipments when required. (3)
- A) **Rs. 19.73 lakh**
 - B) Rs. 21.86 lakh
 - C) Rs. 18.76 lakh
 - D) Rs. 22.10 lakh
- 3) For Ragini's pension, Tarun desires to invest immediately in the proposed Pension scheme. You have reviewed the scheme and advised him to invest in the balanced fund option for 2 years, in the Growth fund option for the next 24 years and in the Protector fund option for the last 5 years, when the corpus is considered to purchase a perpetuity. The corpus standing when she turns 54 shall be used to purchase an annual perpetuity yielding 8%. This annuity is payable in the beginning of every year, the first annuity being drawn by Ragini when she turns 55. Tarun wants to know the likely amount of this perpetuity. (Assume the switch over is done at the beginning of the year, whenever opted, and all charges are levied at the outstanding value as at year-end. The returns on investment under various options shall be same as generated by the scheme in the previous years). (5)
- A) Rs. 54.34 lakh
 - B) Rs. 58.57 lakh
 - C) **Rs. 63.26 lakh**
 - D) Rs. 76.81 lakh
- 4) Ragini purchased a ULIP scheme in which she invested Rs 1 lakh per annum regularly for 3 years, having paid the third installment a year ago. Tarun no longer wants Ragini to continue with this Plan and wants to know the amount to be received if the policy is surrendered now.
You approach the insurance company and get the following details:
- (i) The premium allocation to the Fund is 85% for the first year and 97% in each of the next two years.
 - (ii) Annual fund management charges are 1.5% of the year-end corpus.
 - (iii) Policy administration charges are Rs. 720 p.a. and Mortality charges are Rs. 1,500 p.a, both recovered from the year-end corpus.
 - (iv) Constant growth of investment experienced in the last three years is 15% p.a.
 - (v) Surrender charge is 5% of the corpus outstanding at the time of withdrawal. (5)
- A) Rs. 2,90,500
 - B) **Rs. 3,32,785**

- C) Rs. 3,38,300
D) Rs. 3,50,300
- 5) Tarun has heard about professional indemnity policy and would like to know the applicability of this policy in the context of Ragini. According to you _____ (2)
- A) by use of this policy, Ragini can assure her sponsors of the performance of her obligations towards them
B) by use of this policy, Ragini can protect her sponsors from the risk of her non-performance in the competitions
C) this policy can insulate Ragini from the unseen losses by the persons having her confidential financial information
D) **this policy is not applicable in her context**
- 6) While drafting a risk management plan for Ragini, you have arrived at her initial insurance requirements as follows:
I. Life insurance
II. Health Insurance
III. Disability Insurance
IV. Property Insurance
According to you what should be the most suitable priority order of these insurance needs for Ragini from the given options? (2)
- A) I, III, II, IV
B) II, III, IV, I
C) **III, IV, II, I**
D) III, I, II, IV
- 7) For the Charity Fund to be set up by Ragini, you suggest that Ragini should invest a certain amount, right now, in a deferred annuity plan, which shall earn and distribute 8% p.a. of the corpus in perpetuity. Tarun wants to know what amount needs to be invested in this scheme now so that Ragini receives Rs 1 crore each year, forever, from the beginning of the 6th year from today. (Assume yield remains 8% p.a. in accumulation phase as well as distribution phase). (4)
- A) **Rs. 9.19 Crore**
B) Rs. 8.51 Crore
C) Rs. 10.62 Crore
D) Rs. 11.73 Crore
- 8) To secure Ragini's financial future, you identify an equity growth scheme of a Mutual Fund in which the annual rent, received in advance every year from Ragini's commercial properties shall be invested. The identified MF scheme is expected to generate a CAGR of 14% (net of expenses) in the long term. Tarun wants to start investing the rent in the said MF scheme immediately. What would be the approximate accumulated corpus in the MF scheme when Ragini turns 40? (No entry load is assumed on investment in MF scheme) (5)
- A) Rs. 42 crore
B) Rs. 45 crore
C) **Rs. 50 crore**

- D) Rs. 60 crore
- 9) Tarun is the nominee in the existing Post Office NSC investments of Ragini. Tarun wants to know in case these NSCs are pledged to a bank for availing a loan, what impact will it have on his nomination in these NSCs. (2)
- A) **His nomination shall stand as it is.**
 B) His nomination shall stand cancelled as soon as any pledge is made.
 C) No pledge is permitted for NSC.
 D) Decision on carry forward of existing nomination upon pledge of NSCs is a privileged right of the Post Master of the Post Office concerned.
- 10) Tarun wants to know relative advantages of having exposure to Gold as an asset class through Gold Exchange Traded Funds (Gold ETFs) which can be purchased and traded as units through the Demat A/c. Which of the following is not appropriate in this context? (2)
- A) In Gold ETF, Long Term Capital Gains tax is levied after one year of purchase against 3 years in case of physical Gold.
 B) In case of an investor holding physical Gold, he has to pay Wealth tax after the net wealth crosses a certain limit.
 C) Most of the Gold ETF schemes available in India reflect international prices of Gold and are insulated from local demand-supply factors.
 D) **Securities Transaction Tax (STT) is applicable on purchase and sale of Gold ETF.**
- 11) Tarun wants to set aside from today a certain amount every year for meeting Ragini's marriage expenses when she turns 30. Tarun has estimated her marriage expenses at Rs. 3 crore at current prices. To accumulate this amount Tarun has identified a 10% p.a. interest earning investment which attracts tax @33.99% on the interest earned. Tarun wants to know the required sum of money to be set aside every year to get the net of tax corpus. (5)
- A) **Rs. 56.42 lakh**
 B) Rs. 60.78 lakh
 C) Rs. 49.27 lakh
 D) Rs. 32.91 lakh
- 12) For the bungalow to be made for Ragini, a builder of New Delhi has approached Tarun for a project coming up in the NCR region. The total cost of bungalow, which would be ready in a little over 4 years, is Rs. 3.75 crore of which Rs. 150 lakh has to be paid upfront on 1st January 2009. The remaining Rs. 225 lakh will be paid in two equal installments in the beginning of the 4th and the 5th year from the date of payment of upfront money. A housing finance company has agreed to disburse the upfront money as well as loan installments directly to the builder when due. The cost of financing is 14% p.a. for tenure of 20 years. The EMI increases with each part-disbursement of the loan. Tarun wants to know the EMI which Ragini shall have to pay after full disbursement of loan has been made. (Assume that all EMIs until full disbursement are calculated pro-rata and proportionally recover principal and interest portions; no pre-EMI is considered) (5)
- A) **Rs. 4,78,485**
 B) Rs. 4,71,086
 C) Rs. 4,33,644

- D) Rs. 4,34,189
- 13) For meeting Ragini's marriage expenses, Tarun has identified an investment yielding 10% annual interest which also attracts tax on such interest @33.99%. From Tax Planning perspective, you advise Tarun to instead invest a fixed sum into the 'Growth' option of a Fixed Maturity Plan (FMP) of a Mutual Fund, preferably of maturity more than a year, and giving same pre-tax return as the investment identified. Tarun wants to know in what way it will benefit Ragini if investment is done in the FMP of Mutual Fund vis-à-vis the investment identified by him? (3)
- A) **Tax advantage of not less than 22.66% is possible.**
B) Tax advantage to the extent of 14.16% is possible.
C) Tax advantage to the extent of 19.83% is possible.
D) There is no apparent Tax advantage in FMP vis-a-vis the investment identified by Tarun.
- 14) Ragini wants to donate to the National Sports Fund some amount out of the Rs. 1 crore which she is likely to get as award. Tarun wants to know if any benefit is available to Ragini under the Income Tax Act on account of this donation. (3)
- A) **The whole amount received shall be tax free and there shall be no tax benefit on such donation.**
B) The amount received will be taxable but the part donated will be tax free under section 80- G.
C) The donated amount can be off-set against her earnings from endorsements.
D) No benefit will be available as her taxable income is above Rs. 10 lakh.
- 15) Tarun is eager to know when is the right time for him to start Estate Planning for Ragini. In your opinion the same _____ . (2)
- A) **right now**
B) after Ragini's marriage
C) after Ragini's retirement
D) there is no need for her Estate Planning as she is having sufficient wealth and there is no dependent on her

Ragini Mehta Solutions

1) **D)**

2) **A)**

The cost of construction in 7 years

$$22298317.3$$

$$20000 * 350 * (1.18)^{17}$$

The rate of return (invested scheme)

$$0.12$$

d'

$$0.107142857$$

$$22298317.3 = X * ((1+i)^7 - 1) / d$$

$$0.12 / 1.12$$

$$11.29969314$$

$$(((1+0.12)^7 - 1) / 0.107142857)$$

$$1973356.005$$

$$22298317.3 / 11.29969314$$

Per annum investment (beginning of year) 'X' =

3) **C)**

Year	Ragini's age	Annual Prem	Fund allocation	Fund Value grown during the year	Charges end of year	Net Fund value at Begin of next year	
1	23	600000	420000	453600	6804	446796	Balanced fund
2	24	600000	480000	1000940	15014	985926	Balanced fund
3	25	600000	540000	1709037	42726	1666311	Growth fund
4	26	600000	600000	2538268	63457	2474811	Growth fund
5	27	600000	600000	3443789	86095	3357694	Growth fund
6	28	600000	600000	4432617	110815	4321802	Growth fund
7	29	600000	600000	5512418	137810	5374608	Growth fund
8	30	600000	600000	6691560	167289	6524271	Growth fund
9	31	600000	600000	7979184	199480	7779704	Growth fund
10	32	600000	600000	9385269	234632	9150637	Growth fund
11	33	600000	600000	10920714	273018	10647696	Growth fund
12	34	600000	600000	12597419	314935	12282484	Growth fund
13	35	600000	600000	14428382	360710	14067672	Growth fund
14	36	600000	600000	16427793	410695	16017098	Growth fund
15	37	600000	600000	18611150	465279	18145871	Growth fund
16	38	600000	600000	20995376	524884	20470492	Growth fund
17	39	600000	600000	23598950	589974	23008977	Growth fund
18	40	600000	600000	26442054	661051	25781003	Growth fund
19	41	600000	600000	29546723	738668	28808055	Growth fund
20	42	600000	600000	32937021	823426	32113596	Growth fund
21	43	600000	600000	36639227	915981	35723247	Growth fund
22	44	600000	600000	40682036	1017051	39664985	Growth fund
23	45	600000	600000	45096784	1127420	43969364	Growth fund
24	46	600000	600000	49917688	1247942	48669746	Growth fund
25	47	600000	600000	55182115	1379553	53802562	Growth fund
26	48	600000	600000	60930870	1523272	59407598	Growth fund
27	49	600000	600000	63608054	636081	62971973	Protector fund
28	50	600000	600000	67386292	673863	66712429	Protector fund
29	51	600000	600000	71351174	713512	70637663	Protector fund
30	52	600000	600000	75511922	755119	74756803	Protector fund
31	53	600000	600000	79878211	798782	79079429	Protector fund

Corpus when she turns 54 years of age

Accumulated amount available at the age 54 to purchase perpetuity = 79079429

$$A = PV * i$$

$$79079429 = \frac{6326354}{0.08}$$

4) **B)**

	1st year	2nd year	3rd year
Premium paid	100000	100000	100000
Allocation charge	15000	3000	3000
Net amount for investment	85000	97000	97000
Growth end of year @ 15%	97750	219723	357889
Policy charges	720	720	720
Mortality charges	1500	1500	1500
Fund management charges	1466	3296	5368
Total charges ded. Year-end	3686	5516	7588
Growth in the value	94064	214207	350300

Premium Paid-Allocation Charge

Less : 5% surrender charge 350300*0.05

Surrender Value of Policy 332785

5) **D)**

6) **C)**

7) **A)**

Funds Required to generate Rs. 1 crore per annum @8% = 135000000
 (Annuity Due mode as the first annuity is drawn immediately on purchase)

Investment required now to build a paid-up capital to get Rs. 13.50 Crore after 5 years 91878732

8) **C)**

Age	Value_prop.	Rent	Amt. grown in MF during the year
23	650	39	44.46
24	721.50	43.29	100.04
25	800.87	48.05	168.82
26	888.96	53.34	253.26
27	986.75	59.20	356.21
28	1095.29	65.72	481.00
29	1215.77	72.95	631.49
30	1349.50	80.97	812.21
31	1497.95	89.88	1028.38
32	1662.72	99.76	1286.08
33	1845.62	110.74	1592.37
34	2048.64	122.92	1955.43

$39 * 1.14$
 $(44.46 + 43.29) * 1.14$
 $(100.04 + 48.05) * 1.14$
 $(168.82 + 53.34) * 1.14$

2384.73
2891.25
3487.66
4188.66
5011.19
 $(4188.66+207.12)*1.14$

2273.99 136.44
2524.13 151.45
2801.79 168.11
3109.98 186.60
3452.08 207.12

9) A)

10) D)

11) A)

Current Age 23
marriage Age 30
Year Remaining n' 7

Gross Return on investment 10%
Rate of Tax 33.99%
After Tax Rate of Return $6.601\% \text{ } 10\%*(100-33.99)$

Amount required to meet marriage expenses Rs. 514.15 lakh $300*1.08^7$

interest rate $i = 0.06601$
discount rate $d = i/(1+i) = 0.06192$ $0.06601/(1+0.06601)$

Annual installment to be set aside in FD

500 lakh = $X * ((1+i)^n - 1) / d = 56.42$ lakh $(514.15*0.06192)/(((1+0.06601)^7)-1)$

12) A)

Value of bangalow 37500000
Frontend money 15000000 Disbursement 1-Jan-2009

Outstanding in two installments 22500000 $37500000-15000000$
Each installment 11250000 to be disbursed on 1-Jan-2012 and 1-Jan-2013

$22500000/2$

0.14

Effective annual rate

$0.149342029 \text{ } ((1+(0.14/12))^{12})-1$

20 years

o/s Principal

Disbursed 1-Jan-09	Interest	Prin. Repaid
186528 EMI-1	14988472	175000
186528 EMI-2	14976809	174866
186528 EMI-3	14965011	174729
186528 EMI-4	14953074	174592
186528 EMI-5	14940999	174453
186528 EMI-6	14928782	174312
186528 EMI-7	14916423	174169
186528 EMI-8	14903920	174025
186528 EMI-9	14891271	173879
186528 EMI-10	14878474	173731

186528 EMI-11	1-Dec-09	14865528	173582	12946
186528 EMI-12	1-Jan-10	14852431	173431	13097
186528 EMI-13	1-Feb-10	14839182	173278	13250
186528 EMI-14	1-Mar-10	14825777	173124	13404
186528 EMI-15	1-Apr-10	14812217	172967	13561
186528 EMI-16	1-May-10	14798498	172809	13719
186528 EMI-17	1-Jun-10	14784619	172649	13879
186528 EMI-18	1-Jul-10	14770578	172487	14041
186528 EMI-19	1-Aug-10	14756373	172323	14205
186528 EMI-20	1-Sep-10	14742003	172158	14370
186528 EMI-21	1-Oct-10	14727465	171990	14538
186528 EMI-22	1-Nov-10	14712757	171820	14708
186528 EMI-23	1-Dec-10	14697878	171649	14879
186528 EMI-24	1-Jan-11	14682825	171475	15053
186528 EMI-25	1-Feb-11	14667596	171300	15228
186528 EMI-26	1-Mar-11	14652190	171122	15406
186528 EMI-27	1-Apr-11	14636604	170942	15586
186528 EMI-28	1-May-11	14620836	170760	15768
186528 EMI-29	1-Jun-11	14604885	170576	15952
186528 EMI-30	1-Jul-11	14588747	170390	16138
186528 EMI-31	1-Aug-11	14572421	170202	16326
186528 EMI-32	1-Sep-11	14555904	170012	16517
186528 EMI-33	1-Oct-11	14539195	169819	16709
186528 EMI-34	1-Nov-11	14522291	169624	16904
186528 EMI-35	1-Dec-11	14505189	169427	17101
186528 EMI-36	1-Jan-12	25737889	169227	17301
331369 EMI-37	1-Feb-12	25706795	300275	31094
331369 EMI-38	1-Mar-12	25675338	299913	31457
331369 EMI-39	1-Apr-12	25643515	299546	31824
331369 EMI-40	1-May-12	25611320	299174	32195
331369 EMI-41	1-Jun-12	25578749	298799	32570
331369 EMI-42	1-Jul-12	25545799	298419	32950
331369 EMI-43	1-Aug-12	25512464	298034	33335
331369 EMI-44	1-Sep-12	25478740	297645	33724
331369 EMI-45	1-Oct-12	25444623	297252	34117
331369 EMI-46	1-Nov-12	25410108	296854	34515
331369 EMI-47	1-Dec-12	25375190	296451	34918
331369 EMI-48	1-Jan-13	36589864	296044	35325
478485 EMI-49	1-Feb-13	36538261	426882	51604
478485 EMI-50	1-Mar-13	36486055	426280	52206
478485 EMI-51	1-Apr-13	36433240	425671	52815
478485 EMI-52	1-May-13	36379810	425054	53431
478485 EMI-53	1-Jun-13	36325755	424431	54054
478485 EMI-54	1-Jul-13	36271070	423800	54685
478485 EMI-55	1-Aug-13	36215748	423162	55323
478485 EMI-56	1-Sep-13	36159779	422517	55968
478485 EMI-57	1-Oct-13	36103158	421864	56621
478485 EMI-58	1-Nov-13	36045876	421204	57282
478485 EMI-59	1-Dec-13	35987926	420535	57950
478485 EMI-60	1-Jan-14	35929300	419859	58626
Principal outstanding on 1-Jan-2012		14487889		
Fresh installment disbursed on 1-Jan-2012		25737889		
on 1-Jan-2012		11250000		
Total loan outstanding 1-Jan-2012		11250000+14487889		
Term outstanding		17 years		
Principal outstanding on 1-Jan-2013		25339864		
Fresh installment disbursed on 1-Jan-2012		11250000		
on 1-Jan-2013		36589864		
Total loan outstanding 1-Jan-2013		11250000+25339864		
Term outstanding		16 years		

13) A)

Rate of Tax on FD

33.99%

Growth debt oriented MF schemes entail rate of tax on capital gains of 11.33% i.e. long-term capital gains without indexation.

11.33%

Tax advantage =

22.66% 33.99% - 11.33%

14) A)

15) A)

Case Study – Arvind & Sudha Verma

Today is 1st April 2008. Arvind and Sudha have approached you for Financial Planning advice and are looking forward to a critical evaluation of their life style and ways and means to sustain it in the future.

Personal Background and Financial Information

Arvind Verma is aged 35 with life expectancy of 70. He is currently working as a Senior Manager in a multinational FMCG company at Bangalore since Dec 2002. His package for the year 2008-09 is Rs. 15 lakh p.a. (Basic Rs. 9,00,000, DA Rs. 2,40,000 and HRA Rs. 3,60,000). He expects his salary to grow at an average rate of 10% per year for the next 10 years and at the rate of 5% per year thereafter. Arvind plans to retire when he attains 55 years of age.

Arvind's wife Sudha, aged 33, is a Classical Indian Dancer. She has done Professional courses in classic dance styles Bharatnatyam and Odissi. She is running her own dancing school, Bharat Natya Academy, on a rented space. She also participates in dance concerts five to six times a year. Rewards received from these concerts are accounted for in her Academy Income where she earned a net profit of Rs.6 lakh for FY 2007-08 (expected growth rate 5% p.a.).

The Couple has two kids Sudanshu and Priyanka, aged 5 and 3, respectively. Sudanshu has started prep school from last year and Priyanka spends her maximum day time in Kids Play School as Sudha is busy in conducting dance coaching classes. Arvind's parents lead a retired life and are dependent on Arvind. Arvind's father is Senior Citizen and has a mediclaim policy of Rs. 3 Lakh.

The couple stays in a flat purchased for Rs. 40 lakh. The loan availed for the flat is to the extent of Rs. 30 lakh for a term of 20 years @ 9.5% p.a. fixed rate of interest. The loan availed on 1st May 2006 in joint names of Arvind and Sudha in equal ratio is being repaid by way of EMIs from June 2006. The balance money was paid from their personal savings. Arvind also purchased a car on 1st Nov. 2006 for Rs. 3,90,000 by making a 20% down payment. The remaining 80% was paid by availing a loan @ 14% interest, payable in 48 EMIs beginning from Dec 2006. Sudha also drives a basic car purchased by her 6 years ago.

Arvind has taken a medical insurance cover for Rs. 4 lakh for self, spouse and both children and the renewal premium is paid by him every year. Arvind is insured for Rs. 20 lakh by way of a ULIP policy and Sudha is insured for Rs. 2 lakh by way of an endowment plan.

Statement of Account as of closing of the Financial Year 2007-08

Particulars	Arvind Verma	Sudha Verma
Assets		
PO MIS	Nil	3,00,000
Bank Fixed Deposit	2,00,000	2,00,000
Value of Mutual Fund units	4,00,000	1,00,000
Balance in endowment plan	Nil	1,60,000
Balance in ULIP policy	3,20,000	Nil
2000 equity shares of Silverline Ltd.	1,50,000	Nil
1000 equity shares of Mudra Ltd.	1,50,000	Nil
Balance in PPF A/c (A/c opened in Feb 2003)	3,50,000	1,50,000
Balance in Bank Savings A/c	35,000	25,000
Value of gold ornaments	Nil	1,60,000
Value of Car	3,00,000	80,000
Value of Flat (mortgaged)	25,00,000	25,00,000
Balance in EPF A/c	2,55,000	Nil
Liabilities		
Principal outstanding of housing loan	14,75,900	14,75,900

Principal outstanding of car	2,87,000	Nil
Credit card dues	15,000	10,000

Annual Household Expenses for Arvind's Family were Rs.7,50,000 for F.Y. 2007-08. Taxable investment income of Arvind and Sudha for F.Y. 2007-08 are Rs. 55,000 and Rs. 30,000, respectively. Arvind and Sudha pay annual life insurance premium of Rs.70,000 and Rs.15,000, respectively.

Goals of Arvind and Sudha

1. They want their son Sudanshu to be a Pilot. One time education-cum-training expenses for this at current prices are Rs. 10 lakh. They also want their daughter Priyanka to be an Architect. Professional Education expenses for this at current prices are Rs. 3 lakh for first year and Rs. 2.5 lakh each for the next two years.
2. For the marriage of Sudhanshu and Priyanka, Rs. 10 lakh, at current prices, shall be required.
3. Sudha wants to continue her dance Academy for five more years, after which she would be managing home full time.
4. Arvind would like to take his family on vacation every year for a minimum of seven days; required expenses at current prices are Rs. 60,000 per trip.

Assumptions

1. Inflation will be around 6% p.a. expected in future years.
2. Post-retirement expenses expected to be approximately 70% of pre-retirement expenses.
3. All assets are stated at fair market value as of date.
4. Expected return from balanced scheme of mutual fund is 9% p.a. throughout the period.
5. Expected return from Diversified Equity scheme of mutual fund is 14% p.a. throughout the period.
6. Ignore Surcharge and Education Cess while calculating Income tax liability.
7. Increment in Salary applicable from beginning of every Financial Year for Arvind.
8. Arvind and Sudha are exhausting their limits of Rs. 1 lakh investment under section 80C of Income Tax Act.
9. EPF rate of return is 8.5% p.a.

Questions

- 16) In your initial meeting, to make an impression on your client, you discuss the Financial Plan made by you for a famous doctor and also his spending habits with Arvind. Which Code of Ethics prohibits you to have such a discussion with Arvind? (2)
- A) Code of Ethics of Professionalism
 - B) **Code of Ethics of Confidentiality**
 - C) Code of Ethics of Fairness
 - D) Code of Ethics of Integrity
- 17) Arvind pays Rs. 12,000 annual premium for his medical insurance policy and Rs. 10,000 annual premium for his father's medical insurance policy by cheque. What deduction is available to Arvind under/section 80 D of the Income Tax Act? (3)
- A) Rs. 15,000
 - B) Rs. 12,000
 - C) **Rs. 20,000**
 - D) Rs. 22,000

- 18) You advise Arvind to make a one time investment in a balanced scheme of a mutual fund for Priyanka's professional education by redeeming existing investments in under-performing schemes of mutual funds. The education expenses are required at the end of 15, 16 and 17 years from now. What investment is required to be made by Arvind for this? (4)
- A) **Rs. 5,12,900**
B) Rs. 2,03,097
C) Rs. 8,00,000
D) Rs. 4,70,550
- 19) Arvind wants to know what deduction is available to him u/s 24 of Income Tax Act, for repayment of home loan installments paid by him, while calculating his tax liability for the FY 2007-08. (5)
- A) **Rs. 1,38,975**
B) Rs. 2,77,950
C) Rs. 1,50,000
D) Rs. 1,42,500
- 20) Sudha wants to know her tax liability for A.Y. 2008-09 on the basis of information provided by her to you? (4)
- A) **Rs. 62,800**
B) Rs. 1,04,500
C) Rs. 92,800
D) Rs. 1,07,500
- 21) Arvind has been receiving offers from competing FMCG companies and plans to resign from the present company by the end of March 2009. Arvind wants to know whether he is eligible for Gratuity under Payment of Gratuity Act, 1972 and what shall be the Gratuity amount in his case? (Assume his present organization is covered under Payment of Gratuity Act, 1972) (4)
- A) No, as his present employer is an MNC organization.
B) **Yes, Rs. 3,28,846**
C) Yes, Rs. 3,83,653
D) Yes, Rs. 3,50,000
- 22) You advise Arvind to buy a Rs. 50 Lakh life insurance term plan. While filling the proposal form for purchase of this term plan Arvind does not mention details of another Life Insurance policy, taken by him earlier, from a different insurance company. In case of any mishap, under which principle the claim of Arvind could be questioned by the present Insurer, if facts of his earlier insurance policy become known? (3)
- A) Principle of Insurable Interest
B) **Principle of Utmost Good Faith**
C) Principle of Waiver and Estoppel
D) Principle of Indemnity
- 23) Arvind would like to know how the property would devolve if a person dies intestate and also the importance of Estate Planning. According to you, which of the following is not appropriate in Estate distribution when a person dies intestate? (3)
- A) A Succession Certificate is applicable when there is no valid Will.
B) Legal Heirs will apply to the civil court for grant of a Succession Certificate.
C) Law of Inheritance is applicable in Estate distribution.

D) **Legal Heirs get Estate rights on the basis of probate.**

- 24) You suggest Arvind to start investing in a Diversified Equity mutual fund by way of SIPs for accumulation of funds for professional education of Sudanshu. What amount should Arvind save on a monthly basis if the funds are required at the beginning of 16th year from now? (4)

- A) **Rs. 4,287**
B) Rs. 4,193
C) Rs. 5,555
D) Rs. 4,921

- 25) While analyzing and evaluating Arvind & Sudha's personal and financial information in his Financial Planning process, which of the following tasks have been completed by you at this stage?
1. Identifying alternative investment vehicles.
 2. Identifying financial strengths and weaknesses.
 3. Recommending specific tax strategies.
 4. Preparing preliminary financial statements. (2)

- A) **2 and 4.**
B) 1, 2 and 3.
C) 2, 3 and 4.
D) 1, 2, 3 and 4.

- 26) Arvind is considering a proposal for investment in commercial real estate property to earn rental income. The following data is available for the property selected by him:

Asking price	: Rs. 21,00,000
Annual rental income	: Rs. 1,60,000
Insurance expenses	: Rs. 5,500
Annual Maintenance	: Rs. 10,000
Market yield	: 8 %

What according to you is the value of property as per capitalization approach? (4)

- A) Rs. 21,00,000
B) **Rs. 18,06,250**
C) Rs. 20,00,000
D) Rs. 19,40,000

- 27) On 10th March 2008 Arvind had taken an open short position of 10 lots of Nifty futures, with an average price of Rs. 4,450. On 10th March 2008, Nifty closed at Rs. 4,520. However, he did not square off his position until 11 March 2008 when Nifty dipped to an intraday low of Rs. 4,395. He squared off his position of 4 lots at Rs. 4,495 & remaining 6 lots on an average price of Rs. 4,410. On 11th March 2008, Nifty closed at Rs. 4,460. The lot size of a Nifty future is 50. What profit or loss was booked by Arvind on his entire position? (Assume Brokerage and taxes per lot is Rs. 50 on each side, while buying as well as selling) (4)

- A) **Profit of Rs. 2,000**
B) Loss of Rs. 2,000
C) Profit of Rs. 3,000
D) Loss of Rs. 4,000

- 28) Arvind has an accident insurance policy which pays Temporary Partial Disability (TPD) benefit of Rs. 5,000 per week, for up to 104 weeks. He meets with an accident and is disabled and bedridden for 6

months. He has available leave of 4 weeks, after which he is on loss of pay. What benefit amount will he get from the insurance company? (3)

- A) Rs. 1,00,000
- B) Rs. 1,10,000**
- C) Rs. 2,20,000
- D) Rs. 1,30,000

29) Arvind plans to save for his retirement by investing 10% of his basic salary annually in the EPF Account till he turns 55. Arvind wants to know what monthly annuity certain for 15 years he will receive from the beginning of his 56th year by investing his retirement corpus in Risk free Pension Scheme. (Assume all contributions in EPF account are at year end and returns in risk free pension scheme are 8% p.a. effective). (5)

- A) Rs. 91,884**
- B) Rs. 81,055
- C) Rs. 53,700
- D) Rs. 93,430

Case Study – Arvind & Sudha Verma

Q.16) B)

Q.17) C)

Q.18) A)

T0	512,900	NPV(9%,T1:T17)
T1	0	
T2	0	
T3	0	
T4	0	
T5	0	
T6	0	
T7	0	
T8	0	
T9	0	
T10	0	
T11	0	
T12	0	
T13	0	
T14	0	
T15	718,967	FV(6%,15,0,-3000000,0)
T16	635,088	FV(6%,16,0,-2500000,0)
T17	673,193	FV(6%,17,0,-2500000,0)

Q.19) A)

Period	EMI	Interest	Principal	Outstanding
0	5/1/2006	0.00	0.00	3,000,000.00
1	6/1/2006	27,964.00	4,214.00	2,995,786.00
2	7/1/2006	27,964.00	4,247.36	2,991,538.64
3	8/1/2006	27,964.00	4,280.99	2,987,257.65
4	9/1/2006	27,964.00	4,314.88	2,982,942.78
5	10/1/2006	27,964.00	4,349.04	2,978,593.74
6	11/1/2006	27,964.00	4,383.47	2,974,210.27
7	12/1/2006	27,964.00	4,418.17	2,969,792.11
8	1/1/2007	27,964.00	4,453.15	2,965,338.96
9	2/1/2007	27,964.00	4,488.40	2,960,850.56
10	3/1/2007	27,964.00	4,523.93	2,956,326.63
11	4/1/2007	27,964.00	4,559.75	2,951,766.88

EMI = -27,963.94
PMT(9.5%/12,240,3000000,0,0)

12	5/1/2007	27,964.00	23,368.15	4,595.85	2,947,171.03
13	6/1/2007	27,964.00	23,331.77	4,632.23	2,942,538.80
14	7/1/2007	27,964.00	23,295.10	4,668.90	2,937,869.90
15	8/1/2007	27,964.00	23,258.14	4,705.86	2,933,164.04
16	9/1/2007	27,964.00	23,220.88	4,743.12	2,928,420.92
17	10/1/2007	27,964.00	23,183.33	4,780.67	2,923,640.25
18	11/1/2007	27,964.00	23,145.49	4,818.51	2,918,821.74
19	12/1/2007	27,964.00	23,107.34	4,856.66	2,913,965.08
20	1/1/2008	27,964.00	23,068.89	4,895.11	2,909,069.97
21	2/1/2008	27,964.00	23,030.14	4,933.86	2,904,136.11
22	3/1/2008	27,964.00	22,991.08	4,972.92	2,899,163.18
23	4/1/2008	27,964.00	22,951.71	5,012.29	2,894,150.89
24	5/1/2008	27,964.00	22,912.03	5,051.97	2,889,098.92
25	6/1/2008	27,964.00	22,872.03	5,091.97	2,884,006.95
26	7/1/2008	27,964.00	22,831.72	5,132.28	2,878,874.67
27	8/1/2008	27,964.00	22,791.09	5,172.91	2,873,701.77
28	9/1/2008	27,964.00	22,750.14	5,213.86	2,868,487.90
29	10/1/2008	27,964.00	22,708.86	5,255.14	2,863,232.77
30	11/1/2008	27,964.00	22,667.26	5,296.74	2,857,936.03
31	12/1/2008	27,964.00	22,625.33	5,338.67	2,852,597.35
32	1/1/2009	27,964.00	22,583.06	5,380.94	2,847,216.42
33	2/1/2009	27,964.00	22,540.46	5,423.54	2,841,792.88
34	3/1/2009	27,964.00	22,497.53	5,466.47	2,836,326.41
35	4/1/2009	27,964.00	22,454.25	5,509.75	2,830,816.66
36	5/1/2009	27,964.00	22,410.63	5,553.37	2,825,263.29
					277,952.01
					Accrued Interest for F.Y. 2007-08
					138975
					Joint ownership 277950/2
					Both Joint
					272,233.77

Note: The EMI of Rs. 27,964 is to be paid till 240 installments

Q.20)	A)	Sudha Income from Dance Academy	600,000.00
		Income from Investments	30,000.00
		Total	630,000.00
		Less Deduction u/s 80 C	100,000.00
		Less Deduction u/s 24	138,975.00
		Net Taxable Income	391,025.00
		Income Tax rates	630000-(100000+138975)
		145000-150000	10.00%
		150000-250000	20.00%
		250000 and above	30.00%
			500.00
			20,000.00
			42,307.50
			62,807.50
			(391025-250000)*30%
			500+20000+42307.5

Q.21) B) Yes, Arvind is Eligible for Gratuity under Payment of Gratuity Act

The organization is covered under Gratuity Act
 Arvind is in Continuous Service in this company for more than Five years

Arvind's Average Salary = 75000+20000 95,000.00
 Years of Service 4 months (Less than 6 months ignored for calculation)
 2002-03 1
 2003-04 2
 2004-05 3
 2005-06 4
 2006-07 5
 2007-08 6
 2008-09 6

328,846.15 $95000 \times 15 / 26 \times 6$

Q.22) B)

Q.23) D)

Q.24) A)

FV -2396558 $FV(6\%, 15; 0, 1000000, 0)$
 Effective monthly rate of interest 14% p.a. 0.0109789 $RATE(12, -, 100, 114)$
 PMT = $-4,286.67$ $PMT(0.0109789, 180, 0, 2396558, 0)$

Q.25) A)

Q.26) B)

Annual Rental Income 160,000.00
 Less Insurance Expenses 5,500.00
 Less Annual Maintenance expenses 10,000.00
 Net Rental Income 144,500.00 $160000 - (5500 + 10000)$

1,806,250.00 $144500 / 0.08$

Q.27) A)

Loss on Square off on 2 lots 4495-4450 $45 \times 50 \times 4$ 9,000.00
 Profit on Square off on 3 lots 4450-4410 $40 \times 50 \times 6$ 12,000.00

Total Profit 3,000.00 $12000 - 9000$
 Less Brokerage and Taxes per lot Rs. 50*10*2 (buy and sell) 1,000.00 $50 \times 10 \times 2$
 Net Profit 2,000.00 $3000 - 1000$

Q.28) B)

He is disabled and bed ridden for 26 weeks
 less available leave 4 weeks

total claim 22 weeks 5000*22 110,000.00

Q.29) A)

	Contribution	Interest	Accumulated amount at end	time line
0	255000		255000	35
1	90000	21675	366675	36
2	99000	31167	496842	37
3	108900	42232	647974	38
4	119790	55078	822842	39
5	131769	69942	1024552	40
6	144946	87087	1256585	41
7	159440	106810	1522835	42
8	175385	129441	1827661	43
9	192923	155351	2175935	44
10	212215	184954	2573105	45
11	222826	218714	3014645	46
12	233967	256245	3504857	47
13	245666	297913	4048436	48
14	257949	344117	4650502	49
15	270846	395293	5316641	50
16	284389	451914	6052944	51
17	298608	514500	6866052	52
18	313539	583614	7763206	53
19	329216	659872	8752294	54
20	345676	743945	9841915	55

Monthly return 0.006434 %

RATE(12,-100,108)

-91.884 PMT(0.006434,180,9841915,0,1)

Case 2

Today is 21st June 2008. Mr. Satish Gupta, aged 59, life expectancy 75, an architect by profession has made a visit to meet you, a practicing Certified Financial Planner. Satish is looking forward for a critical evaluation of his finances and wants you to explore ways and means to sustain it in his post retirement tenure. During your discussions with him, he has disclosed factors which would help you in restructuring his current portfolio and recommending a change in course, if required.

Satish is retiring on 31st March 2009 at the age of 60 having spent 15 years in his present employment. Before joining this company Satish was a self employed professional but due to hard competition he gave up the idea of self-practice and joined this company. After retirement, Satish will receive a fix tax free monthly pension of Rs. 18,000 as well as gratuity of Rs. 5 lakh from his company. Currently Satish and his wife are living in a company owned flat in Mumbai. They have 2 children who are settled comfortably. After retirement the Gupta family intends to move to their native place near Lucknow. Further, post retirement, Satish is looking at starting agriculture food processing business at his native place.

Satish's mother, Malti Devi, who used to stay with Satish, expired on 30-09-2007. She had a bank fixed deposit of Rs. 5,00,000, carrying an interest rate of 8.00% p.a (compounding half yearly), which was opened on 01-04-2005 and matured on 31-03-08. However the same has still not been encashed. Malti Devi is survived by three sons (including Satish) and one daughter. Satish is the sole nominee for all the above investments.

Satish's personal finances can be summarized as follows:

Monthly Cash Flow Details in FY 2007-08

1. Basic Salary	Rs. 30,000
2. DA	Rs. 11,000*
3. Commission (Received as a fix % of turnover)	Rs. 7,000 (Average)
4. Reimbursement of Medical Expenses	<u>Rs. 1,000</u>
Total Monthly Salary	<u>Rs. 49,000</u>
5. Household expenses	Rs. 35,000**

* 50% eligible for retirement benefits.

** Household expenses are inclusive of EMI for car loan (Rs. 9,610 p.m), Income Tax and Insurance payments.

Assets as of 31st March 2008

Car	Rs. 2,00,000
Bank Fixed Deposits (Base value in Satish's name)	Rs. 5,00,000
Post Office MIS (Joint with wife, opened on 31/03/2003)	Rs. 6,00,000
RBI Bonds 6.50% (Tax Free)	Rs. 1,50,000
Units US64	Rs. 25,000
UTI Master Share	Rs. 35,000
Cash/Saving Bank Account	Rs. 84,000
Commercial Unit (Shop)	Rs. 15,00,000**
**Earning Nil rental income	

Details of Satish's Insurance Policies

Currently Satish is maintaining two insurance policies.

- A) A "Money Back" life insurance policy in which Satish is the life assured for a basic sum assured of Rs. 5 lakh. Date of commencement is 15-03-1989, term 20 years, maturing on 15-03-2009, has a 30 days grace period for paying the renewal premium, the survival benefits payable are 20% at the end of every 5,10,15 years and 40% at the end of 20 years. A fixed bonus of Rs. 24 per thousand is also payable at the end of the policy term. Assume all due survival benefits have been received on their respective due dates and will continue in future.

- B) A comprehensive car insurance policy for a sum of Rs. 2 Lakh, insurance renewal falls on 15th June of every year, car insurance has to be renewed annually, has a 15 day grace period for renewal, premium of car insurance policy for this year yet to be paid.

Macro Environment

- Inflation figure is expected to remain at 7.00% p.a.
- Interest rates, which had an up-trend over the past three years, have moved downwards and are now around 8% p.a.
- Driven by liquidity and supported by good fundamentals the BSE Index had breached 21000 levels in the first month of the year. However current economic factors have brought the market down by about 25% from its peak levels.

Financial Goals of Satish

- To purchase a residential house in Lucknow on or before retirement.
- Full repayment of his car loan by the time of his retirement.

Questions

- 16) Satish wants to know the annual value of his perquisites from the rent-free accommodation provided by his employer for the AY 2008-09. Assume cost of furniture provided along with the accommodation is Rs 1,00,000. (4)
- A) Rs. 86,500
B) Rs. 98,200
C) Rs. 1,04,400
D) Rs. 78,000
- 17) Satish would also like to know the amount which shall be included in his taxable income for AY 2008-09 due to his mother's fixed deposit. The same is _____. (3)
- A) Rs. 6,083
B) Rs. 11,933
C) Rs. 24,333
D) Rs. 6,32,660
- 18) Satish's own Bank FDR was done on 01-04-2006 giving interest at 8.75% p.a (compounding semi annually). Satish wants to know the amount of TDS which is likely to be deducted by the Bank against this FDR for AY 2008-09. (3)
- A) Rs. 5,017
B) Rs. 5,518
C) Rs. 4,901
D) Rs. 5,391
- 19) Satish is highly concerned about the constantly rising inflation. He wants to know the value of his current Rs.1000 after 10 years and the amount required in lieu of the same at that time if the current rate of inflation remains constant for the whole term. (3)
- A) Rs. 483.39, Rs. 2068.72
B) Rs. 508.35, Rs. 1967.15
C) Rs. 483.39, Rs. 1967.15
D) Rs. 508.35, Rs. 2068.72
- 20) Satish had originally invested Rs. 17,500 in Master Share Units on 29th Feb 2004. He received cash dividends of Rs. 1,000, Rs. 1,300, Rs. 1,500 & 1,800 on 28th Feb 2005/2006/2007 and 29th Feb 2008 respectively. He reinvested all of these dividends in these units again immediately the next day. Satish wants to know the CAGR on these units on the basis of 31st Mar 2008 valuation. (3)

- A) 18.50%
 B) 17.10%
 C) 18.92%
 D) 17.45%
- 21) Satish had taken a car loan of Rs. 3 lakh on 01-10-2006 for a period of 36 months from a nationalized bank. First EMI was payable on 31-10-2006. The bank had no pre-payment penalty clause on this loan. Satish wants to know if he squares off this loan at retirement by repaying full outstanding amount, what amount would he be required to deposit with the bank at that time. (4)
- A) Rs. 56,091
 B) Rs. 55,189
 C) Rs. 65,701
 D) Rs. 57,660
- 22) Satish met with an accident on 18th June 2008 and damages incurred on the car were worth Rs. 50,000. However the insurance company refused to accept his claim due to pending premium. Satish wants to know whether any remedy is available for him. (3)
- A) Yes, Satish can win his claim on the ground of “Estoppel”.
 B) Yes, Satish can win his claim on the concept of “Waiver of Rights”.
 C) Yes, Satish can win his claim on the concept of “Comprehensive Insurance”.
 D) No, Satish has no relief available because there was no insurance cover for the car at the time of accident.
- 23) For purchasing a new house at his native place, Satish is eager to use his life insurance policy proceeds and would also like to sell his shop. For this need he does not want to disturb his retirement funds or to take any fresh loan. Satish wants to know the maturity amount from his life insurance policy which is due for maturity next year. Assume all due premiums are paid on time by Satish. (3)
- A) Rs. 4.40 lakh
 B) Rs. 7.40 lakh
 C) Rs. 2.96 lakh
 D) None of the above
- 24) Satish will not be having any life insurance policy in place post retirement. According to you, at that junction of life, what type of life insurance policy should he avail? (3)
- A) Term Insurance Plan
 B) Whole life insurance plan
 C) Unit linked insurance plan
 D) There is no need of life insurance for Satish
- 25) Both Satish and his employer contribute towards EPF only up to the specified salary limit (Rs 6,500) as per EPF and Misc. Provision Act, 1952. Satish wants to know what accumulated amount he would get on retirement through EPF. Assume average rate of interest on EPF contributions to be 9 % per annum (compounding monthly), since inception. (4)
- A) Rs 45,74,926
 B) Rs 23,78,580
 C) Rs 5,94,740
 D) Rs 3,85,425
- 26) Satish is slightly apprehensive about the retirement benefits due to him a short time ahead. His company is offering him three different choices regarding his retirement benefits which are as follows:
1. He can take his regular pension for his balance life.
 2. He can take 76% of the total receivable pension in lump sum at the time of retirement, assuming he would have received pension for 15 years.

3. Take VRS just one month before retirement with a compensation of Rs. 26 lakh lump sum.

What option should Satish opt for if all lump sum receipts are subject to currently applicable highest tax slab with applicable Surcharge and Education Cess thereon? For calculation purposes assume Satish will invest all receipts at 8% p.a rate of interest. (4)

- A) Option 1
- B) Option 2
- C) Option 3
- D) Data Insufficient

27) Satish wants to know what sum he shall receive on completion of the last month of his Post Office MIS account? (3)

- A) Rs. 6,00,000
- B) Rs. 6,30,000
- C) Rs. 6,60,000
- D) Rs. 6,64,000

28) Post retirement, Satish wants to take franchise of a popular food chain. The company offering the franchise is demanding an upfront security deposit of Rs. 20 lakh for granting the same. The company is offering two different cash flows as follows:

Option (A): A fixed interest of 6% p.a on the security deposit and 5% commission on sale for the next 10 years. Afterwards the company will first refund the original security back and will reset the franchise terms again.

Option (B): 40% commission on the sale value for the whole term but the security deposit shall be non refundable. The franchise rights shall be valid for next 10 years. Sales for the first year are expected to be Rs. 5 lakh with an annual growth of 10% p.a for the next 9 years.

Satish has sought your opinion for choosing the right option for him. (Assume interest and commissions are disbursed at the end of every year on full year sale). (6)

- A) Option A which has an IRR of 7.87%
- B) Option A which has an IRR of 9.18%
- C) Option B which has an IRR of 8.13%
- D) Option B which has an IRR of 10.00%

29) Satish is considering investing some amount in a bond recently floated by a financial institution. This institution is offering the bond at an issue price of Rs. 8,500 for a term of 10 years for a maturity value of Rs.20,000. Maturity proceeds will however be subject to capital gains tax. Satish wants to know the post tax CAGR in case he invests in this bond. (Ignore surcharge and education Cess on tax for calculation purposes). (4)

- A) 8.29% p.a.
- B) 8.93% p.a.
- C) 7.61% p.a.
- D) 6.89% p.a.

Case 1

Background

Today is 21st June 2008. Mr. Abhishek Sawant, age 40, is into management consultancy profession. His family includes wife Chhaya, age 35, and son Mohan, age 10. In the Financial Year 2007-08 Abhishek was able to earn a decent amount of Rs 23.50 lakh from his profession while the family's annual living expenses were Rs. 8 lakh. These included household expenses, Mohan's education expense, personal expenses and a vacation but did not include income tax commitments. Till now Abhishek has been investing all his surplus / savings towards building of his business assets and in purchase of his residential property only. Henceforth he is looking forward for his personal Financial Planning.

Cash Flow Statement of the family (for FY 2007-08)	Amount (Rs.)
Gross Receipts from Abhishek's Profession	23.50 lakh
Allowable Business Expenditures	2.50 lakh
Personal Living Expenses	8.00 lakh
Investments u/s 80C	1.00 lakh
Bank FDR Settlement on 01-04-2007	1.25**lakh

** This FDR matured on 31-03-2007 and on 01-04-2007 Abhishek used this amount in repayment of an Education Loan taken for his own higher education. In this repayment Rs.90,000 was paid towards principal while Rs. 35,000 was paid towards interest cost. This was the full & final payment of an Education loan of Rs. 8 lakh taken 8 years back by Abhishek.

Abhishek's father, who is living independently, has been maintaining an insurance policy in which Abhishek will get an annuity of Rs. 2 lakh per annum starting from Abhishek's age of 45 years till his age of 50 years (total 6 annuities at the starting of every year having zero sum assured). Besides this annuity there is no other insurance policy with the family except third party insurance for the car.

Personal Net Worth Statement of Abhishek (as of 31st March 2008)

A) Assets	Amount (Rs.)
Residential Flat (Cost Price)	30.00 lakh
Public Provident Fund (A/c Opened on 31 st March 2003)	3.50 lakh
Cash in hand	1.25 lakh
Investments in ELSS	3.80 lakh
Consumer / Household Durables	2.00# lakh
# (Inclusive of Gold Jewellery purchased through credit card)	
Total Assets	40.55 lakh
B) Liabilities	Amount (Rs.)
Credit Card Outstanding	1.50 lakh
Total Liabilities	1.50 lakh
Total Net Worth (A-B)	39.05 lakh

Financial Goals

Abhishek has requested you to prepare a Financial Plan for his family for the possible achievements of his financial goals. After discussions with Abhishek and Chhaya, you have summarized the family's financial goals / priorities as follows:

1. Abhishek wants to create a reasonable financial security of Rs. 6 Lakh per annum (subject to inflation) for Chhaya & Mohan, in case he meets any eventuality due to any unforeseen event.
2. Abhishek needs to pay off the outstanding amount of Rs. 1.50 Lakh on his credit card at the earliest.
3. At present Abhishek foresees his retirement at the age 65 years and would like to accumulate funds which would be sufficient till his age of 75 years. He would also like to leave an estate of Rs. 25 lakh (in today's value) at the end of his life. The family's living expenses are expected to increase at 5% per annum, in addition to inflation, till Abhishek's retirement year. Post retirement Abhishek necessarily wants to cut down the expenses by 5% per annum every year. He also wants to use the annuity from the policy maintained by his father for him for his retirement. To create a suitable retirement fund you have advised Abhishek to invest 60% in Equity, 20% in Gold ETFs and 20% in Bank FDR till retirement. However, you have proposed that post retirement Abhishek should shift his investments to risk / tax free instruments.
4. Abhishek and Chhaya also look forward to buy a vacation cottage in Goa at the time of retirement (presently worth Rs. 3 lakh) and would like to start saving and investing for this goal on priority.
5. The family also wants to create a highly diversified investment portfolio with moderate risk.
6. Abhishek is keen to prepare and implement an appropriate Estate Plan for his family.

Assumptions

1. Inflation 5% p.a.
2. Risk/Tax free rate of return 6% p.a.
3. Equity returns 15% p.a.
4. Returns on liquid funds 7 % p.a.
5. Bank FD and Bond return 8% p.a.
6. Gold ETF returns 10% p.a.
7. Real Estate Appreciation 12% p.a.

Questions

- 1) Abhishek has deposited his full income tax due for the FY 2007-08 as advance tax by March 15th 2008. He now wants to know his net investible surplus for the FY 2007-08 having discharged his income tax liability and meeting all cash outflows. (5)

A) Rs. 5,77,980
B) Rs. 5,89,880
C) Rs. 8,49,900
D) Rs. 12,00,000
- 2) Abhishek's father-in-law wants to gift a Bank FDR of Rs. 2 lakh for the benefit of Mohan. From income tax planning perspective how would you plan this gift for the family? (3)

A) FDR should be gifted in the name of Abhishek.
B) FDR should be gifted in the name of Chhaya.
C) FDR should be gifted in the name of Mohan.
D) All options will result in same tax incidences.

- 3) You have advised Abhishek to create a Power of Attorney in favor of Chhaya in case he becomes incapacitated in any unfortunate event. Which amongst the following Power of Attorney would you recommend to Abhishek for this purpose? (2)
- A) Durable Power of Attorney
 B) General Power of Attorney
 C) Non-Durable Power of Attorney
 D) Springing Power of Attorney
- 4) Before beginning work on Abhishek's Financial Plan, you have drafted a "Letter of Engagement" and sought Abhishek's consent on the same. Abhishek asked you about the characteristic of this letter in context of Financial Planning Profession. How would you explain a "Letter of Engagement" to Abhishek in most simple terms? (3)
- A) It is a professional requirement under Code of Ethics of FPSB India.
 B) It is a professional requirement under Practice Guidelines of FPSB India.
 C) It is a legal contract as per Contract Act 1872.
 D) There is no legal importance of this document.
- 5) You have advised Abhishek to discharge his credit card liability on top priority due to high interest rate. Abhishek has informed you that his total credit card liability outstanding as on 31st March 2008 is on behalf of a Gold Jewellery purchase made on 01-01-2008 by using this credit card. Further he has informed you that he has once rolled out the credit by paying minimum amount due as on 01-03-2008. What was the value of Abhishek's purchase?
- Assume Abhishek's credit card company gives a free credit period of 2 months on all purchases made through their credit cards but levies compulsory initial transaction charge of 2% on all transactions. If a card holder wishes to roll over his credit, he/she may do so by paying a minimum of 5% of the due amount on due date. The company charges an interest of 3.60% per month (compounding monthly) on the remaining rolled out amount starting from the date of purchase. Billing date of Abhishek's credit card is 1st of every month & grace period is 7 days after billing. (5)
- A) Rs. 1,42,000
 B) Rs. 1,39,216
 C) Rs. 1,34,900
 D) Rs. 1,37,895
- 6) Before coming up with investment options you decide to work on a few Financial Ratios pertaining to Abhishek's family's finances. According to you what is the Expanded Liquidity Ratio of their finances? (2)
- A) 1.87
 B) 7.57
 C) 12.82
 D) 5.32
- 7) Abhishek wants to create a reasonable financial security of Rs. 6 Lakh per annum (subject to inflation) for Chhaya & Mohan, in case he meets any eventuality due to any unforeseen event. What should be his life insurance cover to get this amount for Chhaya & Mohan's financial security till the remaining expected life of Chhaya? Assume Chhaya's life expectancy to be 75 years and life insurance policy proceeds of Abhishek are invested in risk / tax free instruments by her. (Indicate nearest figure without considering any existing asset) (4)
- A) Rs. 90.27 lakh

- B) Rs. 95.69 lakh
- C) Rs.198.80 lakh
- D) Rs. 200.69 lakh

8) For the term insurance plan which you have suggested to Abhishek, a life insurance company is offering two different plans as follows:

- (1) Pure risk plan without return of premium, term 20 years, SA Rs.100 lakh, premium Rs. 2.18 per thousand SA per annum.
- (2) Risk/Return Plan (Total original premium paid to be returned on maturity), term 20 years, SA Rs. 100 Lakh, premium Rs. 4.36 per thousand SA per annum.

According to you which plan is advisable for Abhishek if Risk / Tax free rate of return is taken into account? (4)

- A) Plan 1
- B) Plan 2 is advisable due to its premium return feature.
- C) Plan 2 is advisable due to its IRR.
- D) Plan 2 is advisable due to its tax free accumulation advantage over other investments.

9) During discussions held with Abhishek's insurance agent regarding implementation of his risk management plan, he proposed Abhishek to take a new term insurance policy from back date of 2 years after paying a nominal interest on the premium. What is your opinion on this advice from the insurance agent? (2)

- A) Abhishek should take the policy from back date as this policy will mature 2 years earlier.
- B) Abhishek should not take the policy from back date.
- C) The decision shall depend on the type of insurance policy.
- D) Abhishek should rather invest in ULIP plans for better returns.

10) Abhishek wants to know his effective rate of return on his retirement fund investments for pre-retirement period if he starts his funds accumulation as per your guidelines? (2)

- A) 13.42%
- B) 13.28%
- C) 12.72%
- D) 13.54%

11) Abhishek wants to know what amount he should save every year end from today in order to accumulate his retirement fund successfully. (Assume average rate of return in pre retirement period as 13% p.a) (6)

- A) Rs. 4,17,126
- B) Rs. 3,12,984
- C) Rs. 26,082
- D) Rs. 3,68,579

12) You have advised Abhishek to use his PPF account exclusively for accumulating fund for buying his vacation cottage in Goa. For this purpose, you have advised him to extend his PPF account upon maturity. Abhishek wants to know what maturity amount he will get from this account if he continues to maintain the account with maximum permissible contributions till the original term and without any contribution in the extension period? Would this accumulated amount be sufficient to buy his dream vacation cottage? Assume the investments would yield a constant return of 8% p.a for the whole period? (3)

- A) Rs. 56.13 Lakh, Yes
- B) Rs. 17.69 Lakh, Yes
- C) Rs. 17.69 Lakh, No

- D) Rs. 56.13 Lakh, No
- 13) You are eager to develop an investment policy statement for Abhishek. Which factor is not a constraint in doing so? (2)
- A) Abhishek's liquidity position
 - B) Abhishek's tax status
 - C) Abhishek's time horizon for investments
 - D) None of the above
- 14) Abhishek is considering investing in a recently launched Mutual Fund scheme. This fund charges an entry load of 2.25% and an annual recurring charge of 2% p.a. Abhishek wants to know the minimum return which must be generated by this fund in the first year if he wants the same rate of return as on equity investments. (Assume initial issue expenditure is Nil and annual recurring charge is levied on year end NAV). (4)
- A) 23.18%
 - B) 19.56%
 - C) 18.00%
 - D) 20.05%
- 15) Abhishek wants to allocate maximum portion of his investments u/s 80C in a most tax / risk efficient manner. What should be the right allocation of his funds if equity investments have a standard deviation of 15%? (3)
- A) 70% in PPF+30% in Bank FDR
 - B) 50% in PPF+50% in Bank FDR
 - C) 50% in PPF+50% in ELSS
 - D) 50% in ELSS+50% in Bank FDR

Q7	Expenses required for Chhaya=		600000						
	Current Age		35						
	Life Expectancy		75						
	Risk/Interest Free Rate		6%						
	Initiation Rate		5%						
	Initiation adjusted rate of return		1.06/1.05		1.00952381		0.9524%	pa	
			$600000 * ((1 - (1 / 1.009524)^{40}) / 0.009524) * 1.009524$						
	Corpus required		20069350						
Q8	If Abhishek takes term insurance policy then annual premium= $(2.18 * 100 * 100) =$				21800		21800	Nil	
	Maturity Value in term plan=								
	If Abhishek takes endowment policy then annual premium= $(4.36 * 100 * 100) =$				43600		43600		
	Maturity Value in endowment plan $(43600 * 20) =$						872000		
	So effective annual investment portion in endowment plan $(43600 - 21800) =$						21800		
	PMT=		21800						
	MV=		872000						
	Term=		20						
	Mode=		Begin						
	So R=		6.77% pa						
	Risk free rate of return=		6% pa						
	So Plan 2 is advisable due to its IRR								
Q9	No, he should not take the policy from back date in term plan as if you take the policy from back date you are paying the premium for the period for which your life risk has already passed out.								
Q10	Term=(65-40)		25						
	Equity portion 60%		@15%						
	Gold ETF 20%		@10%						
	Bond/Bank FDR 20%		@8%						
	So Effective Rate of return in 25 years=								
	Equity= $60 * 1.15^{25} =$		19,75,137.157						
	Gold= $20 * 1.1^{25} =$		2,16,694.1189						
	Bank FD= $2 * 1.08^{25} =$		1,36,969.5039						
	Eff Rate=		23,28,800.78						
			$1,134,18,864$						
	Or		13.4189%						
			13.42%						

Case Study - Rananjoy Majumder

Today is 26th July, 2008. Rananjoy Majumder has approached you for construction of his Financial Plan. His details are as follows:

Rananjoy, born on 31st December 1948, life expectancy at birth 65 years, is a Sr. Manager with a Public Limited Company. He is presently posted in Kolkata, staying with his family in a house provided by his employer. He has had a stable tenure with the same organization for the last 20 years and 4 months. He will be completing 60 years of age on 1st January 2009, when he will retire from his service. During his employment he had concentrated more on his work and less on his personal finances. As he is now on the verge of his retirement, he does not have any idea how to manage his post retirement finances. His wife Nirmala, born on 31st Jan 1953, life expectancy at birth 70 years, is a house wife. Vaibhavi their daughter, born in 1988 is a student presently doing graduation.

A diligent information gathering session with him yielded the following quantitative and qualitative data.

Rananjoy's salary and perquisites for the Financial Year 2007-08 is as follows:

Basic Salary	Rs. 18,000 p.m
Dearness allowance (100% eligible for calculating retirement benefits)	Rs. 6,500 p.m
Bonus	Rs. 18,000 p.a
Entertainment allowance (being paid for the last 10 years)	Rs. 8,000 p.a
Transport allowance	Rs. 800 p.m

Other Income

Rental from own house in Kolkata	Rs. 9,000 p.m.
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Post Retirement Income

Pension: Rs 1,25,000 p.a.

Pension from Life Insurance Company: Rs. 20,200 p.a. (fixed) for entire life and will start from 1st Feb 2009.

Existing P.O. MIS: Rs. 4,800 p.a. (maturing in June 2011).

Post Retirement Expenditure

Household expenses: Rs. 1,15,000 p.a. (with 6% increase p.a.)

Premium for Health Insurance: Rs. 3,000 p.a. (Cover for family)

Life Insurance Endowment Policy premium Rs.1,600 (payable quarterly).

EMI for Housing loan Rs. 3,026 (being paid from 1st Aug 2005)

Vaibhavi's Educational Expenses

Assets

House at Kolkata - Rs. 4,50,000 (Cost Price in the year 1997).

Bonds - Rs. 85,000 (Maturity value in Apr 2009)

PPF- Present Value Rs. 1,08,000 (maturing in 2011)

Retirement Proceeds: Rs. 10,75,000 to be received in Feb 2009.(Including Gratuity: Rs. 3,15,000)

An Endowment Life Insurance plan for 20 years taken on 20th Feb 1990 for a sum assured of Rs. 2 lakh.

Liabilities

Housing loan taken by Rananjoy on 1st Jul 2005 for renovation of his house in Kolkata Rs. 1,75,000. Present interest being charged is 10% p.a.

Vaibhavi's Education Expense: Rs. 8,00,000. (For Post Graduation Program)

Vaibhavi's Marriage Provision in the year 2012: Rs. 5,00,000 present cost

Others

Rananjoy wants to maintain Rs. 1,30,000 in Cash for contingencies.

Both Rananjoy and his wife possess good health. Post retirement they would maintain active life.

Note:

1. Housing loan interest rate at the inception was 7.5% p.a , and was 8% p.a with effect from April 2006 and 10% p.a with effect from April 2008 on the outstanding balance amount. However, Rananjoy has kept the EMI same since inception.
2. Present interest rate on 5 years Fixed Deposit is 8% p.a.
3. Rananjoy wants to buy a house, fix it up and resell it at a profit. He is looking at a 25% annual return on this project and there is a 2% real estate brokerage payable for these transactions (both buy & sell).
4. You have recommended Rananjoy to put his money in a Balanced Mutual Fund which charges an entry load of 2.25%. Management and other fee is 1.10% P.A. charged at the end of the year.
5. Rananjoy recently met with an accident while driving his car and the total damage which has been claimed from the insurance company is Rs. 65,000.
6. Rananjoy has an accident insurance policy which pays TPD benefit of Rs. 2,000 per week, for upto 104 weeks.
7. Municipal Taxes paid on Kolkata house were Rs. 20,000 in FY 2007-08.

Questions

- 1) What amount is eligible for deduction u/s 24 and u/s 80C, respectively, for Rananjoy for the home loan repayment in the AY 2008-09? (4)

A) Rs. 9,640 and Rs. 26,493
B) Rs. 9,640 and Rs. Nil
C) Rs. 9,816 and Rs. 26,493
D) Rs. 9,816 and Rs. Nil
- 2) You have recommended Rananjoy to invest in a Balanced Mutual Fund. What annual returns should the fund generate in the first five years to equal the value that the investment would have earned in Fixed Deposit? (Ignore taxes if any). (4)

A) 9.59% p.a
B) 8.00% p.a
C) 9.70% p.a
D) 8.59% p.a
- 3) Rananjoy's house in Kolkata has a Municipal Value of Rs. 1,00,000 and Fair Rental Value of Rs. 1,20,000. It was self-occupied by him from 1st April 2007 to 31st July 2007. With effect from 1st August 2007 it was rented out for the rest of the year. Rananjoy wants to know the annual value of the house for the Assessment Year 2008-09. (3)

A) Rs. 88,000
B) Rs. 52,000
C) Rs. 60,000
D) Rs. 1,00,000
- 4) Rananjoy wants to invest in an immediate annuity plan at the time of retirement where Rs. 5,000 per month is paid to him or his wife till either of them is alive. What lump-sum investment is required to be made by Rananjoy for this revenue? Assume that life expectancies of Rananjoy and his wife have not changed and return on this investment is equal to interest rate on a 5 year Fixed Deposit. (Take the required rate on annual effective basis and Ignore all expenditures and taxes) (5)

A) Rs. 5,23,203
B) Rs. 4,94,654

- C) **Rs. 5,12,540**
D) Rs. 5,04,379
- 5) Damage to Rananjoy's car in the road accident is of Rs. 22,000. The car later hit another vehicle parked on the roadside causing damage to it worth Rs. 25,000 and then broke the neighboring wall causing loss worth Rs. 18,000. Rananjoy has taken statutory minimum cover while taking insurance for his car. How much claim of Rananjoy would be admissible by the insurance company in this incident? (5)
- A) Rs. 22,000
B) **Rs. 43,000**
C) Rs. 65,000
D) Rs. 47,000
- 6) In case you recommend Rananjoy to put 60% of his money in asset A offering 15% annual return with a standard deviation of 10%, and balance funds in asset B offering a 9% annual return with a standard deviation of 8%, what is the expected return after 1 year and standard deviation of Rananjoy's portfolio? Assume the Coefficient of Correlation between the returns on assets A and B is 0.50. (4)
- A) 12.60% and 0.809%
B) 11.67% and 8.75%
C) **12.60% and 8.09%**
D) 8.09% and 12.60%
- 7) You have selected a Mutual Fund scheme which has stocks in its portfolio which move together and have a high correlation. How will that impact the risk and return of Rananjoy's portfolio? (2)
- A) The Mutual Fund portfolio will have a return that is lower than the stocks included in it, but have a risk that is higher than the risk of the stocks.
B) The Mutual Fund portfolio will have a return that is the average of the stocks included in it, but have a risk that is lower than the risk of the stocks.
C) The Mutual Fund portfolio will have a return that is the average of the stocks included in it, but have a risk that is higher than the risk of the stocks.
D) **The Mutual Fund portfolio will have a return and risk, which lies in the range of risk and return of the stocks included in it.**
- 8) What is the maximum amount Rananjoy can offer to buy a house which requires an investment of Rs. 1,25,000, Rs. 50,000, Rs. 65,000 and Rs. 75,000 at the end of the first, second, third and fourteen months for restoration before sale? Rananjoy expects to sell this house at the end of 26 months for Rs.25,80,000. (For calculation purpose compounding to be done on a monthly basis) (4)
- A) Rs. 12,15,281
B) **Rs. 11,68,090**
C) Rs. 12,27,280
D) Rs. 11,44,251
- 9) Rananjoy has been paying his Life Insurance Premium regularly. He wants to know the exact amount his family will receive from the Life Insurance Company in case he dies today. Assume the Bonus vested is Rs. 1,15,200 and interim Bonus declared after valuation on 31st March 2008 is Rs. 68 per thousand Sum Assured for the policy. (5)
- A) Rs. 2,86,080
B) Rs. 3,28,800
C) **Rs. 3,25,600**
D) Rs. 2,83,680
- 10) Rananjoy has been provided a rent free house in Kolkata for which his employer has been paying a rent of Rs. 8,000 p.m. Cost of the furniture provided in this house is Rs. 80,000. Rananjoy wants to know the perquisite value of rent free house for AY 2008-09. (4)

- A) Rs. 1,04,000
B) Rs. 56,000
 C) Rs. 96,000
 D) Rs. 57,200
- 11) Rananjoy had invested in an open ended Mutual Fund when the NAV of the Fund was Rs. 10. After 6 months the NAV was Rs. 12. The annualised percentage change in the fund is _____. (Ignore all charges). (2)
- A) 22%
 B) 20%
 C) 40%
D) 44%
- 12) You, being a Financial Planner, would help Rananjoy to set his financial goals in _____. (2)
- A) any term as desired by him
 B) both current & future money terms
C) current money terms
 D) future money terms
- 13) The estimated value of a real estate asset in a financial statement of Rananjoy, prepared by you would be based upon the: (2)
- A) Basis of the asset, after taking into account all straight-line and accelerated depreciation.
 B) Rananjoy's estimate of current value.
 C) Current replacement value of the asset.
D) Value that a well-informed buyer is willing to accept from a well-informed seller where neither is compelled to buy or sell.
- 14) Rananjoy has worked in another company prior to his present employment for a period of 14 years and 5 months. He had retired from his previous company and received Rs. 15,000 as gratuity out of which Rs. 13,000 was exempt. What is the tax exempt gratuity for Rananjoy? Assume both companies are covered under payment of Gratuity Act, 1972 and that he has received his retirement proceeds in the month after retirement. (4)
- A) Rs. 2,83,827
B) Rs. 2,96,827
 C) Rs. 3,37,000
 D) Rs. 3,15,000

Q 1)

		Balance	EMI	Int	Principal		
Interest	7.5%	Jul-05	175000				
		Aug-05	173068	3,026	1094	1,932	
		Sep-05	171124	3,026	1082	1,944	
		Oct-05	169168	3,026	1070	1,956	
		Nov-05	167199	3,026	1057	1,968	
		Dec-05	165218	3,026	1045	1,981	
		2005	Jan-06	163225	3,026	1033	1,993
			Feb-06	161220	3,026	1020	2,006
			Mar-06	159201	3,026	1008	2,018
			Apr-06	157171	3,026	995	2,031
	8%		May-06	155193	3,026	1048	1,978
			Jun-06	153202	3,026	1035	1,991
			Jul-06	151197	3,026	1021	2,004
			Aug-06	149179	3,026	1008	2,018
			Sep-06	147148	3,026	995	2,031
			Oct-06	145103	3,026	981	2,045
			Nov-06	143045	3,026	967	2,058
			Dec-06	140973	3,026	954	2,072
		5006	Jan-07	138887	3,026	940	2,086
			Feb-07	136787	3,026	926	2,100
			Mar-07	134673	3,026	912	2,114
			Apr-07	132545	3,026	898	2,128
			May-07	130403	3,026	884	2,142
			Jun-07	128247	3,026	869	2,156
			Jul-07	126076	3,026	855	2,171
			Aug-07	123891	3,026	841	2,185
			Sep-07	121691	3,026	826	2,200
			Oct-07	119476	3,026	811	2,214
			Nov-07	117247	3,026	797	2,229
			Dec-07	115003	3,026	782	2,244
		2007	Jan-08	112744	3,026	767	2,259
			Feb-08	110470	3,026	752	2,274
			Mar-08	108180	3,026	736	2,289
			Apr-08	105876	3,026	721	2,305
	10%		May-08	103732	3,026	882	2,143
			Jun-08	101571	3,026	864	2,161
			Jul-08	99392	3,026	846	2,179
			Aug-08	97194	3,026	828	2,198
			Sep-08	94978	3,026	810	2,216
			Oct-08	92744	3,026	791	2,234
			Nov-08	90491	3,026	773	2,253
			Dec-08	88219	3,026	754	2,272
		2008	Jan-09	85929	3,026	735	2,291
			Feb-09	83619	3,026	716	2,310
			Mar-09	81290	3,026	697	2,329
			Apr-09	78942	3,026	677	2,348
			May-09	76574	3,026	658	2,368
			Jun-09	74186	3,026	638	2,388
			Jul-09	71779	3,026	618	2,408
			Aug-09	69351	3,026	598	2,428
			Sep-09	66903	3,026	578	2,448
			Oct-09	64435	3,026	558	2,468
			Nov-09	61946	3,026	537	2,489
			Dec-09	59437	3,026	516	2,510
		2009	Jan-10	56906	3,026	495	2,530
			Feb-10	54355	3,026	474	2,552
			Mar-10	51782	3,026	453	2,573
			Apr-10	49188	3,026	432	2,594
			May-10	46572	3,026	410	2,616
			Jun-10	43934	3,026	388	2,638
			Jul-10	41274	3,026	366	2,660
			Aug-10	38593	3,026	344	2,682
			Sep-10	35888	3,026	322	2,704
			Oct-10	33162	3,026	299	2,727
			Nov-10	30412	3,026	276	2,749
			Dec-10	27640	3,026	253	2,772
		2010	Jan-11	24845	3,026	230	2,795
			Feb-11	22026	3,026	207	2,819
			Mar-11	19184	3,026	184	2,842
			Apr-11	16318	3,026	160	2,866
			May-11	13428	3,026	136	2,890
			Jun-11	10514	3,026	112	2,914
			Jul-11	7576	3,026	88	2,938
			Aug-11	4613	3,026	63	2,963
			Sep-11	1626	3,026	38	2,987
						Int	9640
						Prin	Nil
Today							

Q 2)	Annual Return	0.097	0.989
	1	10605.22008	9775*(1+0.097)*.989
	2	11505.95323	10605*(1+0.097)*.989
	3	12483.18836	11506*(1+0.097)*.989
	4	13543.42299	12483*(1+0.097)*.989
	5	14693.70654	13543*(1+0.097)*.989

Q 3)	A	The gross (Municipal value Rs. 1,00,000 or FRV Rs. 1,20,000 whichever is higher)	120000	
	B	Actual rent received/receivable for let out period i.e. 9000*8	72000	
		Gross annual value		120000
	Less	Municipal Taxes		20000
		Net annual value		100000

Q 4)	Lump-sum	Present Value of a level monthly annuity of Rs 5,000 for a period of 14 years
		Annual Effective Rate of Interest 8% i = 0.08
		Monthly effective Rate $i' = ((1+i)^{(1/12)}) - 1$ 0.006434
		Therefore PV = $5000 * (1 - ((1+i')^{-14*12})) / i'$ = 512539.5

Q 5)	25000
	18000
Admissible	43000

Q 6)	$(((SD(P)^2) = (W1^2) * (SD1)^2 + (W2^2) * (SD2)^2 + (2W1W2) * Cor\ Coefficient * SD1 * SD2)^{.5}$		
	Allocation	Return	SD
	W1	60	
	SD1	0.10	
	W2	40	
	SD2	0.08	
	Correlation Coefficient of	0.5	
	SD of Portfolio-	8.09	
	0.6	15%	0.69
	0.4	9%	0.436
	1		1.126
	Return of portfolio =		12.6%

Q 8)	Brokerage	2%	
	NPV	1191452	Purchase Price = 1168090 1191452*100/102
	1	-125000	
	2	-50000	
	3	-65000	
	4	0	
	5	0	
	6	0	
	7	0	
	8	0	
	9	0	
	10	0	
	11	0	
	12	0	
	13	0	
	14	-75000	
	15	0	
	16	0	
	17	0	
	18	0	
	19	0	
	20	0	
	21	0	
	22	0	
	23	0	
	24	0	
	25	0	
	26	2528400	2580000

Q 9)	SA	200000
	Bonus Vested	115200
	Bonus Int	13600
		328800
less	unpaid premium	3200
		325600

Q 10)	Basic Salary	18000	216000
	DA	6500	78000
	Bonus		18000
	Ent Allow		8000
	Transport	800	-
	Salary		320000
	15% of Salary		48000
	Rent paid	8000	96000
	Furniture	80000	8000
	RFA =		56000 48000+8000

Q 11) Return = **44% RATE(0.5,0,-10,12,0)**

Q 12) Cuurent money terms

Q 14)	Basic Sal	18000
	DA	6500
		24500
	Gratuity Exempt	296827

Case Study –Raghuveer Singh

Chaudhary Raghuveer Singh, age 54 years, is a well settled farmer of Bundelkhand region. By the grace of God he is enjoying a good reputation in society, having sufficient wealth and a healthy and prosperous family. He is a professional farmer as well as an active political leader. Since last 3 consecutive terms he is an M.L.A from his local constituency & his current term is for another 2 years. Endorsing his remarkable social services for the benefit of the poor, the state government has recently declared a prestigious public interest award for him in which, apart from the recognition from state government, he will also receive a cash amount of Rs. 50 lakh. At present along with performing his duties as an MLA, he is also running an agriculture food processing unit in his native village & maintaining a petrol pump on a national highway. Presently the family lives in Jhansi. His family members are as follows:

Name	Relation with Ch. Raghuveer Singh	Age
1. Chaudhary Yashpal Singh	Father	78
2. Sumitra Devi	Mother	74
3. Mahima Chaudhary	Wife	53
4. Virendra Singh	Son	30
5. Sangeeta	Daughter in law	28
6. Master Dhawan	Grand Son	03
7. Naveen	Son	25
8. Sandeep	Son	23

His eldest son Virendra takes care of his food processing unit and his petrol pump. Second son Naveen has completed his M.Sc. & preparing for civil services. He is residing in Delhi & taking coaching classes for the same. Sandeep was never made for studies and left his schooling even before his matriculation and takes active interest in local politics with his father. His dream is to become an M.P. or an M.L.A first and a minister in centre or state government later on.

Chaudhary Raghuveer Singh, being a seasoned politician and good businessman, knows very well that any fortune cannot last long without good planning. He also feels that every success has a cost and his current position has also earned some enemies. He has contacted you, a practicing Certified Financial Planner, for creating a well structured Financial as well as Risk Management plan for him.

For this he has submitted the Financial and other information as follows:

Current Income Sources

1. His emoluments as an MLA from the state government
2. Income from investments
3. Income from food processing unit
4. Income from his petrol pump
5. Income from his agriculture lands
6. Income from farm house

Current Investments/Properties

Existing Portfolio of Raghuveer Singh					
S.No.	Type of Investment	Amount Rs.	% of Total	Indicative Returns (p.a)	Volatility
Equity Funds					
1	Direct Equities	25,75,000	15.90	18.00%	36.00%
2	Equity Based Mutual Funds	1,90,000	1.17	15.00%	18.00%
Income Funds					
3	Post Office Monthly Income Scheme	9,00,000	5.56	8.00%	0%
4	Income Scheme of Mutual Funds	83,000	0.51	7.00%	2.50%
5	Sr. Citizen Savings Scheme (In parents name)	30,00,000	18.52	9.00%	0%
Bonds					
6	GOI Relief Bonds	49,65,000	30.65	6.50%	0%
7	UTI Bonds	22,36,000	13.80	6.75%	0%
Bank FDRs & Saving A/cs					
8	Bank Fixed Deposits	19,00,000	11.73	8.50%	0%
9	Saving Account	3,50,000	2.16	3.50%	0%
	Total Value	1,61,99,000	100%		

Joint Family Properties of Raghuveer Singh		
S.No.	Properties	Approx. Market Value (Rs. lakh)
1	Agriculture Land	1150
2	Farm House	800
3	Agriculture Equipments	50
4	Petrol Pump	500
5	Residential Property	250
6	Cars/Automobiles	88
	Total	2838

Current Priorities

1. Acquiring a new car for his business/personal use. Cost of the car is Rs. 10 lakh and Raghuveer intends to use this car for 7 years.
2. Taking a life insurance policy on the life of Virendra. An endowment life insurance policy has been identified in which for a sum assured of Rs. 5 lakh, premium is Rs. 25,000 per annum whereas it is Rs 500 per lakh / per annum for the term plan. Premium paying term is 16 years while total policy term is 25 years.
3. Taking a Family Floater health insurance policy for Virendra's family.
4. Starting funds accumulation for higher studies of his grand-son Dhawan.
5. Starting funds accumulation for marriage of second son Naveen
6. Providing for an income stream for his third son Sandeep
7. Investment of the amount received in award from the state government
8. Proper Retirement Planning
9. Proper Estate Planning

Current Economic Figures

1. Risk free rate of return=8% per annum
2. Inflation= 7% per annum

Questions:

- 15) Raghuveer has asked you to give him a written assurance that if you prepare a Financial Plan for him, then in no case you would reveal any of his information to any other person, including his family members. As per FPSB Code of Ethics, is it possible for you? (3)
- A) Yes
B) No
C) Yes, but with prior consent of all relevant family members.
D) No, because client has no authority to demand such type of assurance.
- 16) After working on the restructuring of the existing portfolio of Raghuveer Chaudhary, you have recommended for a major shift into equities and he has acted upon your advice implicitly. Unfortunately in the current year, equities performed badly and Raghuveer's portfolio lost almost 50% of the original investment. If he blames you for the same, then on what ground you may seek relief? (2)
- A) Volenti non fit injuria (to a willing person one cannot do injustice)**
B) Caveat emptor (let the buyer beware)
C) Cuiusvis hominis est errare (every human can make a mistake)
D) Ignorantia legis non excusat (ignorance of the law is no excuse)
- 17) Raghuveer is considering two different options for his new car which are as follows: 1. Acquiring the car on a monthly lease of Rs. 20,000 payable for 7 years with no upfront payment. First payment is payable after one month from acquiring the car. 2. Take a car loan of Rs. 8 lakh and make the rest of the payment from his pocket. Car loan rate of interest is 12.50% p.a and assume rate of depreciation @15% p.a for the whole term after which the car may be sold at written down value. Which option should he opt if risk free rate of return is the opportunity cost? (Mark your choice without considering any taxation aspect & in both cases normal wear and tear of the car is with Raghuveer only) (5)
- A) Option 1 as it has a higher NPV
B) Option 1 as it has a lower NPV
C) Option 2 as it has a higher NPV
D) Option 2 as it has a lower NPV
- 18) The insurance policy which has been identified for Virendra carries a guaranteed bonus of Rs. 75 per thousand and an additional loyalty bonus of 45% of face value, if policy continues for more than 20 years. Raghuveer wants to know the risk (term plan) adjusted IRR which is expected on the proposed life insurance policy of Virendra. According to you the same is _____ . (5)
- A) 8.80% p.a.**
B) 8.68% p.a.
C) 8.08% p.a.
D) None of the above
- 19) For accumulation of higher education funds for Dhawan, Raghuveer is considering two options:
A) to take a Unit Link Insurance Policy in which Dhawan is the life assured
B) to start investments in a good equity based Mutual Fund.
According to you, which option is advisable? (3)
- A) ULIP
B) Equity Mutual Fund
C) Equity mutual fund with a combination of term insurance plan.
D) Data insufficient
- 20) Raghuveer wants to know what maximum amount can be claimed with respect to each covered family member in the proposed health insurance policy of Virendra's family. (2)
- A) Each family member can claim upto one third amount of total sum assured.

- B) Both the parents can claim upto 40% each of the sum assured while the child can claim 20% of the sum assured.
- C) **No limit is defined for individual family member subject to overall sum assured.**
- D) None of the above
- 21) Prior to consultations with you, Raghuveer had opened a Post Office MIS account on May 10th 2008 and a Post Office RD account on June 10th 2008 for accumulation of funds for Naveen's marriage. RD account was opened to receive monthly interest from MIS account for the full term. Raghuveer wants to know the maturity amount of his investments done in the PO MIS and RD account. (Assume that RD account shall be extended for one year after maturity. Further, Raghuveer shall not reinvest the maturity proceeds of the MIS account till the RD account also matures. For calculation purpose take 0.6211% as monthly rate of interest for the RD account) (3)
- A) Rs. 12,97,788
- B) Rs. 13,50,839
- C) **Rs. 14,91,040**
- D) Rs. 14,85,178
- 22) Prior to consultations with you, Raghuveer had opened a Post Office MIS account on May 10th 2008 and a Post Office RD account on June 10th 2008 for accumulation of funds for Naveen's marriage. RD account was opened to receive monthly interest from MIS account for the full term. Raghuveer wants to know the CAGR on his investments in MIS & RD account put together upon maturity? (Assume that RD account shall be extended for one year after maturity. Further, Raghuveer shall not reinvest the maturity proceeds of the MIS account till the RD account also matures. For calculation purpose take 0.6211% as monthly rate of interest for the RD account) (4)
- A) **8.65% p.a.**
- B) 8.50% p.a.
- C) 8.00% p.a.
- D) 8.33% p.a.
- 23) Raghuveer wants to take your advice about his Retirement Planning. He is eager to know the time when he should plan for his retirement? (2)
- A) **Immediately**
- B) At the time of dissolution of his joint family
- C) In case he does not get re-elected as an MLA
- D) After the demise of his father
- 24) Raghuveer wants to know the minimum & maximum possible returns on his existing portfolio if returns are normally distributed. The same is _____. (5)
- A) **-8.66%, 27.02%**
- B) -8.19%, 25.02%
- C) -27.02%, 8.66%
- D) -10.33%, 6.49%
- 25) Raghuveer is seriously concerned with the ongoing rising inflation. Taking a bitter experience of his earlier equity investments, he is keen to do some investments in debt instruments. Keeping in view the constantly rising inflation rate into account, which type of investment, from the given options, is advisable for Raghuveer in the current scenario? (2)
- A) Bank FDR
- B) Long Term Bonds
- C) Short Term Bonds
- D) **Floating Rate Bonds**

- 26) Raghuveer wants to have an income provision of Rs. 10,000 per month in today's value (subject to inflation) for Sandeep from his age of 30 onwards. What upfront deposit should Raghuveer make today in a 9 % p.a yield investment for this requirement? (4)
- A) Rs. 42.50 lakh
B) Rs.62.85 lakh
C) **Rs. 56.39 lakh**
D) Rs. 103.09 lakh
- 27) Raghuveer wants to know the currently applicable rate of tax on his proposed award. The same is _____ . (3)
- A) Applicable normal rate of tax on his taxable income.
B) Flat 20%
C) Flat 10%
D) **Nil**
- 28) In January 1984 Raghuveer had invested in XYZ Ltd. company's 1000 partially convertible debentures @ Rs.200 per debenture (face value @100 Rs each). These debentures were never listed at any stock exchange. 60% portion of these debentures was converted into 2000 shares of the same company in January 2006. (Conversion Ratio= 1 Debenture: 2 Shares, Face value Rs. 10 per share). Mr. Chaudhary sold all his 1000 debentures (the non converted portion) in March 2008 @ Rs. 310 per debenture but he did not sell any of the shares received after conversion. CII index for 1983-84 is 116, 2005-06 is 497 and 2007-2008 is 551. Raghuveer wants to know the amount of tax on the capital gains on this transaction (ignore any surcharge/education cess). (5)
- A) Rs. Nil
B) **Rs. 46,000**
C) Rs. 23,000
D) None of the above
- 29) Raghuveer has not done any Estate Planning as of now. Even his father has not prepared any Estate Planning documents. As Raghuveer is the only son of his parents, along with his 3 sisters, what is most suitable for him? (2)
- A) Raghuveer's father should first prepare his Will and on the basis of that Will Raghuveer should prepare his own Will.
B) **Raghuveer should create his own Will without waiting for his father's Will.**
C) There is no need for any Estate Planning as the family is a joint family & Raghuveer is the only son of his parents.
D) Raghuveer should create his Will by including his father's property but with an inbuilt provision for his sisters on account of that property.

Solutions Case Study: Mr. Raghuvveer Singh

Q15 B) No

Q16 A) Volenti non fit iniuria

Translation: "To a willing person one cannot do injustice."

B) Caveat emptor.

Translation: "Let the buyer beware."

C) Cuiusvis hominis est errare

Translation: "Every human can make a mistake."

D) Ignorantia legis non excusat

Translation: "Ignorance of the law is no excuse."

Q17

On Road Value of Car=	10	lakh	Value of car after 7 years	1.00	1000000	850000
Time to use=7 years=	84	months		2.00	850000	722500
Lease Rate=	20000	per month		3.00	722500	614125
Car Loan=	8	lakh		4.00	614125	522006
Initial Upfront Payment=	2	lakh		5.00	522006	443705
Rate of Interest on car loan=	12.50%	pa		6.00	443705	377150
Depreciation=	15%	pa		7.00	377150	320577
Car loan EMI=	14337	per month				
Opportunity Cost=	8%	pa				

Value at the end of 7th Year 320577
 Less last EMI -14337
Value received in last 306240

	Option 1 Lease	Option 2 Car Loan
0	0	-200000
1	-20000	-14337
2	-20000	-14337
3	-20000	-14337

4 -20000
5 -20000
6 -20000
7 -20000
8 -20000
9 -20000
10 -20000
11 -20000
12 -20000
13 -20000
14 -20000
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34 -20000
35 -20000
36 -20000
37 -20000
38 -20000
39 -20000
40 -20000

4 -14337
5 -14337
6 -14337
7 -14337
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32 -14337
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35 -14337
36 -14337
37 -14337
38 -14337
39 -14337
40 -14337

41	-20000	41	-14337
42	-20000	42	-14337
43	-20000	43	-14337
44	-20000	44	-14337
45	-20000	45	-14337
46	-20000	46	-14337
47	-20000	47	-14337
48	-20000	48	-14337
49	-20000	49	-14337
50	-20000	50	-14337
51	-20000	51	-14337
52	-20000	52	-14337
53	-20000	53	-14337
54	-20000	54	-14337
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62	-20000	62	-14337
63	-20000	63	-14337
64	-20000	64	-14337
65	-20000	65	-14337
66	-20000	66	-14337
67	-20000	67	-14337
68	-20000	68	-14337
69	-20000	69	-14337
70	-20000	70	-14337
71	-20000	71	-14337
72	-20000	72	-14337
73	-20000	73	-14337
74	-20000	74	-14337
75	-20000	75	-14337
76	-20000	76	-14337
77	-20000	77	-14337

78	-20000	78	-14337
79	-20000	79	-14337
80	-20000	80	-14337
81	-20000	81	-14337
82	-20000	82	-14337
83	-20000	83	-14337
84	-20000	84	306240
	-1,283,185		-930,193

D) because option 2 has a lower NPV

Q18	Term Plan (Risk Premium)=	2500	pa	Policy Face Value=	500000
	Installment=	25000	pa	Bonus @75 per thousand=(75*500*25)	937500
	Premium Paying Term=	16	years	Loyalty Bonus @45% of Face Value=	225000
	Total Policy Term	25	years	Policy Maturity Value	1662500

Year	(25000-2500)
1	-22500
2	-22500
3	-22500
4	-22500
5	-22500
6	-22500
7	-22500
8	-22500
9	-22500
10	-22500
11	-22500
12	-22500
13	-22500
14	-22500
15	-22500
16	-22500
17	2500
18	2500
19	2500
20	2500

Total Initial Investment= 900000
 MV in PO MIS= 945000
 MV in RD A/C= 546040
C) Total MV= 1491040

Q22 N= 73 Months (6 year term for PO MIS account and PO RD account shall come to the maturity after one month delay from PO MIS account)

PV= -900000
 FV= 1491040
 N= 73 Months

0.006939507 Per Month
 1.086527
A) CAGR= 8.65 PA

A)
Q23 Immediately

Q24 Existing Portfolio of Mr. Raghuvveer Singh

SNo.	Type of Investment	Amount INR	% of Total	Indicative Returns	Volatility	Max Ret.	Min Ret	Max PF Ret	Min PF Ret
	Equity Funds		in %	in %	in %	in %	in %	in %	in %
1	Direct Equities	2575000	15.90	18	36	126	-90	20.03	-14.30643867
2	Equity Based Mutual Funds	190000	1.17	15	18	69	-39	0.81	-0.457435644
Income Funds									
3	Post Office Monthly Income Scheme	900000	5.56	8	0	8	8	0.44	0.444471881
4	Income Scheme of Mutual Funds	83000	0.51	7	2.5	14.5	-0.5	0.07	-0.002561887
5	Sr. Citizen Savings Scheme	3000000	18.52	9	0	9	9	1.67	1.666769554
Bonds									
5	GOI Relief Bonds	4965000	30.65	6.5	0	6.5	6.5	1.99	1.992252608
6	UTI Bonds	2236000	13.80	6.75	0	6.75	6.75	0.93	0.931724181

Bank FDRs & Saving A/cs

7	Bank Fixed Deposites	1900000	11.73	8.5	0	8.5	1.00	0.996975122
8	Saving Account	350000	2.16	3.5	0	3.5	0.08	0.075621952
	Total Value	16199000	100.00				27.02	-8.66
							Maximum	Minimum

A)

Maximum Return= (in%) **27.02**

Minimum Return= (in%) **-8.66**

Q25 D) Floating Rate Bonds

Q26 Today's value= Rs. 10000 per month
 Inflation= 7% per annum
 Rate of Return= 9% per annum
 Time till stattring= 7 years
 Amount after 7 years= 10000×1.07^7 16057.81

Inflation adjusted rate after 7 years= $1.09/1.07$

0.018692 per annum
 0.001558 per month

Then amount needs to be available to fetch this amount (pm)= $16057.81/0.001557632$ 10309117

C) Amount required to be deposited today to get this amount after 7 years= $10309117/1.09^7$

5639440

Q27 D) Nil

Q28 B) capital gain is $(310000-80000) \times .2=46000$

Q29 B) Raghuvver can create his own will without waiting for his father's will

Case Study: Rakesh Gupta

Today is August 23rd 2008. Rakesh Gupta, aged 40, having life expectancy of 70, is a Senior Manager in Maximus Tech Solutions Ltd Mumbai, for the past 8 years. He has a total of 18 years of work experience and plans to work till his age of 55. His wife Sulekha, aged 37, is a house wife. They have two children – Sonia (11) and Tejas (6).

The family stays in Malad (Mumbai) in their own apartment. Rakesh had bought this apartment about 6 years ago for Rs. 17 Lakh which seemed like a king's ransom then. Now the same apartment is priced close to Rs. 50 Lakh. Municipal tax for the same is Rs. 12,000 p.a. which is paid in advance by Rakesh every financial year.

At present Rakesh brings home Rs. 77,000 p.m. after taxes and other statutory deductions. His Basic Salary is Rs. 35,000 p.m. and HRA is 60% of Basic Salary while the balance amount is received under tax free perks & other benefits. Rakesh expects his post tax salary to increase at an average rate of 10% annually. His retirement funds add up to Rs. 1,17,600 p.a. He has accumulated Rs. 8.25 Lakh in his retirement account with his employer till date.

Rakesh has a car which he uses to commute to his office. The current value of the car is Rs. 1.80 Lakh. His personal expenses include petrol expenses for commuting to work (Rs. 5,500 p.m.) and other expenses of Rs.3,000 p.m. The family's household expenses are Rs.19,000 p.m. including Telephone, Electricity, Education and all other incidental expenses. Society charges are Rs. 2,150 p.m. All expenses keep moving up 7% annually. Rakesh also sends a fixed sum of Rs. 7,500 p.m. to his parents.

Rakesh had taken a housing loan of Rs. 8.50 Lakh which is now down to just Rs. 5 Lakh. Interest rate is 11% p.a. and his EMI is Rs. 9,100. His lender has a 3.50% prepayment penalty clause on the outstanding amount in case of prepayment by the borrower.

Rakesh has been investing Rs. 5,000 p.m. in a Mutual Fund Diversified Equity scheme through SIPs for the past 4 years. Apart from these SIPs, he has also invested Rs. 2.45 Lakh in other Mutual Funds, whose current value is Rs. 4.10 Lakh. He also has equity investments of Rs. 6.50 Lakh and Post Office MIS to the tune of Rs. 2.25 Lakh. He has also invested Rs. 1.50 Lakh in NSCs in his own name 3 months back. He has a bond of Rs. 10,000 giving annual return of 8%. MF returns can be assumed to be 10% p.a. (net of expenses).

Meanwhile you have suggested to Rakesh that PPF account would be a useful tool for accumulation of retirement funds in his case. He should open this account on 31st March 2009 with currently permissible maximum contribution and to maintain this account with the same contribution till maturity. Further the account should be extended with the same contribution for 3 consecutive blocks of 5 years each. While suggesting this you have assumed that present rate of interest shall remain constant for the whole term.

Presently Rakesh has 5 Life Insurance policies, details of which are as follows:

- 1) A Jeevan Shree policy– S.A. Rs. 5 Lakh for which he is paying Rs. 26,735 p.a. as premium
- 2) Endowment plans (3 policies) – S.A. Rs. 1.50 Lakh each for which he is paying a sum total of Rs. 18,650 p.a., as premium (20 years term).
- 3) A ULIP plan – S.A. Rs. 3 Lakh for which he is paying Rs. 30,000 p.a. as premium.

The endowment Insurance policies can be assumed to give a bonus of Rs. 50 per thousand sum assured. You have suggested Rakesh to take a fresh term insurance for which he is informed by the life insurance company that the tabular premium shall be Rs. 3.50 per thousand sum assured.

Rakesh is a much sought after professional now for his experience and grasp over technology. He has got an offer from another company, which is offering him a 60% increase in his take home pay. This company also gives the flexibility to work as a consultant. He is seriously considering this offer as the company has an excellent track record and is known to be employee friendly. They have even promised to allot him ESOPs.

Goals

Rakesh has one ambition for his children – he wants them to become doctors. Rakesh has been saving regularly for the same. The current value of these savings stands at Rs. 5 Lakh per child. Sulekha has a dream of her own. She wants to own a bungalow in her hometown in Himachal Pradesh, where she would like to settle down, after Rakesh's retirement. The bungalow would cost Rs. 45 Lakh then, along with the plot. For this dream she has accumulated Rs. 1.75 Lakh till date over the years. In addition to this amount she is confident of saving Rs. 1,250 p.m. from her monthly household budget for the first 3 years and to increase this saving by Rs. 1,000 p.m. from the starting of every 4th year unto Rakesh's retirement.

Rakesh would like to change his car after changing his job. He wants to buy a Toyota Innova for which the dealer "Lakozy Toyota" is offering him three schemes as follows:

	Scheme1	Scheme 2	Scheme 3
Car Value	Rs. 8,91,660	Rs. 8,91,660	Rs. 8,91,660
Loan Amount	Rs. 7,12,000	Rs. 7,12,000	Rs. 8,02,000
Margin Money	Rs. 1,79,660	Rs. 1,79,660	Rs. 89,660
EMI (No Advance EMI)	Rs. 21,945	Rs. 14,940	Rs. 27,410
Various charges	Rs. 63,902	Rs. 67,098	Rs. 72,000
Tenor	3 years	5 years	3 years
Discounts	Nil	Nil	Rs. 70,000**

** To be adjusted in margin money

Rakesh had also long desired to take his family on a trip to Europe which is expected to cost Rs. 4 Lakh. He is now thinking that his new job can help him realize that ambition, in view of increased salary that he is expected to get.

Questions

- 1) Rakesh informed you that prior to consultations with you, he had contacted another CFP^{CM} practitioner who demanded a flat remuneration of 35% of the "Assets under Management" from Rakesh for providing his services. Is there any violation of "Code of Ethics" as stipulated by FPSB India by the earlier Practitioner?
(3)
 - A) This is a matter of mutual consent between the practitioner and the client only.
 - B) This is a violation of Code of Ethics of Professionalism.
 - C) **This is a violation of Code of Ethics of Fairness.**
 - D) This is a violation of Code of Ethics of Compliance.
- 2) Rakesh has been offered three schemes from the car dealer for purchasing his Toyota Innova. What is the interest rate being charged in all three schemes and which option is most beneficial for him in terms of interest rate being charged?
(4)
 - A) **6.88%, 9.46%, 14.00%; Scheme 1.**
 - B) 11.17%, 5.66%, 8.05%; Scheme 1.
 - C) 11.12%, 9.86%, 13.00%; Scheme 2.
 - D) 11.12%, 14.00%, 8.18%; Scheme 3.
- 3) Rakesh wants to know, what approximate amount is standing currently in his MF Diversified Equity scheme?
(3)
 - A) Rs. 2.78 lakh
 - B) Rs. 2.88 lakh
 - C) **Rs. 2.91 lakh**

- D) Rs. 2.94 lakh
- 4) Rakesh wants to discontinue all the three endowment policies and instead invest in a combination of a Mutual Fund Scheme and a Term Insurance Plan for the same sum assured. The surrender value of the old endowment policies will be 55% of the premiums paid. A total of 5 premiums have been paid as of now. The surrender value and future premiums he would have paid can be deployed in a Mutual Fund scheme giving an annual return of 14%. What maturity value he is expected to get from his endowment plans, if he were to continue it till the end? Also indicate the maturity value in case he surrenders the policy and starts redirecting the premium and the surrender value from this point onwards in a combination of MF and Term insurance plan. (5)
- A) **Rs. 9,00,000; Rs. 12,19,502**
 B) Rs. 9,00,000; Rs. 11,14,696
 C) Rs. 9,55,000; Rs. 11,83,748
 D) Rs. 9,55,000; Rs. 12,98,221
- 5) As per your assessment Rakesh needs additional life insurance on the basis of Human Life Value (HLV). How much additional life insurance does he require? (For calculations assume same income tax treatment as is prevalent now even for future years; the whole annual salary is coming at the year end; no existing investments taken into account, all calculations to be done at the end of the current year and the discounting factor is 8% p.a.) (5)
- A) **Rs. 129 Lakh**
 B) Rs. 105 Lakh
 C) Rs. 115 Lakh
 D) Rs. 118 Lakh
- 6) Rakesh wants to know that in case he decides to clear his housing loan after payment of 36th EMI from now, how much he will have to pay to foreclose the loan at that time. (3)
- A) Rs. 3,02,116
 B) **Rs. 3,19,183**
 C) Rs. 3,08,389
 D) Rs. 3,14,605
- 7) Rakesh wants to plan for his dream of making both of his children professional doctors. He estimates that it would cost about Rs.18 Lakh per child in today's cost. Both the children shall join the medicine course after completing 17 years of age. Total required money is to be provided at the beginning of the education. What amount would Rakesh need to save at the beginning of every month from today till the remaining period for Sonia and Tejas respectively? (Assume Rakesh uses his currently available children education fund for the same & gets an investment return of 10% p.a. Education cost is increasing 8% every year. All calculations have to be done on a monthly compounding basis). (5)
- A) Rs. 21,026 and Rs. 30,895
 B) **Rs. 19,687 and Rs. 11,217**
 C) Rs. 20,445 and Rs. 30,895
 D) Rs. 21,026 and Rs. 30,639
- 8) For Sulekha's dream bungalow how much more amount would the family have to pay over and above what Sulekha will have with her at the time of Rakesh's retirement? (Assume Sulekha is saving in a Mutual Fund yielding 10% annual returns compounded monthly). (3)
- A) Rs. 32,45,112

- B) Rs. 32,02,476
 C) Rs. 26,19,175
 D) **Rs. 26,12,117**
- 9) In case Rakesh wants to withdraw from the accumulated fund of his PPF account, what will be the maximum equated yearly withdrawal which can be availed by him from his proposed PPF account during the first extension block? (Assume all withdrawals are made on 1st April of the respective years). (3)
- A) Rs. 4,24,540
 B) **Rs. 2,54,724**
 C) Rs. 2,12,270
 D) Rs. 2,86,540
- 10) What maturity value will Rakesh get at the end of the whole term from his PPF account if he makes withdrawals of Rs. 2,00,000 on 1st April of every year in the first extension block? (3)
- A) Rs. 55,22,700
 B) Rs. 45,15,691
 C) **Rs. 58,98,452**
 D) Rs. 51,86,226
- 11) Rakesh is keen to buy a deferred annuity policy for his retirement period in which he receives a fixed annuity of Rs. 3 Lakh p.a. starting from his retirement. What maximum one-time payment should Rakesh pay today for this policy if the applicable discount rate is 8% p.a. for the whole term? (Assume all annuity installments are required in annuity due mode). (2)
- A) **Rs. 8,74,251**
 B) Rs. 7,73,271
 C) Rs. 6,47,522
 D) Rs. 8,09,491
- 12) Rakesh's parents are senior citizens. They have no other source of income other than what they get from Rakesh per month. Rakesh wants to ensure a separate source of cash inflow for them thereby ending their dependency upon him. For this purpose he wants to deposit Rs. 5 lakh each in the name of both of his parents in Senior Citizen Saving Scheme, 2004. However before doing so he wants to know from you whether the same is allowed. (2)
- A) No, any deposit in the said scheme should be made only from the retirement benefits of the concerned depositor.
 B) **Yes, after the age of 60 years of depositor, source of deposit is immaterial.**
 C) No, any deposit in the said scheme should be sourced from self funds only.
 D) Yes, any person not having any source of income can make a deposit in the said scheme.
- 13) Rakesh is not sure about the tax treatment of shares proposed to him by the new company through ESOPs. He wants to know the tax treatment of the same at the time of vesting and selling. (Assume shares are sold through recognized stock exchange). (3)
- A) Rakesh has to pay the normal rate of taxes as per prevailing legislation on both occasions.
 B) The employer pays FBT on the allotment price; Rakesh has to pay STCG if he sells within 12 months or Nil after that.
 C) **The employer/employee pays FBT on the difference between allotment price and Fair market price at vesting at the time of exercise of the option; Rakesh has to pay STCG if he sells within 12 months or Nil after that.**

- D) Rakesh pays a concessional FBT of 10% on the allotment price; Rakesh also has to pay STCG between Allotment price and the vesting price and LTCG on difference between vesting price and his eventual selling price.
- 14) Rakesh's new employer is offering him a consolidated CTC of Rs.15 Lakh p.a. In this CTC, he is being offered two choices as below:
Option 1: Basic Salary= Rs. 44,750 p.m., DA=Rs. 40,000 p.m., HRA=27,250 p.m and Tax free perks=Rs. 13,000 p.m., Total Rs. 1,25,000 p.m.
Option 2: Basic Salary= Rs. 44,750 p.m., DA=Rs. 40,000 p.m., Tax free perks=Rs. 13,000 p.m. The company shall also take Rakesh's house on lease with a lease rent of Rs. 27,250 p.m. to him.
From a tax planning perspective which option should Rakesh opt for if the applicable interest on housing loan is Rs. 52,182 for the year under consideration? (4)
- A) **Option 1**
B) Option 2
C) Both options will have the same impact.
D) Rakesh should not take an amount greater than 60% of his Basic towards HRA or lease rent.
- 15) While drafting a Financial Plan, on examining the annual cash flow of Rakesh you have observed one crucial factor. How would you explain that factor? (2)
- A) His personal expenses' proportion is too high and needs to be curtailed.
B) His net cash flow is too high to justify a small housing loan.
C) **Excess cash which is not routed to a suitable liquid and tax efficient investment.**
D) Net cash flows will decrease in future years.

Q 5)	Year	Net salary	Personal Expenses	Insurance Prem	Net salary after deducting expenses	NPV
	1	924000	102000	75385	746615	746615
	2	1016400	109140	75385	831875	770255
	3	1118040	116780	75385	925875	793789
	4	1229844	124954	75385	1029505	817254
	5	1352828	133701	75385	1143742	840685
	6	1488111	143060	75385	1269666	864113
	7	1636922	153074	75385	1408463	887571
	8	1800615	163790	75385	1561440	911085
	9	1980676	175255	75385	1730036	934685
	10	2178744	187523	75385	1915836	958395
	11	2396618	200649	75385	2120584	982241
	12	2636280	214695	75385	2346200	1006245
	13	2899908	229724	75385	2594799	1030430
	14	3189899	245804	75385	2868709	1054818
	15	3508888	263010	75385	3170493	1079429
						136.78 → NPV
		Add: Loan Liability				5.00
		Less: Existing Insurance				12.50
		Total additional insurance required as per HLVC				129.28
Q 6)						136.78+5-12.5
		Interest rate pm (11%/12)=		0.92%		
		Current Amount of Loan =		500000		
		Outstanding Principal	Interest	EMI	Principal	
	1	500000	4583	9100	495483	OS Principal+Interest-EMI
	2	495483	4542	9100	490925	
	3	490925	4500	9100	486325	
	4	486325	4458	9100	481683	
	5	481683	4415	9100	476999	
	6	476999	4372	9100	472271	
	7	472271	4329	9100	467500	
	8	467500	4285	9100	462686	
	9	462686	4241	9100	457827	
	10	457827	4197	9100	452924	
	11	452924	4152	9100	447976	
	12	447976	4106	9100	442982	
	13	442982	4061	9100	437943	
	14	437943	4014	9100	432857	
	15	432857	3968	9100	427725	
	16	427725	3921	9100	422546	
	17	422546	3873	9100	417319	
	18	417319	3825	9100	412045	
	19	412045	3777	9100	406722	
	20	406722	3728	9100	401350	
	21	401350	3679	9100	395929	
	22	395929	3629	9100	390459	
	23	390459	3579	9100	384938	

24	384938	3529	9100	379366				
25	379366	3478	9100	373744				
26	373744	3426	9100	368070				
27	368070	3374	9100	362344				
28	362344	3321	9100	356565				
29	356565	3269	9100	350734				
30	350734	3215	9100	344849				
31	344849	3161	9100	338910				
32	338910	3107	9100	332917				
33	332917	3052	9100	326868				
34	326868	2996	9100	320765				
35	320765	2940	9100	314605				
36	314605	2884	9100	308389	314605+2884*9100			
		Add: Prepayment Penalty @3.5%		10794	308389*0.035			
		Total amount required to pay		319183	10794+308389			

Q 9)	Year	Op Bal	Withdrawal	Contribution	Interest	CI Bal		
	0	0	0	70000	0	70000	Contribution+Interest-Withdrawal	
	1	70000	0	70000	5600	145600		
	2	145600	0	70000	11648	227248		
	3	227248	0	70000	18180	315428		
	4	315428	0	70000	25234	410662		
	5	410662	0	70000	32853	513515		
	6	513515	0	70000	41081	624596		
	7	624596	0	70000	49968	744564		
	8	744564	0	70000	59565	874129		
	9	874129	0	70000	69930	1014059		
	10	1014059	0	70000	81125	1165184		
	11	1165184	0	70000	93215	1328399		
	12	1328399	0	70000	106272	1504671		
	13	1504671	0	70000	120374	1695044		
	14	1695044	0	70000	135604	1900648		
	15	1900648	0	70000	152052	2122700	1273620	254724
							2122700*0.6	1273620/5
Q 10)	Year	Op Bal	Withdrawal	Contribution	Interest	CI Bal		
	0	0	0	70000	0	70000	Contribution+Interest-Withdrawal	
	1	70000	0	70000	5600	145600	70000+70000+5600-0	
	2	145600	0	70000	11648	227248	145600+70000+11648-0	
	3	227248	0	70000	18180	315428		
	4	315428	0	70000	25234	410662		
	5	410662	0	70000	32853	513515		
	6	513515	0	70000	41081	624596		
	7	624596	0	70000	49968	744564		
	8	744564	0	70000	59565	874129		
	9	874129	0	70000	69930	1014059		
	10	1014059	0	70000	81125	1165184		
	11	1165184	0	70000	93215	1328399		
	12	1328399	0	70000	106272	1504671		
	13	1504671	0	70000	120374	1695044		
	14	1695044	0	70000	135604	1900648		
	15	1900648	0	70000	152052	2122700		
	16	2122700	200000	70000	153816	2146516	(2122700+70000+153816)-200000	
	17	2146516	200000	70000	155721	2172237		
	18	2172237	200000	70000	157779	2200016		
	19	2200016	200000	70000	160001	2230017		
	20	2230017	200000	70000	162401	2262419		
	21	2262419	0	70000	180993	2513412		
	22	2513412	0	70000	201073	2784485		
	23	2784485	0	70000	222759	3077244		
	24	3077244	0	70000	246180	3393423		
	25	3393423	0	70000	271474	3734897		
	26	3734897	0	70000	298792	4103689		
	27	4103689	0	70000	328295	4501984		
	28	4501984	0	70000	360159	4932143		
	29	4932143	0	70000	394571	5396714		
	30	5396714	0	70000	431737	5898452	maturity amount	

Case Study : Prasoon Bharti

Today is 23rd August 2008. Prasoon J. Bharti who has turned 38 today, is a busy executive employed with a multi-national firm. His wife Sumita, aged 35 years, is working. The couple has two children - daughter Piya aged 12 years and son Vansh aged 6 years. The family lives in a house owned by Prasoon in uptown Mumbai.

Prasoon Bharti has a current annual package of Rs. 12 lakh p.a. having a basic salary of Rs. 52,000 p.m. He has accumulated PF benefits of Rs. 12.25 lakh in his account as of March, 2008. Prasoon and his employer each contribute 10% of basic salary per month to the PF account which carries an interest rate of 9% p.a. compounded half-yearly. Prasoon's basic salary increases by 10% each year in April.

Sumita has been working in a foreign bank for over a decade and has an all-inclusive current package of Rs. 6 lakh p.a. with increment of 6% affected in January every year. She is neither covered under PF nor under any Pension scheme by her employer. She plans to work till her daughter is married. Thereafter, she may join some NGO for social work or assist her husband in his venture.

Their current household expenses are Rs.9.60 lakh per annum. Prasoon took a 15-year endowment life insurance policy for Rs. 20 lakh Sum Assured five years ago, the premium being Rs. 85,750, paid annually. Bharti's are very health conscious and thus the entire family's medical expenditure is within Rs. 15,000 for the past many years. There is no family history of heart disease, diabetes, asthma, etc.

Prasoon has not taken any loan but has recently invested in an upcoming housing project in suburban Mumbai for a flat worth Rs. 44 lakh of which Rs. 4 lakh down payment has been made on 1st August 2008. He has to pay 20% of the remaining amount on 1st February, 2009 and another 20% six months thereafter. The 3rd installment of 30% shall be due on 1st February, 2010 and the final 30% one year thereafter, pursuant to which the possession can be had. Prasoon Bharti has a self-driven car of 2004 make which is in good condition. The couple has already made the following investments:

Prasoon Bharti : Balance of outstanding units as on 31st March, 2008 in the following schemes of a Mutual Fund:

1. Rs. 5 lakh in the Money Market Mutual Fund (MMMF);
2. Rs. 3,08,870 (NAV Rs. 40.38) in a diversified equity scheme of a Mutual Fund;
3. Rs. 57,987 (NAV Rs. 15.24) in the designated pension scheme of a Mutual Fund.

Prasoon has given standing instructions to the Mutual Fund for switch-out to the extent of Rs. 10,000 by redeeming equivalent units from MMMF and switch-in to the extent of Rs. 5,000 each in diversified equity scheme and pension scheme of the same mutual fund w.e.f. 1st April 2000 to 1st March 2012. The switch-out and switch-in are being affected on the 1st of every month. The said MMMF generates an intrinsic return of 6% p.a.

Sumita Bharti : Balance of outstanding units Rs. 1,54,959 in an open-ended Equity Linked Savings Scheme as on 31st March 2008; NAV Rs. 16.49. Standing instructions were given to the banker in November, 2006 to pay Rs. 10,000 p.m. on 1st of every month beginning January 2007 onwards from her Salary Account for a period of 10 years for investment in the said ELSS scheme.

Prasoon & Sumita Bharti : D-Mat Account having the following investments:

1. 2000 units of an Exchange Traded Fund (ETF) tracking NSE Nifty Index (bought at Rs. 394.25 per unit a year ago and currently trading at Rs. 417.75 per unit). The Nifty Index last traded at 4227.25.
2. Equity shares of 12 large capitalized companies having weights of 8-10% each in the portfolio aggregating to a value of Rs. 6.76 lakh (at current valuation).
3. 100 units of Gold Exchange Traded Fund (bought at Rs. 894.60 per unit a year ago, currently trading at Rs. 1329.45 per unit).

The couple has high aspirations regarding the educational milestone for their children. They have planned for Piya's higher education 6 years from now and Vansh's higher education preferably at a foreign university 12 years from now. The lump-sum requirements are estimated to the extent of Rs. 35 lakh for Piya and Rs. 65 lakh for Vansh at the then prevailing prices. The outgoings are to be met from the investments of the family in process. Prasoon and Sumita have now approached you to scrutinize their investment plan and advise wherever there are gaps in meeting their chosen financial goals. You can make a reasonable assumption regarding inflation to be at 6% p.a. and prevailing risk free interest rate at 7% p.a. throughout.

Questions

- 16) While entering into a relationship with you, Prasoon assumed that you being a practicing Certified Financial Planner, you are fully able to take care of the execution of all aspects of his Financial Plan, i.e. Taxation, Insurance, Investments, etc. As per FPSB India Code of Ethics, what is the best proposition in this context? (3)
- A) This is the right assumption which can be made about all Certified Financial Planners.
 - B) The scope and limitations of the services of the Certified Financial Planner needs to be disclosed in the beginning, specifically in writing, by the Certified Financial Planner to the client.**
 - C) A Financial Planner can never take care of all aspects of a Financial Plan.
 - D) A Financial Planner is concerned with only making a Financial Plan and not its execution.
- 17) Prasoon Bharti has tied up with a bank for housing loan at fixed rate of interest of 12.5% p.a. disbursable in tune with the timing and amounts required to be paid to the builder for the remaining amount of Rs. 40 lakh. The tenure of loan is 12 years from the date of disbursement of first installment. The EMI increases with the receipt of each fresh disbursement by the Bank. Prasoon wants to know what would be the final EMI payable after the full disbursement of loan amount. (5)
- A) Rs. 53,754
 - B) Rs. 56,041**
 - C) Rs. 59,130
 - D) Rs. 61,896
- 18) If the growth in the NAV of the invested Gold ETF from here onwards is taken at 6% CAGR (net of administration charges), Prasoon wants to know what would be the approximate tax liability on selling 100 units of the Gold ETF 10 years from now. (Ignore indexation benefit of arriving at capital gains, education cess and surcharge). (4)
- A) Rs. 13,650
 - B) Rs. 14,860**
 - C) Rs. 16,300
 - D) Rs. 19,750
- 19) Prasoon is seeking your advice regarding suitability of a health insurance plan for his family. Taking into account the health status of the family, what would be your advice? (3)
- A) The family has good liquidity to take care of any sudden medical expenses, hence no health insurance policy is required.
 - B) Given fairly good medical history, they should postpone taking health insurance for 5 more years.
 - C) A floater policy which covers the medical expenses of any member of the family, as well as disability insurance of Prasoon, at least, must be taken.**
 - D) Prasoon can save upto Rs. 15,000 under section 80 D by taking a suitable health cover to that extent.

- 20) If Piya's higher education expenses, tentatively beginning April 2014, are to be met from Prasoon Bharti's diversified equity scheme and the selling of Nifty ETF, you are approached to advise whether the chosen investments would be enough in order to meet the expenses. You estimate in consultation with Prasoon that the NAV of equity scheme grows at a CAGR of 18% during this period, and the NSE Nifty Index could be trading at 10,000. (3)
- A) **Expect shortfall of Rs. 2.19 lakh.**
 B) Expect shortfall of Rs. 2.05 lakh.
 C) Is expected to meet the expenses.
 D) Expect surplus of Rs. 1.38 lakh.
- 21) Prasoon intends to build a retirement corpus of Rs. 2 crore required at the age of 60 through the specified Pension scheme in which he regularly switches-in Rs. 5,000 p.m. from the MMMF A/c till March 2012. Thereafter, he plans to continue a certain amount through the SIP mode of investment from his Salary Account till his age of 52. If the said scheme's NAV grows at a CAGR of 10.2% throughout, what amount of SIP would you advise him to maintain in order to achieve the desired corpus? (5)
- A) Rs. 25,250
 B) **Rs. 37,841**
 C) Rs. 42,700
 D) Rs. 45,900
- 22) If Bharti's house hold monthly expenses are Rs. 80,000 p.m. currently and inflation is estimated at 6% p.a. how many years the retirement corpus will last? Assume all withdrawals are done in the beginning of the month. The retirement corpus is Rs. 2 crore built up in Prasoon's investment in mutual fund's pension scheme at his age 60. The monthly annuity post-retirement is drawn by withdrawal from this scheme which is presumed to grow perpetually at a CAGR of 10.2%. Bharti's agree to contain their lifestyle expenses, post-retirement, to 75% of the pre-retirement lifestyle. However, inflation will be effective post-retirement also. (5)
- A) **9 years 2 months**
 B) 11 years 8 months
 C) 14 years 1 month
 D) 16 years 6 months
- 23) Prasoon wants to know the status of tax liability on annuity withdrawals post-retirement from his invested pension scheme of mutual fund, the scheme being a debt-oriented balanced fund. The plan opted by Prasoon is dividend reinvestment. You advise that the dividend distribution tax will be paid by the scheme, pursuant to which they will be tax free in the hands of Prasoon. Further, _____. (3)
- A) no taxes will be applicable on the amounts withdrawn either prior to or after retirement
 B) **the redemption NAV would be compared with the NAV on which all investments as well as dividends are invested to arrive at LTCG, if any, and shall be taxed at the lower of 10%, or 20% with indexation**
 C) the mutual fund scheme being a retirement scheme, post-retirement withdrawals are tax-free
 D) capital gains tax, as applicable, will be applicable only on investments made
- 24) Prasoon has already paid premium for his endowment life insurance policy for 5 years. The surrender value comes to approximately Rs. 3,08,000. A 20-year term insurance policy for life insurance to the extent of Rs. 40 lakh for Prasoon is available at an annual premium of Rs. 21,238. Prasoon wants to cover the life risk to the extent of Rs. 40 lakh and seeks your advice whether to continue with the existing policy or change to term plan. In your opinion, what is most appropriate of the following options? (4)

- A) He gets surrender value of existing policy which is at a loss to his total premium paid. Continue with existing policy and opt for a term insurance of the balance cover of Rs. 20 lakh.
- B) **Having adequately provided for his financial goals with suitable investments, he needs adequate cover till those goals are met. Surrender endowment policy and opt for term insurance which gives him double the cover for 10 additional years at less than one-fourth of original premium.**
- C) Without surrendering his existing policy, he can take a fresh term cover of Rs. 40 lakh as the premium on additional policy is small compared to his earlier policy.
- D) His existing investments and Superannuation benefits shall be enough in ten years from now till the existing insurance cover lasts. He may neither surrender this policy nor take additional insurance.
- 25) Praseon has planned for Piya's marriage after 10 years, the present expenses for which are presumed to be Rs. 20 lakh. Praseon intends to meet these expenses by systematically redeeming his equity portfolio. Assume that the equity portfolio grows at an annualized rate of 23% upto 9 years. In the first half of the tenth year the market declines by 10% and increases by a mere 2% in the second half. Further, after the expiry of 8 years, Praseon redeems his equity portfolio to the extent of 20% equally across all stocks, and thereafter redeems 20% of the then outstanding portfolio after every 6 months. All the amounts realized out of part redemption of portfolio will be used for marriage expenses. What could be the approximate value of remaining equity portfolio after meeting the marriage expenses? (3)
- A) **Rs. 3.5 lakh.**
- B) Rs. 3.8 lakh.
- C) Shortfall in Portfolio to the extent of Rs. 2 lakh at the end of 10th year.
- D) Portfolio is barely able to meet the expenses.
- 26) The cost of Vansh's higher education, tentatively beginning in April 2020, is to be met out of Sumita's ELSS scheme, which is expected to generate returns of 20% p.a. (net of expenses). What would be the shortfall/surplus, if any, at the time the funds are required? (3)
- A) **Expect Shortfall of Rs. 4.76 lakh.**
- B) Expect to meet the liability.
- C) Expect little surplus of Rs. 1.89 lakh.
- D) Expect huge surplus of Rs. 12.51 lakh.
- 27) Praseon has filed his wife's IT returns for the AY 2008-09 in July end. As her employer had already deducted Rs. 1 lakh as income tax at source during the last year, Praseon is expecting some refund in his wife's name. The same is _____ . (3)
- A) Rs. 8,850
- B) **Rs. 9,500**
- C) Rs. 5,900
- D) Rs. 1,640
- 28) Praseon wants to know the tax treatment of the withdrawals by way of switch-outs he is making out of his Money Market Mutual Fund (MMMF) to the equity scheme and in the pension scheme. In your opinion _____ . (3)
- A) the income related to every monthly withdrawal shall be subject to normal rate of tax applicable to Praseon
- B) **the income related to monthly withdrawals shall be subject to Capital Gains Tax as is applicable to debt instruments**
- C) the MMMF being a mutual fund scheme, all income received on withdrawal shall be tax free
- D) these being switch-outs, no money is being withdrawn, hence no incidence of tax

29) Recently in an unfortunate event, one of Prasoos brother died in a road accident. He was a bachelor and he died intestate. Prasoos parents were living with his deceased brother. Apart from Prasoos there are three other siblings of the deceased. Prasoos wants to know the applicable order of priority as per Hindu Succession Act for the disposition of his deceased brother's property. (3)

- A) Both parents will get the priority over all siblings of Prasoos including Prasoos himself.
- B) All siblings of Prasoos will get the priority over their parents.
- C) **Prasoos mother will get priority over her husband and sons.**
- D) All of them will have equal right over the property of the deceased.

Case Study – Marc Amaranth

Today is 18th October 2008. Marc Amaranth, aged 38 years, life expectancy 70 years, is semi-literate. His father ran a grocery shop in which Amaranth helped him from his teen age. As Amaranth grew up, he explored various business opportunities with the help of his two young brothers Marc Sumer and Marc Shalem. Today, Amaranth is an established businessman in Mumbai. He is running two Guest Houses and two Restaurants in Mumbai; and operating a fleet of 20 taxies. Additionally, he has three shops which he has rented on profit sharing basis. The details of his family members are:

Name	Relationship with Amaranth	Age
1. Sylvester Kedhar	Father	60 Years
2. Faria	Mother	56 Years
3. Ameya	Sister	22 Years
4. Marc Sumer	Brother	29 Years
5. Marc Shalem	Brother	23 Years
6. Benzeer	Wife	31 Years
7. Joyce	Daughter	14 Years
8. Kylie	Daughter	12 Years
9. Zayed	Son	8 Years
10. Nazer	Son	7 Years
11. Freyas	Daughter	3 Years

His father Sylvester Kedhar takes care of his both the restaurants while his both brothers Sumer and Shalem look after his Guest Houses and Taxi Fleet. Legal ownership of all properties/investments is with Amaranth and his wife. His father and brothers do not have any legal rights in his business and properties. Amaranth's brother Sumer is engaged and his marriage is fixed after 6 months from now. Ameya's marriage is tentatively after one year from Sumer's marriage and Shalem's marriage is tentatively after one year from Ameya's marriage. Hearing from one of his tenants, he has contacted you, a practicing Certified Financial Planner for creating and implementing a Financial Plan for him. He has submitted the following information to you:

Sources of Income

1. Daily Rental Income from his Guest Houses
2. Daily collection from his taxies fleet
3. Daily collection from his restaurants
4. Monthly rent & profit share from his shops
5. Interest from the private money lending business

Expenditures

	Per Month
1. Household expenses	Rs. 58,000
2. Personal expenses	Rs. 15,000
3. Fuel & maintenance - Personal Cars & vehicles	Rs. 15,000
4. Fix payment to his father and both brothers	Rs. 30,000 **
**Debited to Amaranth's capital account as his personal withdrawals	
5. Children's education expenses	Rs. 28,000

Current Assets

	Current Market Value
1. 2 Guest Houses	Rs. 350 lakh
2. 20 Taxies	Rs. 35 lakh
3. 2 Restaurants	Rs. 115 lakh
4. 3 Shops	Rs. 75 lakh

5. Residential House	Rs. 200 lakh
6. Private Cars/ Vehicles	Rs. 15 lakh
7. Cash money rotating in his private money lending business	Rs. 50 lakh
8. Misc Savings/Insurance Policies/Investments	Rs. 50 lakh

Amaranth's Goals & Aspirations

1. To create an independent income source for his parents
2. To go for Holy Land pilgrimage with his entire family
3. To provide a guaranteed education fund for his children
4. To provide a separate marriage fund for his children
5. To plan for a guaranteed cash flow for his living without any physical work
6. To diversify his business interests
7. To buy a lavish Bungalow in Dubai
8. To get his siblings married in the next three years
9. To purchase 2 separate flats for his both brothers on or before their marriage

Current Economic Scenario

1. Risk free interest rate	10%
2. Inflation	11%

Historical Mutual Funds schemes' return (5-year period)

Scheme	CAGR (% p.a.)
Income schemes	6%
Balanced schemes_1 (70:30 equity-debt)	12%
Balanced schemes_2 (40:60 equity-debt)	8%
Equity Diversified schemes	16%
Fixed Maturity Plans (Annual) #	9%

The track record for Fixed maturity Plans is only for three years.

Questions

- 1) As Amaranth is a semi-literate person, he doesn't comprehend a structured communications in written English or written Hindi. He can read only Konkani though he understands Hindi in verbal communication. According to you what would be the most suitable method of recording his consent at all required instances during construction/implementation of his Financial Plan in this situation? (2)
 - A) All documents should be prepared in English only and once its Konkani/Hindi version is communicated orally to Amaranth, the documents should be got signed by Amaranth.
 - B) All papers must be prepared in Hindi only as he understands Hindi, and later his signatures must be taken on all papers.
 - C) Amaranth must give a blanket authority to you to proceed in his Financial Plan process.
 - D) The documents should be prepared bi-lingual in English and Konkani. A vernacular declarant should witness the exact validity of translation. Later the bi-lingual documents may be got signed by Amaranth.**
- 2) Amaranth has estimated expenditure of Rs. 10 lakh each (the then value) towards the marriage of his three siblings. For this, he does not want to encash any of his existing investment rather he is willing to take a loan against property for this purpose. He will take this loan right now and until the expenditure is required for the respective marriages, he will invest the loan proceedings into his private money lending business in which he can easily get a return of 1.50% per month. Amaranth shall lend this amount to a

private investor who will repay the required amount for the marriage at the time of each and every respective marriage (including principal and interest amounts). He wants to know how much loan he should take right now if he intends to repay his property loan from the time of marriage of Sumer by way of EMI over a period of next 5 years. He also wants to know the amount of his EMI if the interest rate on this property loan is 14.50% per annum (compounding monthly)? (5)

- A) **Rs. 23,19,216, Rs. 58,645**
- B) Rs. 24,92,521, Rs. 54,567
- C) Rs. 26,15,340, Rs. 61,534
- D) Rs. 24,33,495, Rs. 57,256

3) One day, in one of Amaranth's restaurants, one boiler exploded accidentally, causing death of two persons dining there. Now the families of the deceased want a claim under "The Public Liability Insurance Act 1991". Amaranth wants to know his liability under the said act for this incident. According to you the same is _____ . (3)

- A) Rs. 25,000
- B) Rs. 12,500
- C) Rs. 6,000
- D) **Nil**

4) Amaranth prefers Comprehensive Insurance for his fleet of taxis. This time while renewing his policy, he was surprised to notice that the premium was more for one of the taxis than what he paid last year. On investigating, he found that the insurance company has charged a "Malus" on the premium and therefore the premium is more. Amaranth wants to know what "Malus" is. You explain "Malus" as the extra premium which insurance company charges on the _____ . (3)

- A) basis of his overall claim experience in motor insurance policies issued by that company in the last 3 years
- B) **basis of claim lodged by the policy owner in the last year policy**
- C) basis of accidental track record of the driver of the insured vehicle
- D) commercial passenger carrying vehicles

5) Amaranth wants to take a life insurance policy on the life of his father as well as both his brothers, because all of them are playing a crucial role in managing his business. However, in case of any eventuality he wants to reserve all legal rights of receiving the policy benefits in his name. He wants to know whether it is legally possible for him. (2)

- A) Yes, he can take the policy in the desired way.
- B) Yes, but he cannot reserve the right to receive the policy benefits in his name.
- C) **No, in the absence of insurable interest he cannot take their life insurance policy.**
- D) Data insufficient.

6) Amaranth wants to deposit Rs. 15 lakh in Sr. Citizen Saving Scheme in the joint names of his parents. But his father, instead of consuming interest income from this account, wants to accumulate the same so as to utilize the same, along with the deposited sum, for buying a new flat for Shalem at the time of his marriage. Amaranth wants to know a suitable risk free investment vehicle where this interest can be accumulated. You advise accumulating this income in a money market mutual fund which gives an average return of 8% p.a. (net of all expenses) compounding monthly. If the Sr.Citizen Saving Scheme account is opened on 1st November 2008, Money Market Mutual Fund account on 1st January 2009 and Shalem's marriage takes place on 1st April 2011, how much amount would be cumulatively available by the time of Shalem's marriage for buying a flat for him? (5)

- A) **Rs. 18,41,318**
 B) Rs. 18,39,297
 C) Rs. 18,56,318
 D) Rs.18,54,676
- 7) Amaranth is keen to fulfill his parents' wish to go for the Holy Land pilgrimage. He is planning to accommodate all households on this pilgrimage who will inhabit his house after the marriage of Shalem. Current Holy Land pilgrimage expenses (subject to inflation) are Rs. 2 lakh per person over and above the age of 10 years and Rs. 1.40 lakh below the age of 10 years. Government of India gives 33.33% subsidy on the total expense to all Holy Land pilgrims. Amaranth wants to know, if he starts accumulating the required funds from today in an 18% p.a. yielding investment (compounding monthly), how much monthly investment he is required to make? (3)
- A) Rs. 54,965
 B) Rs. 55,789
 C) Rs. 45,426
 D) **Rs. 56,330**
- 8) In Amaranth's both Guest Houses, there is a maximum capacity to accommodate 80 persons. The average occupancy of his Guest Houses is 88% per day and current charge is Rs.250 per person per day. His net of expenses pay out from these Guest Houses is 68%. He wants to know if he sells these guest houses at current market value, how many years' income from these guest houses is taken care of if the sale proceeds are invested immediately in a 10% p.a. yielding investment. (Assume all receipts at the end of the year) (3)
- A) 27.56 Years
 B) 19.67 Years
 C) **16.95 Years**
 D) 12.88 Years
- 9) Amaranth in his private money lending business, usually deals with small shop keepers and lends them money on the condition of collecting from them repayment on a daily basis. He usually gives upfront Rs.9,000 to a shop keeper and in return receives 100 installments of Rs. 100 per day from him. What annual effective rate of interest is being earned by Amaranth on such lending? (3)
- A) 44 %
 B) 78 %
 C) 83 %
 D) **117 %**
- 10) Amaranth wants to buy a Bungalow in Dubai. As per current RBI provisions, how much investment can Amaranth make directly in Dubai in his individual capacity for buying the bungalow? (3)
- A) There is no upper ceiling for the same. He can do as much investment as he wants.
 B) **Maximum US\$ 2,00,000 per financial year.**
 C) Maximum US\$ 1,00,000 per financial year.
 D) Maximum US\$ 50,000 per financial year.
- 11) Amaranth firmly believes in charity. Towards this, he wants to donate 5% of his gross total income to a Trust providing full time education to orphan children. Amaranth wants to do this charity in a tax efficient manner. However the specific Trust he has identified is not a recognized institution for the

purpose of Section 80G of the Income Tax Act. According to you in what manner Amaranth can do this charity in a tax efficient way? (3)

- A) He can donate 5% portion of his all properties to that Trust.
- B) He can give 5% of his gross total income to Trust and claim this amount as his personal expenditures from his business income.
- C) **He can create a non-revocable charge of 5% of his total income upon his all business properties/incomes by executing a legal document in favor of that Trust.**
- D) All of the above.

12) In the FY 2007-08, Amaranth's partnership firm conducting the taxi operating business earned a net profit of Rs. 11.73 lakh. Amaranth wants to know his firm's total tax liability including surcharge and education cess on the same. According to you the same is _____ . (2)

- A) **Rs. 3,62,460**
- B) Rs. 3,98,700
- C) Rs. 3,61,310
- D) None of the above

13) For ensuring smooth education for his children, Amaranth is willing to create a fund. For this, he wants to ensure availability of Rs. 2 lakh p.a. (subject to inflation) for each of his children starting from their (completed) age of 16 years to 22 years constantly. You suggest Amaranth to invest an equal yearly contribution in a balanced fund giving a CAGR of 15% p.a. starting from today and up to the time of last withdrawal from the fund. What yearly investment should be made in the beginning of the year to get this arrangement? (Assume current age of all children as age completed today.) (4)

- A) **Rs. 6,10,717**
- B) Rs. 6,72,843
- C) Rs. 6,80,558
- D) Rs. 7,73,769

14) Amaranth is concerned about the non-diversified nature of his business which is income from hospitality sector, especially from real estate properties. He wishes to set aside a sum of Rs 12 lakh per annum from the profits of his existing business at the end of each financial year from now for 6 years. He wants to start a new business in April 2015. He wants to target a corpus of approximately Rs. 1 crore (post tax) at that time by not taking too much risk. He wishes to accumulate this corpus by using not more than two mutual fund schemes, with investment in either scheme not exceeding 60%. You analyze historical data of past five years of various generic Mutual Fund products and make few combinations for showing to Amaranth. Which of the following combination of products with the given ratio of exposure would you advise Amaranth to achieve his objective?

[Assumptions: i) Flat rates (i.e. without indexation) of LTCG are considered.

ii) The option chosen for each of the schemes is 'growth'.]

(5)

- A) Income Schemes and Equity Diversified schemes in the ratio 60 : 40
- B) **Balanced schemes_1 and Annual Fixed Maturity Plans in the ratio 60:40**
- C) Equity Diversified scheme and Annual Fixed Maturity Plans in the ratio 45:55
- D) Balanced schemes_2 and Annual Fixed Maturity Plans in the ratio 60 : 40

15) Amaranth's 3 shops, each having same market value, are fetching him average annual return of 8%, 6% and 2.5%, of their market value. He wants to contract disposing of the shop with least return in such a way that he will receive the currently prevailing market value of the shop at the end of this financial year, but without any return for the year. He wants to invest this sale proceed immediately on receipt along with the annual return he would get from the other two shops in a certain investment. From this year

onwards, the return from remaining shops shall also be invested at the financial year-end every year for 15 years. Amaranth is planning this for his peaceful retirement. Assume that the market value of the shops appreciate by 2% p.a. year-on-year and the return percentage from remaining shops remains the same during the period of investment. Amaranth wants to know whether the funds so accumulated would be sufficient to fetch him Rs. 24 lakh every year, beginning April 2025, for his remaining life (life expectancy 70) by considering a 7.5% per annum annuity yield which would be purchased in April 2024. What rate of return is required to be generated by the investments during his preretirement period to accumulate the desired fund for annuity? (4)

- A) **9.14% p.a.**
- B) 9.62% p.a.
- C) 10.16% p.a.
- D) 10.41% p.a.

9th Interest Payment Date= 33750 1500000*(0.0075*3) 33750 1500000*(0.0075*3)

10th Interest Payment Date 31/12/2010 33750 1500000*(0.0075*3) 31/03/2011 33750 1500000*(0.0075*3)

Maturity Amount of Money Market Liquid Fund=

Opening Date	Op Bal	Investment	Interest	Cl Bal
1-Jan-09	0	22500	150	22650
1-Feb-09	22650	0	151	22801
1-Mar-09	22801	0	152	22953
1-Apr-09	22953	33750	378	57081
1-May-09	57081	0	381	57462
1-Jun-09	57462	0	383	57845
1-Jul-09	57845	33750	611	92205
1-Aug-09	92205	0	615	92820
1-Sep-09	92820	0	619	93439
1-Oct-09	93439	33750	848	128037
1-Nov-09	128037	0	854	128890
1-Dec-09	128890	0	859	129750
1-Jan-10	129750	33750	1090	164590
1-Feb-10	164590	0	1097	165687
1-Mar-10	165687	0	1105	166791
1-Apr-10	166791	33750	1337	201878
1-May-10	201878	0	1346	203224
1-Jun-10	203224	0	1355	204579
1-Jul-10	204579	33750	1589	239918
1-Aug-10	239918	0	1599	241517
1-Sep-10	241517	0	1610	243127
1-Oct-10	243127	33750	1846	278723
1-Nov-10	278723	0	1858	280581
1-Dec-10	280581	0	1871	282452
1-Jan-11	282452	33750	2108	318310
1-Feb-11	318310	0	2122	320432
1-Mar-11	320432	0	2136	322568
1-Apr-11	322568	33750	0	356318
Maturity Amount (account closed on 31/03/2011)=				
				356318

Q.7) D)

Total Family Members	Over 10 years	Below 10 years
Amaranth's parents	2	
Amaranth's family	5	2
Sumer's family	2	
Shalem's family	2	
Total	11	2
Exp Per Person	2200000	280000
After 2.5 Years after inflation @11%	2855815	363467
33.33% Subsidy	951938	121156
		363467/3

Q.8) Net amount required 1903877 2855815-951938 242312 363467-121156
 Installment Required 2146189 1903877+242312
 @1.5% per month -49,968.21 PMT(1.5%,30,0,1903877,1) -6,360 PMT(1.5%,30,0,242312,1)
 total -56,327.80

C) 16.95 Years

Total Monthly Investment Required= 56,328 per month 49968+6360

Today's Market Value= 350 lakh
 Deemed Investment= 350 lakh
 Total Occupancy Capacity= 80 persons (per day)
 Yearly Capacity= 29200 persons 80*365
 Occupancy Factor= 88% 29200*88%
 Total Net Occupancy= 25696
 Rate Per Person= 250 250*25696
 Total Receipts= 6424000 per Year
 Net of Expense Pay Out= 68%
 Net Receipts= 4368320 per years 6424000*68%
 Rate of Return on investment= 10%

So payback period =
 PV= 350 lakh
 R= 10%
 PMT= 43.68 lakh
 Mode= End
 N= 16.95 years
 4368320/100000

Q.9) D)

Upfront Payment= 9000 RS.
 PMT= 100 RS.
 N= 100 Days
 R= 0.21258% per day RATE(100,-100,90000,0,0)
 Annual Effective Rate of Interest=
 $(1+(0.21258\%))^N - 1$ 117.08% p.a.

Q.10) B) Maximum US\$ 2,00,000

Reference : RBI 2007-2008 / 146 A.P.(DIR Series) Circular No. 9
 [Liberalised Remittance Scheme for Resident Individuals- Enhancement of limit from USD 100,000 to USD 200,000]

Q.11) C)

Q.12) A)

Rate of Tax on Partnership Firms= 30%
 Surcharge = 10%
 **Applicable only above Rs. 1 Crore Income

E.Cess 3%

Net Profit= 1173000
 Tax @30%= 351900
 E.Cess 3%= 10557
 Total Tax= 362457
362460

1173000*0.3
 351900*0.03
 10557+351900

Q.13)

A)

Year	Joyce (14 years)		Inflated	PV@15%	Kylie (12 years)		inflated	pv@15%
	Age	Amount			Age	Amount		
0	14				12			
1	15				13			
2	16	200,000	246,420	186,329	14			
3	17	200,000	273,526	179,848	15			
4	18	200,000	303,614	173,592	16	200,000	303,614	173,592
5	19	200,000	337,012	167,554	17	200,000	337,012	167,554
6	20	200,000	374,083	161,726	18	200,000	374,083	161,726
7	21	200,000	415,232	156,101	19	200,000	415,232	156,101
8					20	200,000	460,908	150,671
9					21	200,000	511,607	145,431
10								
11								
12								
13								
14								
15								
16								
17								
18								

Today's PV @15%

1,025,151

955,076

Year	Zayed (08 years)		inflated	pv@15%	Nazer (07 years)		inflated	pv@15%
	Age	Amount			Age	Amount		
0	8				7			
1	9				8			
2	10				9			
3	11				10			
4	12				11			
5	13				12			
6	14				13			
7	15				14			
8	16	200,000	460,908	150,671	15	200,000	511,607	145,431
9	17	200,000	511,607	145,431	16	200,000	567,884	140,372
10	18	200,000	567,884	140,372	17	200,000	630,351	135,490
11	19	200,000	630,351	135,490	18	200,000	699,690	130,777
12	20	200,000	699,690	130,777	19	200,000	776,656	126,228
13	21	200,000	776,656	126,228	20	200,000		

511607/1.15^9

14 121,838
 15 862,088
 16 200,000
 17 21
 18 121,838

Today's PV @15% 828,970
 Freyas (03 years) 800,136

Year	Age	Amount	inflated	pv@15%
0	3			
1	4			
2	5			
3	6			
4	7			
5	8			
6	9			
7	10			
8	11			
9	12			
10	13			
11	14			
12	15			
13	16	200,000	776,656	126,228
14	17	200,000	862,088	121,838
15	18	200,000	956,918	117,600
16	19	200,000	1,062,179	113,509
17	20	200,000	1,179,019	109,561
18	21	200,000	1,308,711	105,751
				694,487

Total Current PV = 4,303,820
 PMT = -610,717
 $1025151 + 955076 + 828970 + 800136 + 694487$
 $PMT(15\%, 18, 4303820, 0, 1)$

So the investment required = -610,717 pa

Q.14	B)		
Income schemes (MF)	6%	0.06 LTCG/STCG	
Balanced schemes_ 70:30	12%	0.12 STCG	
1 (MF) equity- debt			
			1200000*((1+0.06)^6-1)/(1+0.06)/(0.06)
			1200000*((1+0.12)^6-1)/(1+0.12)/(0.12)
			7867339.013
			7867339.013
			10906814.07
			10906814.07

Balanced schemes_2 (MF)	40:60 debt equity- 8%	0.08 LTCG/STCG	9507364.032	$1200000 * ((1+8\%)^6 - 1) * (1+8\%) / (8\%)$	9507364.032*	B)Bal_160 FMP 40= 10034324.65
Equity Diversified scheme (MF)	16%	0.16 STCG	12496648.01	$1200000 * ((1+0.16)^6 - 1) * (1+0.16) / (0.16)$	8430179.687	10906814*0.6+8725590.512*0.4
Fixed Maturity Plans (Annual)	9%	LTCG (only 3 year track 0.09 record)	9840521.611	$1200000 * ((1+0.09)^9 - 1) * (1+0.09) / (0.09)$	9840521.611*	

Q.15) A) Annuity of Rs. 24,00,000 p.a. is purchased in April, 2024 for 16 years.
 The required corpus for 7.5% annuity As at March 31, 2009 21939616 $2400000 * (1 - (1.075)^{-16}) / (0.075)$

The sales proceeds from the shop sold= 2500000
 Return from remaining shops 350000 $(2500000 * 0.06) + (2500000 * 0.08)$
 Total 2850000 $2500000 + 350000$

YEAR	Age of Amaranth	
Year 1	Mar-09	2850000
Year 2	Mar-10	357000
Year 3	Mar-11	364140
Year 4	Mar-12	371423
Year 5	Mar-13	378851
Year 6	Mar-14	386428
Year 7	Mar-15	394157
Year 8	Mar-16	402040
Year 9	Mar-17	410081
Year 10	Mar-18	418282
Year 11	Mar-19	426648
Year 12	Mar-20	435181
Year 13	Mar-21	443885
Year 14	Mar-22	452762
Year 15	Mar-23	461818

The sales proceeds of Rs. 25 lakh and annual profits from remaining shops Rs. 3.50 lakh p.a. in Mar2009 growing @ 2% p.a. are invested every year

The rate 'r' is given by :
 PV of Annuity = $\frac{1}{(1+r)^n} + \frac{2}{(1+r)^{n+1}}$
 {1} (Sale value of shop) * $(1+r)^n$
 {2} (Annual Profit in the 1st year) * $\frac{1 - (1+e)^{-n}}{e} * \frac{(1+r)^n}{(1+r) - (1+e)}$
 where n = 15, e = 2% (annual growth in market value of shops)

0.0913602 9278156.32 $2500000 * (1+0.0913602)^{15}$ 21939611 12661455+9278156.32
 12661455.22

$$[(1+0.0913602) * 350000 * ((1+0.0913602)^{15} - (1.02)^{15}) / (0.0913602 - 0.02)]$$

9.14%

Case Study – Gunjan Bhide

Today is 9th November 2008. Gunjan Bhide, 28, life expectancy 68, is a clerk in a Central Government department and is posted in Surat. He joined this department on 02-04-2004. His wife Neerja, 28, life expectancy 72, is working in a diamond manufacturing & export firm in Surat. Parents of Gunjan and Neerja are also settled in Surat. The couple has twins, Mayank and Manas, aged 5 years. Unfortunately both are mentally challenged, and are certified as having severe disability by the medical authority and thus require constant attention. While Mayank stays with Gunjan's parents, Manas stays with Neerja's parents, however their total expenditure is borne by Gunjan and Neerja equally. The kids also go to a special school. Gunjan and Neerja are concerned about the future of their kids and want to create enough reserve of funds for them.

After joining the Government service, Gunjan bought a flat in Surat in Nov 2004 for their living, with a housing loan. The housing loan, as on date, has 16 years' remaining tenure. Gunjan also opted for Government pension whereby he has to contribute a fixed percentage of his salary every month and equal contribution is made by his employer to his pension account. The first deduction from his salary towards pension account was Rs. 1,400 per month and this contribution has been increasing @4% per annum and is expected to increase in future too at the same rate. His total job tenure is expected to be 36 years.

You being a practicing Certified Financial Planner, Gunjan approached you to draft a Financial Plan for his family. He has submitted his financials to you which are as follows:

Sources of Income:

Current take home pay

Gunjan Bhide	Rs. 17,000 per month
Neerja Bhide	Rs. 22,750 per month

**Interest from PO MIS account of

Mayank	Rs. 2,000 per month
Manas	Rs. 2,000 per month

**These accounts were opened on 01-04-2008 by the money gifted to Mayank and Manas from Gunjan and Neerja's parents. The interest received from these accounts is invested into an equity scheme of a Mutual Fund.

Current Expenditure:

Housing Loan EMI	Rs. 8,761 per month
Household Expenses*	Rs. 8,500 per month
Mayank and Manas medical expenses (excluding life insurance premiums)	Rs. 2,500 per month (for each child)

Assets & Liabilities:

Residential House in Surat	Rs. 14.00 Lakh (current market value)
Housing Loan	Rs. 7.90 Lakh (current outstanding balance)
Gold ornaments with Neerja	Rs. 3.80 Lakh (current market value)
LIC endowment policy with Gunjan #	Rs. 21,600 (current surrender value)
Motor Cycle with Gunjan	Rs. 21,000 (current market value)
Scooter with Neerja	Rs. 32,000 (current market value)
Bond 10% (Maturing on 31st March 2015)	Rs. 1,00,000
# 4 annual premiums have been paid for total premium paying term of 25 years for a sum assured of Rs. 5 lakh.	

Additional Information:

- 1) An insurance agent has approached Gunjan for investing in a recently launched investment-cum-insurance-cum-pension product of an insurance company ABC. The plan, which requires annual premium of Rs. 30,000 for his age, payable for 20 years, has the following features:
 - a) If the applicant dies during the premium payment term an amount of Rs. 10,00,000 only is payable to his/her survivors.
 - b) A lump-sum amount of Rs. 10,00,000 is paid to the applicant a year after the payment of last premium.
 - c) If the applicant dies after the full payment term but anytime before completion of 55 years of age, an insurance amount of Rs. 10,00,000 is payable to his/her survivors in addition to the above lump-sum payment.
 - d) After attaining 55 years, insurance cover ceases. However, a lifetime annual pension of Rs. 2,00,000 is payable after the completion of 55 years to the applicant only.

- 2) An insurance agent of an insurance company XYZ has approached him with the following details of a health insurance policy for him and his family members:

Plan A) Annual Premium of Rs. 2,250 each for Gunjan and Neerja for a sum assured of Rs. 1 lakh each.
Annual Premium of Rs. 2,070 each for Mayank and Manas for a sum assured of Rs. 1 lakh each.
A family discount of 10% if more than 3 persons are covered under a single policy.

Plan B) A family floater policy covering all 4 members for a premium of Rs. 2,750 per annum per Rs. 1 lakh sum assured. A 10% discount if policy is taken for more than 3 lakh sum assured.

Assumptions (Average rates expected in future years)

Risk Free Interest Rate:	8.00%
Inflation :	8.00%
Equity Returns:	14%

Questions

- 18) While interacting with you during the data collection sessions, Gunjan and Neerja became so impressed with your professional approach and the trust created that the couple requested you to become a whole time legal guardian of their kids regarding execution of all required financial steps at every stage in future even without further recourse to the couple. As per FPSB Code of Ethics, is this possible for you? (2)
- A) Yes
B) Yes, but you can do it in your individual capacity and not in professional capacity.
C) Yes, but in that case you will not be in a position to charge any professional fee from the couple.
D) No
- 19) Gunjan's housing loan was granted on "Equitable Mortgage" basis. In view of the current credit crisis hovering over major world economies, Gunjan's lender wants to convert this loan on the lines of "English Mortgage" clause. Gunjan wants to know if he accepts this option, what major change will occur in the terms and conditions governing his housing loan? According to you, if he accepts the new clause he will have to _____. (2)
- A) deposit the title deed of the property with the lender right now
B) sell his property to the lender right now on the condition that if at any time Gunjan fails to repay the outstanding loan, the sale shall be absolute, otherwise it will be void
C) transfer the possession to the lender right now with a condition of re-transfer on repayment of the entire loan amount
D) All of the above
- 20) Before joining the present employment in May 2008, Neerja was working with a fabric manufacturing unit in Surat since 1999. When Neerja joined this unit, there was a 55 member staff but when Neerja resigned from there in May 2006, only 6 members were left there. Neerja wants to know whether she is entitled to get any gratuity from this company. (2)
- A) Yes
B) No
C) No, because Neerja herself resigned and was not expelled by the company.
D) No, because on the date of resignation, company was exempt from the provisions of the Gratuity Act.
- 21) Gunjan wants to know if he survives as per his projected life expectancy, what would be the annual return obtained by him by investing in the proposed plan of the insurer ABC? (4)
- A) 8.54%
B) 9.48%
C) 9.80%
D) 10.13%
- 22) Gunjan wants to know which of the health insurance plans of insurer XYZ he should opt for, from the cost effectiveness perspective, if he wants to take minimum sum assured of Rs. 1 lakh per member of his family. (2)
- A) Individual Member Policy
B) Family Floater Policy
C) Gunjan should take 50% risk cover under both the policies
D) Gunjan should take 75% cover under individual policy and 25% cover under Family floater policy

- 23) You have ascertained that the surrender value of Gunjan's life insurance policy is given by his insurer as 30% value of all premiums paid till date excluding first year premium. This policy has a guaranteed addition of Rs. 55 per thousand for every completed policy year. Gunjan wants to know, if he keeps this policy and continues to pay the premium regularly till its maturity, what annual returns is he expected to get from this policy. (5)
- A) 5.99%
 B) 4.91%
 C) 3.18%
 D) Given data is insufficient to get the solution
- 24) Gunjan & Neerja want to ensure a life annuity for their kids. You have suggested an immediate annuity plan from a life insurance company in which they can buy the policy by paying a lump sum premium and the kids will start getting annuity from the end of 1st policy year. Gunjan and Neerja will be the proposers for the beneficiaries Mayank and Manas, respectively in these policies. The Life Insurance company is giving 4 annuity options. From the perspective of ensuring maximum benefit to their children, which option should be chosen by the couple? (3)
- A) Life Annuity
 B) Life Annuity certain for 15 years
 C) Joint life last survivor
 D) Joint life last survivor with return of purchase price
- 25) The Post Office MIS accounts of Mayank and Manas were opened on 01-04-2008. The couple wants to know how much amount will be received from each of these accounts if they are closed today. (3)
- A) No premature closure is allowed in PO MIS account within one year
 B) Rs. 2.94 lakh from each account
 C) Rs. 2.97 lakh from each account
 D) Rs. 3.00 lakh from each account
- 26) The couple wants to ensure cash flows for the existing medical expenses (subject to inflation) to both of their children throughout their life at the beginning of every month. They want to know what upfront amount they should deposit today if the average inflation rate is expected to remain at 8% per annum and the average effective rate of return in the chosen investment plan is to remain at 10% per annum throughout the term. (5)
- A) Rs. 32.40 lakh
 B) Rs. 32.45 lakh
 C) Rs. 32.72 lakh
 D) Rs. 32.55 lakh
- 27) Pursuant to RBI reduction in Repo rate by 1%, Gunjan's lender financial institution amended his housing loan rate of interest by 50 basis points in the same direction. Gunjan wants to know what will be the impact of this on his EMI or tenure of the loan. (5)
- A) EMI will go down by Rs. 265 or tenure will reduce by about 14 months.
 B) EMI will go down by Rs. 240 or tenure will increase by one year.
 C) EMI will go down by Rs. 251 or tenure will reduce by about 14 months.
 D) EMI will increase by Rs. 251 pm or tenure will increase by 13 months.
- 28) The coupon payments on the bond held by Gunjan are made annually. The bond will compulsorily be redeemed by way of two equal capital repayments on 31st March, 2010 and 31st March, 2015. Gunjan

wants to know the annual return to be obtained by him if he paid Rs. 96,000 to acquire the bond on 31st March, 2005. Assume Gunjan holds the bond till maturity. (3)

- A) 10.00%
- B) 10.83%
- C) 12.20%
- D) 13.03%

29) Gunjan wants to know the expected maturity amount from his pension account. The average nominal rate of return from this account is expected to be 10% per annum (compounding monthly). According to you the same is _____ . (5)

- A) Rs. 15.18 lakh
- B) Rs. 158.14 lakh
- C) Rs. 102.43 lakh
- D) Rs. 173.72 lakh

30) You have suggested that Gunjan and Neerja can get a special deduction from their taxable incomes u/s 80DD of the Income Tax Act, 1961. They want to know the maximum amount of deduction which can be claimed from their incomes? (3)

- A) Rs. 50,000 each by Gunjan and Neerja
- B) Rs. 75,000 each by Gunjan and Neerja
- C) Only Rs. 50,000 from any one person's income
- D) Only Rs. 75,000 from any one person's income

31) Gunjan wants to know that the income from PO MIS accounts of both kids shall be added in whose taxable income as the amount of one account was gifted by the Gunjan's parents and that of other account was gifted by Neerja's parents? (3)

- A) Income from both accounts shall be added to the taxable income of Gunjan.
- B) Income from both accounts shall be added to the taxable income of Neerja.
- C) One account's income in Gunjan's and the other in Neerja's taxable income.
- D) Income shall not be added in the incomes of Gunjan and Neerja.

32) Neerja wants to know whether she has to pay more tax or will she get a refund for her earnings in AY 2008-09 assuming that a monthly TDS of Rs. 850 is already being deducted? Assume the stated salary/all other figures for her this year were same in AY 2008-09, she takes all her salary as Basic plus DA only and there is no investment done by her under section 80C. (Ignore interest income, if any). (3)

- A) Tax payable Rs. 2,300
- B) Tax Payable Rs. 21,170
- C) Refund Due Rs. 10,200
- D) None of the above

Solutions- Gunjan Bhide

18) B

19) C

20) A

21) B

Age of Gunjan	Cash flows
28	-30000
29	-30000
30	-30000
31	-30000
32	-30000
33	-30000
34	-30000
35	-30000
36	-30000
37	-30000
38	-30000
39	-30000
40	-30000
41	-30000
42	-30000
43	-30000
44	-30000
45	-30000
46	-30000
47	-30000
48	1000000
49	0

50	0
51	0
52	0
53	0
54	0
55	0
56	200000
57	200000
58	200000
59	200000
60	200000
61	200000
62	200000
63	200000
64	200000
65	200000
66	200000
67	200000
68	200000

IRR 9.48% IRR(Age 28:Age 68)

22) A

Individual Member Policy

Gunjan & Neerja @2250 Each
 Mayan & Manas @2070 Each

10% Discount
 Net Premium

4500 2250*2
 4140 2070*2
 8640 4500+4140
 864 8640*0.1
 7776 8640-864

Family Floater Policy

@2750 per lac for all 4/so for 4 lac SA=
 10% discount=
 Net Premium=

11000 2750*4
 1100
 9900 11000-1100

This policy is beneficial from cost effectiveness perspective

23) B

Current SV=
 Total premiums paid by now=
 So annual premium=(21600/.3*1)/3=
 Sum Assured=
 Bonus=(55/1000*500000*25)=
 Total MV=

21600 (30% of all premiums excluding first year premium)

4

24000

500000

687500

1187500 500000+687500

PV= 0

N= 25 years

Pmt= 24000

Mode= Begin

FV= 1187500

Annual Returns

4.91% pa

24) A

25) A

26) C

Average ROR= 10% pa
 Average Inflation= 8% pa
 Inflation Adjusted ROR= $(1.1/1.08)-1*100\%$
 Inflation Adjusted ROR= $(1+1.85\%)^{12}-1$
 Mode= Begin
 PMT= 5000 per month

PV= 5000*(1+i)/i

3272409

27) C

Current Installment= 8761 per month
 Current account Balance= 790000
 Remaining Tenure= 16 years
 192 months
 Current rate of interest= 0.9166% per month
 Current rate of interest= 11.00% pa
 RATE(192,-8761,790000,0,0)
 0.9166%*12
 New Rate of Interest= 11%-0.005
 10.5%/12
 So new EMI at the new interest rate with same tenure= 0.00874983 per month
 -8,510
 Reduction in EMI 251
 NPV((10.5%/12),-8761,790000,0,0)
 192-178.59
 New Tenure with the same EMI but with new interest rate= 178.59 months
 Reduction in Tenure 13.41 months

28) B

Cash flow 31-03-2005 -96000
 Cash flow 31-03-2006 10000
 Cash flow 31-03-2007 10000
 Cash flow 31-03-2008 10000
 Cash flow 31-03-2009 10000
 Cash flow 31-03-2010 60000
 Cash flow 31-03-2011 5000
 Cash flow 31-03-2012 5000
 Cash flow 31-03-2013 5000
 Cash flow 31-03-2014 5000
 Cash flow 31-03-2015 55000

returns 10.83% p.a

irr(cash flows from 31-03-2005 to 31-03-2015)

29) D

Op Bal Gunjan Ded. (pm) 1,400
 Employer Cont.pn 1,400
 Year 1 0
 Year 2 35,184
 CI Bal 35,184
 FV(10%/12,12,-(1400+1400),0)
 FV(10%/12,12,-(1456+1456),-35184)

Year 3	75,459	1,514	1,514	121,415	FV(10%/12,12,-(1514+1514),-75459)
Year 4	121,415	1,575	1,575	173,705	
Year 5	173,705	1,638	1,638	233,054	
Year 6	233,054	1,703	1,703	300,264	
Year 7	300,264	1,771	1,771	376,224	
Year 8	376,224	1,842	1,842	461,919	
Year 9	461,919	1,916	1,916	558,439	
Year 10	558,439	1,993	1,993	666,993	
Year 11	666,993	2,072	2,072	788,916	
Year 12	788,916	2,155	2,155	925,689	
Year 13	925,689	2,241	2,241	1,078,951	
Year 14	1,078,951	2,331	2,331	1,250,514	
Year 15	1,250,514	2,424	2,424	1,442,386	
Year 16	1,442,386	2,521	2,521	1,656,786	
Year 17	1,656,786	2,622	2,622	1,896,172	
Year 18	1,896,172	2,727	2,727	2,163,260	
Year 19	2,163,260	2,836	2,836	2,461,057	
Year 20	2,461,057	2,950	2,950	2,792,888	
Year 21	2,792,888	3,068	3,068	3,162,432	
Year 22	3,162,432	3,190	3,190	3,573,755	
Year 23	3,573,755	3,318	3,318	4,031,356	
Year 24	4,031,356	3,451	3,451	4,540,209	
Year 25	4,540,209	3,589	3,589	5,105,815	
Year 26	5,105,815	3,732	3,732	5,734,254	
Year 27	5,734,254	3,881	3,881	6,432,251	
Year 28	6,432,251	4,037	4,037	7,207,238	
Year 29	7,207,238	4,198	4,198	8,067,436	
Year 30	8,067,436	4,366	4,366	9,021,927	
Year 31	9,021,927	4,541	4,541	10,080,755	
Year 32	10,080,755	4,722	4,722	11,255,021	
Year 33	11,255,021	4,911	4,911	12,556,995	
Year 34	12,556,995	5,108	5,108	14,000,239	
Year 35	14,000,239	5,312	5,312	15,599,745	
Year 36	15,599,745	5,525	5,525	17,372,079	FV(10%/12,12,-(5525+5525),-15599745)

30) B

31) D

32) A

Monthly Take Home Pay of Neerija=	22750 pm
TDS=	850 pm
Net Income=	23600 pm
Annual Income=	283200
Less: Deduction us 80DD	-75000
Taxable Income=	208200

Tax for AY 2008-09=

0-145000

Nil

850+22750
23600*12

283200-75000

145001-150000
150001-208200

10%
20%

Tax 500
E.Cess 3%= 11640
Total Tax= 12140
or 364.2
Less:TDS= 12504.2
Tax Payable= 10200 2300

(208200-150000)*0.2
11640+500
12140*0.03
364.2+12140

850*12
12500-10200

Case Study: Dr. B K Mishra

Today is 09-11-2008. Dr. B K Mishra, Ph.D. age 40, life expectancy 75, is a lecturer in a private college in Mumbai. His wife Sneha, (age 38, life expectancy 80) is a housewife. He resides with his wife in an unfurnished house provided by his college without paying any rental. The house is owned by the college. The couple does not have any children. Dr. Mishra's parents are senior citizens enjoying good health and residing with Dr. Mishra. They are financially dependent on their son. Dr. Mishra is considering settling down in Mumbai. He still has 20 years of service left unto retirement. Dr. Mishra is serving in the same college since 11-02-1995 and wants to take retirement on 31-12-2028. The working time in his college is 4 hours a day for 210 days in a year.

Dr. Mishra already has all of his property insured. His father-in-law has recently gifted him a sum of Rs. 25 lakh. Dr. Mishra is an active day trader in the stock market due to lot of available time from his present employment. However, he does not have much knowledge about this market. He has now contacted you to develop a Financial Plan for him for which he has submitted the following information of his financials to you:

Income/Expenditure (01-04-2007 to 31-03-2008)

Salary from College (Increasing 4% annually)	Rs. 5,10,000
Warden-ship allowance	Rs. 50,000
Leave Salary Encashment	Rs. 21,110
Living Expenditure**	Rs. 2,98,800

** (It includes premium of Rs. 7,450 for insurance of Car/House Hold properties and Rs. 2,650 for Health Insurance)

Assets/Liabilities (As on 01-04-2008)

Saving Account balance	Rs. 3,42,800
PPF (Opened on 31-03-2001)	Rs. 4,10,166
Car (Purchased on 30-05-2005)	Rs. 2,50,000 (Purchase Value)
House-hold consumer durables	Rs. 1,60,000
Value of ELSS Investments	Rs. 1,98,560
Credit Card Liability	Rs. 40,800

Supplementary Information:

1. Dr. Mishra wants to fulfill his parents' desire of going on a foreign trip. They have decided a time frame of 2 years from now and the tour currently costs Rs. 8 lakh.
2. Dr. Mishra has identified a flat to be purchased for which the owner is quoting a price of Rs. 18 lakh.
3. Dr. Mishra's college follows Payment of Gratuity Act, 1972 for providing retirement benefits to its employees.
4. In FY 2007-08 Dr. Mishra has contributed Rs. 50,000 to his PPF account. The same amount of investment has also been made in his ELSS account.
5. Dr. Mishra wants to buy a single premium pension plan for Rs. 25 lakh with zero risk cover from a life insurance company. The company charges a premium allocation charge of 5% in the first year while other charges are as follows:

Policy Administration Charges:	Rs. 60 p.m in first year, Rs. 20 p.m for the balance period
Fund Administration Charges:	1.5% p.a. (deductible monthly for the whole term)
Fixed Charges:	Rs. 100 p.m for first three years
Mortality Charges:	Rs. 4.15 per thousand sum assured

All monthly charges are levied at the beginning of the month. The company is projecting a tentative purchase price of Rs. 52,84,045 after 20 years.

6. Dr. Mishra is considering taking up a part time job for which his present employer has no objection. Dr. Mishra is negotiating with an education institute for the same. This institute is offering him 3 options of pay packages and gives retirement benefits only to employees having a gross salary up to the specified limit under the EPF Act.

	Option A	Option B	Option C
Basic Pay	7000	7000	8000
DA	3000	2500	2000
HRA	1000	1500	2000
CCA	1000	500	1500
Transport allowance	1000	1000	0
Telephone allowance	500	1000	0
	-----	-----	-----
	13500*	13500*	13500*
	-----	-----	-----

*(All figures are in Rs. per month)

Current economic figures:

- Inflation= 11% p.a.
- Bank FDR Interest Rate= 10.50% p.a.
- Debt Fund rate of return= 10.00% p.a.
- Equity Fund rate of return= 15% p.a.
- Balance fund rate of return= 11% p.a.
- Long term bonds= 11% p.a.
- Short Term bonds= 9% p.a.
- Company FDR= 12-15% p.a.
- Risk Free rate= 6.50% p.a.
- PPF interest rate= 8% pa

Questions

- 1) You have started working on the financial plan for Dr. Mishra. One day he called you & told that for Estate Planning aspects of his financial plan he shall be taking the services of his brother, an advocate. As per FPSB Code of Ethics how would you proceed in this aspect? (2)
- A) This is not possible as the Financial Plan has to cover all aspects.
 - B) This must be stipulated in writing.
 - C) Prior consent of Dr. Mishra's wife must be taken.
 - D) Prior consent from his brother must be taken.
- 2) One day, while sitting in the office of his stock broker, Dr. Mishra heard some discussions about demutualization of Stock Exchanges in India. Dr. Mishra is unaware about this term and has thus asked you about this concept. According to you _____ (2)
- A) in demutualization, the administration of Stock Exchange is kept isolated from its trading brokers/members
 - B) demutualization refers to privatization of all government owned Stock Exchanges in India
 - C) demutualization refers to Self Regulatory Organizations (SRO) structure of Stock Exchanges in India

- D) All of the above
- 3) Recently, one of the leading AMCs has introduced a new FMP of 20 months indicating an annual yield of 12.50%. This AMC is sponsored by a leading private bank. The bank is offering an interest rate of 11% p.a on an FDR of 24 months. Dr. Mishra is looking for short term parking of the entire cash received from his father-in-law. From "Default Risk" point of view which of the two investments is more secure? (3)
- A) Bank FDR
 B) FMP
 C) Both have the same risk
 D) Upto initial Rs. 1 lakh Bank FDR is more secure, above that both have the same risk
- 4) Dr. Mishra wants to set aside an equated monthly amount from today for the family foreign trip. A travel company is offering a customized solution for this to Dr. Mishra. As per the offer, after two years the company will bear the total travel cost at the then prices and Dr. Mishra shall have to pay that cost in 60 EMIs, charging nominal interest rate of 10% p.a. (compounding monthly), EMI starting from today. Dr. Mishra wants to know how much EMI he will have to pay for this arrangement. (Assume inflation in travel expense is 15% p.a.) (4)
- A) Rs. 18,268
 B) Rs. 22,294
 C) Rs. 16,857
 D) None of the above
- 5) Dr. Mishra is planning to take a life insurance policy as per your advice. His agent has suggested him that he should take "Critical Illness Rider" on the new policy and thereby save 60% portion of his health insurance premium by taking this rider with this policy. Dr. Mishra wants to take your advice whether he should replace his health insurance by this rider as by doing this transaction he is saving 60% of his current health insurance premium. According to you, he should _____ . (2)
- A) not replace his health insurance with this rider as both have different features
 B) replace this health insurance as there is a direct saving on the premium
 C) reduce his health cover by 50% and take the 50% rider as suggested by the agent
 D) Both options are same and anyone may be opted
- 6) Recently one of the life insurance agents has informed Dr. Mishra that if one takes a life insurance policy under "Key Man Insurance", one can get deduction of the premium of this policy from their taxable income. According to you _____ . (2)
- A) Dr. Mishra can claim deduction but the maturity value of this policy shall be taxable in his hands
 B) Key Man Insurance is not applicable in his context
 C) this is applicable on second life insurance policy only
 D) None of the above
- 7) Acting upon your advice Dr. Mishra decides to take a life insurance plan for himself. At the time of choosing mode of payment, Dr Mishra has asked you the difference between various modes of payment of insurance premium (monthly/quarterly/half yearly/yearly) from claims perspective, in case if any. According to you _____ . (2)
- A) monthly mode is better because in case of claim the same shall be payable against the minimum possible paid premium
 B) there is no difference among all options from claims perspective
 C) yearly mode is better because it offers a rebate in premium to the Life assured
 D) choice may be different depending upon the age of the life assured

- 8) The CAGR on the projected pension purchase price for Dr. Mishra is _____. (4)
- A) 6.12%
 - B) 3.81%
 - C) 4.08%
 - D) None of the above
- 9) Which pay package should Dr. Mishra opt for from retirement benefits perspective while considering the part time job? (3)
- A) Option A
 - B) Option B
 - C) Option C
 - D) None of the option gives any advantage over the other two
- 10) Dr. Mishra is considering purchasing the new flat from his own resources. For this how much loan can he take from his PPF account on 31-03-2009? He has been contributing Rs. 50,000 p.a (at the end of every financial year) in this account since opening of the account and intends to do so in future as well. He has also made a partial withdrawal from this fund on 31-03-2007 for Rs. 30,000. (4)
- A) Rs. 4,10,166
 - B) Rs. 1,24,858
 - C) Rs. 1,47,346
 - D) Nil
- 11) Dr. Mishra wants to donate Rs. 2 lakh (the then value) to an NGO on each of the last 5 birthdays of his life. For this you advise him to invest a fixed amount on every birthday (starting from his next birthday) in 22 installments in an 8% p.a. yielding investment. What annual amount should he contribute to ensure donation as per his plan? (4)
- A) Rs. 8,402
 - B) Rs. 15,551
 - C) Rs. 7,203
 - D) Rs. 7,780
- 12) Dr. Mishra's ELSS scheme is giving returns equivalent to those generated by the equity fund. He wants to know the expected rate of return from this scheme after adjusting for Income Tax and Inflation, provided that withdrawal is made as per ELSS guidelines. (Assume his average Tax rate works out to be 15% for the year). (3)
- A) 3.60% p.a.
 - B) 1.58% p.a.
 - C) 4.00% p.a.
 - D) None of the above
- 13) Dr. Mishra's stock broker suggested him to write a call on XYZ Pvt. Ltd. at a strike price of Rs. 500 per share. The lot size is 400 shares and premium is Rs. 4 per share. Dr. Mishra wants to know, if he enters this transaction, what maximum profit/ loss opportunity is available for him. (3)
- A) Maximum profit is Rs. 1,600; Maximum loss is unlimited.
 - B) Maximum loss is Rs. 1,600; Maximum profit is unlimited.
 - C) Maximum profit/loss is limited to Rs. 1,600.
 - D) Both profit and loss are unlimited.

- 14) Dr. Mishra's father sold his house for Rs. 1 Crore in March 2008. Fair market value of the house on 01-04-1981 was Rs. 8,25,000. Dr. Mishra wants to know the tax liability of his father for A.Y. 2008-09. Assume his father does not have any other income in the said Assessment Year, has no contributions under section 80C and does not intend to buy any other property with the sale proceeds. CII for 1981-82 is 100 and for 2007-08 is 551. (4)
- A) Rs. 11,91,750
 B) Rs. 12,35,940
 C) Rs. 6,57,870
 D) Rs. 3,75,980
- 15) Sneha wants partition of his father-in-law's HUF to claim her share and her husband's share out of the HUF's assets. In principle, Dr. Mishra is not keen for the same and wants to know whether his wife can legally demand partition of his father's HUF as she is also one of the member in the same? (2)
- A) Yes
 B) No
 C) With prior permission from IT Department only
 D) Data insufficient
- 16) In March 2008, Dr. Mishra suffered a cash loss of Rs. 1.50 lakh in a gold derivative transaction which was settled by him without giving delivery. He has not filed his Income Tax return for the AY 2008-09 as yet and wants to know the tax treatment on this loss. According to you this loss _____. (3)
- A) may be set off against his salary income for AY 2008-09
 B) may be carried forward to next year and may be set off against any speculative income in the next year
 C) can neither be set off against salary income nor can it be carried forward
 D) could be set off against any speculative income in the same assessment year's income only
- 17) A Mutual Fund agent has told Dr. Mishra that bigger the AUM of the fund the better it is. Which of the following statements are correct ?
- 1) The bigger the fund AUM, the lower the expense ratios and in that sense it could be better.
 2) The bigger the funds AUM, lesser are the chances of showing break-out returns as stock buying becomes difficult without moving the price upwards.
 3) The bigger the fund AUM the worse-off a mid & small cap fund would be, due to its limited pool of stocks.
 4) The smaller the AUM of a small cap fund the better it is due to lower expenses & higher returns. (3)
- A) Only 1 is correct
 B) Only 1 & 2 are correct
 C) Only 1, 2 & 3 are correct
 D) All are correct

Solutions Dr. B K Mishra

- 1) **B**
- 2) **A**
- 3) **D**
- 4) **A**
 Current Tour Cost= 800000
 Inflation= 15%
 After 2 years= $800000 * 1.15^2$
 Rate of interest on Loan= 10% pa (monthly compounding)
 PV of 1058000 @10% pa= $1058000 / (10\%/12, 24, 0, 1058000, 1)$
EMI for 5 years= 18,268 $PMT(10\%/12, 60, -866935, 0, 1)$

- 5) **A**
- 6) **B**
- 7) **B**
- 8) **B**
 PV= 2500000
 MV= 5284045
 CAGR= 3.81 %
 $(RATE(20, 0, -2500000, 5284045, 1))^*100$

9) **D**
 As the new institute is providing retirement benefits upto specified limit under EPF Act only i.e. upto Rs. 6500/- per month salaried employees only, so in Dr. Mishra's case all options are same because in option gross salary (basic+da) is equal to or less than Rs. 6,500/- per month

10) **D** No loan allowed from PPF A/C after 5 years.

- 11) **D**
 Amount required in last 5 years 200000 pa
 Current Age= 40 years
 Expected Life= 75 years
 Total Time left= 35 years
 Rate of interest= 8%
 PV of Last 5 years annuity (In begin) $PV(8\%, 5, -200000, 0, 1)$
 PV after 22 years from now= $862425 / 1.08^8$
 PMT= $PMT(8\%, 22, 0, 465942, 1)$
-7780

- 12) **A**
 Rate of ELSS return= 15% pa
 Inflation= 11% pa
 Rate of Tax on ELSS= 0% (for more than one year long term capital gain tax is nil)
 Inflation adjusted ROR= $3.60\% \text{ pa } ((1.15/(1.11)-1)^*100)$

- 13) **A**
- 14) **A**
 COA/FMV on 01-04-1981 825000
 Sell Price 2008-09 10000000

CII Index 2008-09
 CII Index 1981-82
 Indexed COA=
 Long Term Capital Gain=
 Less:
 Basic Exemption for Sr Cit
 Total Taxable LTCG=
 20% Tax on LTCG=
 surcharge 10%
 E cess 3%

551
 100
 4545750 825000*551/100
 5454250 1000000-4545750
 195000
 5259250 5454250-195000
 1051850 5259250*0.2
 105185 1051850*0.1
 34711.05 (1051850+105185)*0.03
1191746.05 34711.05+105185+1051850

- 15) B
- 16) C
- 17) C

Case Study Umang

Today is December 15th 2008. Umang & Parineeta are a happily married couple with a 3 year old daughter Aahna and a month old son Arnav. Umang is 33 years old with a life expectancy of 80 years. This month he changed his job and joined a leading media house at executive level. Parineeta is 32 years old with a life expectancy of 80 years. She is a physiotherapist and currently contended with her role as a home maker raising her two children.

The family stays in a rented apartment in Mumbai for the last couple of years. Umang has been paying a rental of Rs. 18,000 p.m for his accommodation. Due to current market scenario, he wants to negotiate his current rental and bring it down by 20%. His previous employer has not yet settled his dues.

Umang is a workaholic, aspires to have a better lifestyle and desires to retire by the age of 50. He believes in investing today for a better tomorrow. His current annual salary package details are as follows:

Basic	Rs. 4,80,000
HRA	20% of Basic
LTA	Rs. 25,000
DA	Rs. 1,80,000
Commission based Bonus	Rs. 3,00,000

Umang and Parineeta want to provide the best of education to their children. They would also like to live a comfortable life upon retirement. Their current monthly household expenses are Rs. 22,000 p.m.

Umang's investment value of various investments as of 30th Nov 2008 is as follows:

Equity MF 1 (growth option)	Rs. 1,30,000
Equity MF 2 (growth option)	Rs. 47,000
Equity MF 3 (growth option)	Rs. 33,000
Quarterly FMP with dividend payout	Rs. 50,000
Direct Equity	Rs. 50,000
Bank FDRs (5 Years) @ 10.25% p.a	Rs. 2,40,000 ¹
(¹ Investment Amount)	

However, the recent market volatility has brought down the value of his portfolio considerably.

Umang has purchased a term cover of Rs. 50 lakh for a term of 25 years with an annual premium of Rs. 22,000. He has a group medical insurance cover for himself and his family through his employer as well.

Umang purchased a ready-possession flat in Pune, a couple of years ago, planning to spend his retirement years over there. He took a loan of Rs. 15 lakh for a 15 year term on a floating rate basis. Interest rate on this loan at inception in April 2006 was 11% p.a. For the same loan the interest rate was revised to 12% p.a in June 2007 and to 13.5% p.a in Aug 2008. However with effect from 1st Jan 2009 his interest rate is proposed to be revised to 11% p.a. Due to change of employment and poor cash flow judgment, Umang defaulted on his Dec 2008 EMI payment. He has given this house on rent from the very first day of taking possession to generate some extra income for himself and his family.

The couple buys 10 gms of Gold and an NSC of Rs. 5,000 on Aahna's birthday every year from her first birthday. They wish to do so till she is 18 years old. This is their way of accumulating for Aahna's marriage.

Umang's father, an ex-army Captain, is 70 years old and Umang's mother is 64 years old. They live in a small town of Belgaum. Parineeta's parents live in Pune. Her father is 72 years old and mother is 70 years old.

Umang realizes his financial situation and the need for professional help to avoid defaults and a smooth future. For this purpose he has approached you, a Certified Financial Planner, for drafting his Financial Plan and providing solution to his queries on the subject.

Questions:

- 1) Some time back Umang's investment advisor, also a CFP, recommended him a savings product stating that it offered an assured annual return of 12%. Umang was skeptic about the returns and did not invest. You realize that the product has been misrepresented. In reality it is the simple rate of interest with a lock in period of 10 years. According to you _____ . (3)
- A) the advisor has violated Code of Ethics of Fairness
B) the advisor has violated Code of Ethics of Integrity
C) the advisor has violated Code of Ethics of Professionalism
D) the advisor has violated Code of Ethics of Diligence
- 2) Umang is much concerned on the default of his home loan repayment. Umang mentions that he is not in a position to pay an EMI more than Rs. 12,000. He wants to know the tentative time frame in which he would be able to square off his housing loan outstanding as on 31st Dec 2008. Assume the proposed rate of interest (11%) remains unchanged for the term beginning January 2009 and he keeps on repaying Rs. 12,000 as the EMI. (4)
- A) 12.5 years
B) 18.25 years
C) 15 years
D) The loan amount can never be repaid.
- 3) Umang proposed to buy another life insurance policy which also offered Critical Illness Rider for an additional premium. Umang was considering a sum assured of Rs. 10 lakh for the death benefit and Rs. 2 Lakh under Critical Illness. Before finalizing the same Umang wants to know that in case he is identified with a disease, covered under Critical Illness Rider, after 2 years of having taken the policy, what amount would he receive as claim under the Critical Illness Rider? (2)
- A) A sum of Rs. 2 Lakh shall be paid when such a disease is identified and certified by a Doctor.
B) Actual Expenses, subject to a maximum of the Rider amount, shall be paid after treatment of disease.
C) Rider benefit is available only in case of death of the Insured person by the disease.
D) A sum of Rs. 2 lakh shall be paid when disease is identified and another Rs. 2 Lakh shall be paid at the time of death.
- 4) Umang's relative, Prashant, met with an accident while driving the car. His car insurance had expired a couple of days before the accident. Umang wants to know whether Prashant's claim will be settled by the insurance company in such a situation. (3)
- A) This is to be seen in light of the governing terms and conditions of the expired policy.
B) If the accident occurs within 15 days after the expiry of policy the claim is payable.
C) The cover lapses the moment the policy expires thus denying him any claim.
D) Insurance company will take renewal premium along with penalty and then settle his claim.
- 5) What corpus will be required by Umang at the time of his retirement to buy an inflation adjusted annuity if he expects his household expenses, post retirement, to decline by 20% of the pre retirement expenses? What approximate amount should Umang invest at the end of every month from now, till his retirement, to achieve this target? (Assume: Inflation shall remain at 7% p.a for the whole period, long term rate of investment is 15% p.a, risk free rate of return post retirement is 9% p.a). (4)
- A) Rs. 1.91 crore and Rs. 20,642 respectively

- B) Rs. 1.91 crore and Rs. 40,020 respectively
- C) Rs. 1.53 crore and Rs. 32,016 respectively
- D) Rs. 1.53 crore and Rs. 18,402 respectively

6) 3 years ago Parineeta's father had invested Rs. 15 lakh into Senior Citizens Savings Scheme considering it to be a safe instrument offering high rate of assured returns. At present most of the banks are offering a higher rate of return on a 1 year FD. Parineeta wants to know whether her father can withdraw some money from his Senior Citizens Savings Scheme account and invest in these FDs. (3)

- A) Premature withdrawal allowed, however withdrawals are subject to a penalty of 1% of withdrawal amount.
- B) Premature withdrawal allowed, however withdrawals are subject to a penalty of 1% of deposit amount.
- C) Premature withdrawal not allowed under this scheme.
- D) Premature withdrawal allowed without any penalty.

7) Umang had bought NSCs worth Rs. 30,000 in March 2004 to avail tax benefit during that financial year. He wants to know the maturity amount of these investments and whether the same shall be paid net of TDS? (3)

- A) Maturity amount Rs. 48,030; shall be paid without deduction of TDS.
- B) Maturity amount Rs. 48,030; shall be paid after deduction of TDS.
- C) Maturity amount Rs. 48,253; shall be paid without deduction of TDS.
- D) Maturity amount Rs. 48,253; shall be paid after deduction of TDS.

8) Umang's mutual fund investments have given him the following annual returns:

	MF 1	MF 2
Year 1	40%	35%
Year 2	32%	25%
Year 3	-5%	-1%

What is your opinion on these two funds on the basis of risk? (4)

- A) Both the Funds are equally risky.
- B) MF 1 is better.
- C) MF 2 is better.
- D) Need more information.

9) How much marriage corpus would have been accumulated for Aahna through investments in NSCs when she completes 24 years of age? Assume interest rate offered on NSC remains unchanged throughout the investment period and the maturity proceed of each NSC is reinvested in an instrument giving an average annual return of 9%. Ignore taxes for computation. (4)

- A) Rs. 3,32,153
- B) Rs. 3,27,700
- C) Rs. 3,60,380
- D) Rs. 3,30,624

10) Umang purchased 200 shares of XYZ Ltd. on 01/04/1978 for Rs. 40 each. He was allotted 200 right shares on 01/05/1979 for Rs. 50 each and 400 bonus shares on 01/05/1980. On 04/05/1990, he was further allotted 800 right shares for Rs 80 each. Again on 07/08/1996 he was allotted 800 bonus

shares. The fair market value of this share on 01/04/1981 was Rs. 60. All the shares thus accumulated by Umang are sold by him on 16/10/2007 for Rs. 400 per share. Compute the capital gain for AY 2008-09 on this transaction assuming the above shares are not sold through recognized stock exchange. Cost Inflation Index for 1981/82 is 100; for 1990/91 is 182; for 2006/07 is 519; for 2007/08 is 551. (4)

- A) LTCG of Rs. 5,01,762
- B) LTCG of Rs. 6,34,002
- C) LTCG of Rs. 3,20,000
- D) Nil

11) Umang wants to know what deductions he can claim for his flat in Pune for AY 08-09. The same are_____ (4)

- A) Rs. 1,50,000 u/s 24 (b) & Rs. 1,00,000 u/s 80 (C)
- B) Rs. 1,72,249 u/s 24 (b) & Rs. 40,457 u/s 80 (C)
- C) Rs. 1,69,075 u/s 80 (C) & Rs. 33,654 u/s 24 (C)
- D) Rs. 1,50,000 u/s 24 (b) & Rs. 40,457 u/s 80 (C)

12) Umang's brother in law is an NRI. He wants Umang to make some investments on his behalf whenever the right opportunity arises. You suggest: (2)

- A) Umang's brother in law should prepare a Notarized affidavit in Umang's favor.
- B) Umang's brother in law should prepare a Special Power of Attorney specifying transactions that can be carried out by Umang.
- C) Umang should prepare a General Power of Attorney that gives him the right to do transactions on behalf of his brother in law.
- D) Umang should not get into such an arrangement due to complex tax laws related to NRI investments.

13) Umang has done 4 FDRs of Rs. 60,000 each in four different branches of a Public Sector Bank in Mumbai on 01-01-2008. He wants to know the in hand maturity amount from these FDRs, post TDS, upon maturity. (4)

- A) Rs. 3,90,935
- B) Rs. 3,72,572
- C) Rs. 3,70,774
- D) None of the above

14) Umang is looking at investing in shares of ABC Ltd which is currently trading at Rs. 140. The share is expected to give a dividend of Rs. 2.50 per share in the coming year and growing at the rate of 10% every year. At what price should Umang bid for this share if he is looking for an absolute return of 15% by selling it at Rs. 150, tentatively after one year? (3)

- A) Rs. 132.60
- B) Rs. 135.65
- C) Rs. 137.10
- D) Rs. 130.43

Case Study: Charu Saxena

Charu Saxena, presently aged 57, with life expectancy 72, is a renowned industrialist based in Kolkata. He is the owner of a manufacturing unit employing close to 500 workers and another 100 in the executive level. His wife, Neeru, also participates in the business affairs with him. Their business has been doing well for the past few years.

The couple has two children –son Satish, aged 28 years, who shall be completing his Masters from USA and a daughter Sonam, aged 26 years, who shall be completing her MD in Medicine from Kolkata. Satish is engaged to Priya, aged 27, who is working in USA and they both intend to settle down in US for the initial 10-15 years of their career. Charu has fixed Satish's marriage for 01-01-2009 by when Satish would have also completed his Masters and joining one of the firms in USA. Sonam will be completing her MD in December 2009. Charu desires to settle her in Kolkata after her marriage sometime in 2010.

Charu's parents are Senior Citizens and reside with him.

Charu purchased a house on 11-04-2003 for Rs. 15.50 lakh for investment purpose. In September 2003 he spent another Rs. 2,95,000 on its renovation. In March 2006 he entered into an agreement for sale of this house for Rs. 25 lakh and received Rs. 5 lakh towards advance. However the buyer could not meet his commitment of getting the property registered in his name within due time and the amount was forfeited by Charu. This house was finally sold in January 2008 to another customer.

As their business is facing tough competition and also taking the global financial turmoil into account, the couple wants to ensure proper planning of their financial goals.

They have submitted the following information related to their financials as on December 15th 2008 to you, a practicing CFP certificant:

Cash Flows (Personal)

Household withdrawals ¹	Rs. 2 lakh p.m.
Expenses on Satish's education	Rs. 70,000 p.m
Expenses on Sonam's education	Rs. 40,000 p.m

(¹from the current account of the business)

Assets/Investments (Personal)

1) Bank Account:

Charu's current Account	Rs. 2.89 lakh
Neeru's current Account	Rs. 1.10 lakh
Satish's saving Account	Rs. 3.00 lakh
Sonam's saving Account	Rs. 2.87 lakh

2) PPF Account:

Charu (opened on 01-01-1997)	Rs. 8,98,850
Neeru (opened on 01-01-1997)	Rs. 6,67,833 ²
Satish (opened on 01-04-2003)	Rs. 2,76,580
Sonam (opened on 01-04-2004)	Rs. 2,26,580

(²after withdrawal of Rs. 3 lakh made on 01-06-2008)

3) Bonds:

GOI Taxable Bonds	Rs. 13.88 lakh ³
XYZ Tax Free Bonds	Rs. 41.98 lakh ³
10,000 Corporate Bonds paying 15% annual coupon (Maturity on 20/12/2014)	Rs. 44.75 Lakh ⁴

(³face value as on date)

4) Property

Residential house-I in Kolkata	Rs. 17 Crore ⁴
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Residential house-II in Kolkata

Rs. 2 Crore⁴

5) Precious Metal

Gold Ornaments with Neeru

Rs. 1.67 Crore⁴

(⁴current market value)

Questions

- 15) Umang has not done any Estate Planning as of now. Even his father has not prepared any Estate Planning documents. As Umang is the only son of his parents, along with his 3 sisters, what is most suitable for him? (3)
- A) Umang's father should first prepare his Will and on the basis of that Will Umang should prepare his own Will.
 - B) Umang should prepare his own Will without waiting for his father's Will.
 - C) There is no need for any Estate Planning as Umang is the only son of his parents.
 - D) Umang should prepare his Will by including his father's property but with an inbuilt provision for his sisters on account of that property.
- 16) During the initial discussions Charu wants to know from you the nature of compliance by which you are bound to FPSB India's Code of Ethics. You have explained to him that for every practicing CFP certificant it is _____ to adhere to FPSB India's Code of Ethics. (2)
- A) Discretionary
 - B) Mandatory
 - C) Obligatory
 - D) Depends upon the country of operation
- 17) Charu has authorized one of his executives for day to day interactions with you in relation to his Financial Planning. One day the executive asked you the relation between the "Percentage Rate" and "Basis Point" in the financial context. According to you _____. (2)
- A) 1 Percentage = 100 Basis Point
 - B) Percentage Rate + 100 = Basis Point
 - C) Basis Point + 100 = Percentage Rate
 - D) Basis Point = Percentage Rate
- 18) Charu has heard about the "Rule of 72" but is not familiar with its application. You explain to him, citing an example, that if any investment doubles in a 13 year time frame, then according to this rule, the applicable rate of interest on this investment would have been close to _____. (2)
- A) 5.47% p.a
 - B) 5.54% p.a
 - C) 1.80% p.a
 - D) 4.25% p.a
- 19) Keeping in view the present uncertainty in the global financial markets, Neeru wants to know the most probable risk faced on their portfolio of GOI taxable bonds. According to you which amongst the following is the most likely option? (2)
- A) Volatility
 - B) Price
 - C) Currency
 - D) Inflation

- 20) Charu's company is listed on one of the key regional Stock Exchanges. While discussing the success of Indian Stock Exchanges in securing a prominent place among their global peers Charu has asked you the difference between the method of calculation of Sensex of BSE and Nifty of NSE in India. You have explained this as_____.
- (2)
- A) Sensex is calculated on the basis of market capitalization method while Nifty is calculated on the basis of free float market capitalization method
- B) Nifty is calculated on the basis of market capitalization method while Sensex is calculated on the basis of free float market capitalization method
- C) Both are calculated on the basis of market capitalization method
- D) Both are calculated on the basis of free float market capitalization method
- 21) As part of employee welfare, Charu purchased a group insurance scheme for all employees of his company. The policy was taken for a sum assured which was 50% of the respective Human Life Value of all employees at the time of taking the policy. Unfortunately one of his key executives died during the policy term. His policy was taken for a sum assured of Rs. 10 lakh by Charu's company. Charu wants to know the amount of claim payable to the family members of that employee.
- (3)
- A) Rs. 10 lakh
- B) Rs. 5 lakh
- C) Rs. 2.5 lakh
- D) Rs. 20 lakh
- 22) In January 2008 Charu had signed a fresh sale agreement with another prospective buyer, for Rs. 30 lakh, for the house which he had purchased for investment purposes. Out of this amount, Rs. 20 lakh was paid immediately at the time of registry in January 2008. The balance was paid after 6 months along with interest @18% per annum. Charu wants to know the approximate capital gain on this sale transaction. CII for various Financial Years are 2002-03: 447; 2003-04: 463; 2007-08: 551; 2008-09: 582.
- (5)
- A) Rs. 13.99 Lakh
- B) Rs. 11.46 lakh
- C) Rs. 18.86 lakh
- D) Rs. 8.17 lakh
- 23) Charu has informed you that although he has filed his income tax return for the AY 2008-09 within due time, he has identified a factual mistake in his return. Charu wants to know from you till which date he can furnish his revised return.
- (3)
- A) 31st March 2008 or completion of his assessment whichever is earlier.
- B) 31st March 2009 or completion of his assessment whichever is earlier.
- C) 31st March 2010 or completion of his assessment whichever is earlier.
- D) No time limit defined.
- 24) Charu has informed you that Neeru is one of the Managing Directors in his company. Apart from salary and perquisites she has also been paid a sum of Rs. 1.67 lakh in the AY 2008-09 towards Director's sitting fee for attending the board meetings of the company. Charu wants to know the tax treatment of this payment in the accounts of Neeru?
- (3)
- A) This will be treated as "Income from Salary".
- B) This will be treated as "Income from Business or Profession".
- C) This will be treated as "Income from other sources".

- D) This will be a tax free income for Neeru.
- 25) Charu has not prepared any Will as on date. He wants to know in case he dies intestate, as per prevailing Hindu Succession law in India, which of his existing family member/s can be denied share of his estate in case of a dispute. (3)
- A) His father.
 B) His mother and father.
 C) His daughter if she is married.
 D) All members have a share on his property on an equitable basis.
- 26) Charu purchased Corporate bonds on 20th Dec 2004 at the face value of Rs. 500 for each bond. Charu has informed you that in one of the FDRs he is being offered an interest rate of 16% p.a. (quarterly compounding). Charu wants to know whether he should liquidate his bonds investment at the current market valuation or not? According to you _____ . (4)
- A) No, he should even increase his investment in these bonds
 B) Yes
 C) No
 D) 50% redemption is advisable
- 27) Till date the couple has never given any attention to their individual insurance needs. Most of the insurance needs of the family are taken care by the company's group insurance policy which provides all common risk protection to the family. You have explained to Charu that this group insurance policy may not cater one important risk which is _____ . (2)
- A) Life insurance
 B) Health insurance
 C) Liability insurance
 D) Disability insurance
- 28) Charu wants to issue a Zero Coupon Bond of Rs. 1,000 face value, of his own company, for a tenure of 25 years. You estimate the cost of fund to be 10% p.a for the first 5 years, 8% p.a for the next 5 years and 6% p.a for the last 15 years. From Charu's perspective what should be the least issue price of this Bond under these circumstances? (5)
- A) Rs. 1,000
 B) Rs. 117.63
 C) Rs. 176.33
 D) None of the above
- 29) Charu has told you that Satish's would be father in law wants to give a sum of Rs. 10 lakh to the family on the occasion of Satish and Priya's marriage next year. Charu wants to know from you how should this gift be accepted from Tax Planning perspective? (3)
- A) It should be received in Priya's name
 B) It should be received in Satish's name
 C) It should be received in Neeru's name
 D) It should be received in the name of either Satish or Priya
- 30) Neeru has informed you that she is contributing Rs. 50,000 per annum in her PPF account since inception. She wants to withdraw some money from her PPF account at the time of Satish's marriage. She wants to know what maximum amount she can withdraw from this account on 1st January 2009. (4)

- A) Rs. 3.33 lakh
- B) Rs. 2.19 lakh
- C) Nil
- D) None of the above

31) Charu wants to set up a cash flow arrangement for monthly donation to a charitable trust. He wants to start this donation from 01-01-2009 which shall continue till the end of his life. For this purpose you suggest him to take the benefit of the Reverse Mortgage scheme being provided by his bank. The bank is ready to provide a cash stream for the full term, charging an interest rate of 12.50% p.a (nominal-compounding monthly) on 70% of the current market value of his residential house-II. Charu wants to know the approximate monthly amount which he can donate to the trust through this arrangement? (5)

- A) Rs. 26,750
- B) Rs. 26,500
- C) Rs. 3,21,000
- D) Rs. 2,65,000

Solutions Umang-Case

1 B)

2 D)

3 A sum of Rs. 2 Lakh shall be paid when such a disease is identified and certified by a Doctor

4 This is to be seen in light of the governing terms and conditions of the expired policy

5 D

Risk free rate of return	9%		1.018691589	1.09/1.07
Inflation	7%		1.87%	
Long term rate of investment	15% p.a	=	1.1715% p. m effective	RATE(12,-,100,115)
Retirement Age	50			
Current Age	33			
Spouse's age	32			
Life expectancy for both	80		1.09/1.07	
Current Costs p.m	22,000		1.018691589	
Costs at the time of retirement	69,494	FV(7%,50-33,-,22000)		
Costs during retirement	55,595	0.8*69494		
Corpus required during retirement	15,332,892	PV(1.87%/12,12*(80-50),-55595,,1)		
Amount required to be saved per month	18,402	PMT(1.1715%,12*(50-33),-,15332892)		

6 C)

7 A)

Nation Savings Certificate	
Interest rate p.a	8%
Compounding per year	2
Tenure in years	6
Amount invested	30,000
Maturity amount	48,031

FV(8%/2,2*6,-,30000)

8 C)

	MF1	MF2
Year 1	40	35
Year 2	32	25
Year 3	-5	-1

Variance	576.33	345.33	VAR(35,25,-1)
Standard deviation	24.01	18.58	STDEV(35,25,-1)

9 D)

National Savings certificate			
Interest rate p.a	8%		
Compounding per year	2		
Tenure in years	6		
Year	Amount	NSC Maturity	Final Amount
	1	5,000	
	2	5,000	

4	1-Jul-06	1,507,061	17049	13,658	1,503,670
5	1-Aug-06	1,503,670	17049	13,627	1,500,249
6	1-Sep-06	1,500,249	17049	13,596	1,496,796
7	1-Oct-06	1,496,796	17049	13,564	1,493,311
8	1-Nov-06	1,493,311	17049	13,532	1,489,795
9	1-Dec-06	1,489,795	17049	13,500	1,486,246
10	1-Jan-07	1,486,246	17049	13,468	1,482,664
11	1-Feb-07	1,482,664	17049	13,435	1,479,050
12	1-Mar-07	1,479,050	17049	13,402	1,475,403
13	1-Apr-07	1,475,403	17049	13,368	1,471,722
14	1-May-07	1,471,722	17049	13,491	1,468,164
15	1-Jun-07	1,468,164	17049	14,682	1,465,797
16	1-Jul-07	1,465,797	17951	14,658	1,462,503
17	1-Aug-07	1,462,503	17951	14,625	1,459,178
18	1-Sep-07	1,459,178	17951	14,592	1,455,818
19	1-Oct-07	1,455,818	17951	14,558	1,452,425
20	1-Nov-07	1,452,425	17951	14,524	1,448,999
21	1-Dec-07	1,448,999	17951	14,490	1,445,538
22	1-Jan-08	1,445,538	17951	14,455	1,442,042
23	1-Feb-08	1,442,042	17951	14,420	1,438,512
24	1-Mar-08	1,438,512	17951	14,385	1,434,946
25	1-Apr-08	1,434,946	212706	172,249	40,457
26	1-May-08	1,431,344	17951	14,349	1,431,344
27	1-Jun-08	1,427,707	17951	14,313	1,427,707
28	1-Jul-08	1,424,033	17951	14,277	1,424,033
29	1-Aug-08	1,420,322	17951	14,240	1,420,322
30	1-Sep-08	1,418,350	19262	15,979	1,418,350
31	1-Oct-08	1,415,044	19262	15,956	1,415,044
32	1-Nov-08	1,411,701	19262	15,919	1,411,701
33	1-Dec-08	1,408,321	19262	15,882	1,408,321
				15,844	1,424,164

12 B)

13 A) 390935 (60000*(1.1025)^5)*4

14 A) 132.6 (2.5/1.15)+(150/1.15)

Charu Solutions

15 B)

16 B

17 A)

18 B) 5.54 72/13

19 D)

20 B

10 lakh

21 A)

22 A)

Full Sale Value=
 Less: Cost of acquisition
 Original Cost 1550000
 Less: Forfited Amt -500000 (u/s 51)

 1050000

30 lakh

Indexed Cost= 12.49568035 10.5*551/463

Less: Cost of improvement

Original Cost 295000

Indexed Cost= 3.510691145 (2.95*551/463)

LTCG= 13.99362851 30-(12.5+3.51)

23 C)

upto 31st march 2010 (u/s 139 (5))

24 C)

25 A)

26 A)

27 C)

28 C)

Maturity after 25 years=
 Interest in the last 15 years=6%=
 interest from 6th to 10 years=8%=
 interest for first 5 years=10%

1000
 417.2650607
 283.983589
 176.3314658

1000/1.06^15
 417.27 / 1.08^5
 283.99/1.1^5

So the current issue price=

176.33

29 D)

30 C)

31 B)

Current Market Value of House II =
 on 01-01-2009 Age of Charu=
 Expected Age=
 Rate of Interest=
 Liquidity upto =

2 crore
 57 years
 72 years
 12.50% pa
 70%

Annuity=

SAY

26,444 pm
 26,500

PMT(12.5%/12,15*12,0,-14000000,1)