

PRESIDENCY UNIVERSITY, BENGALURU

SCHOOL OF MANAGEMENT

MID TERM EXAMINATION

Odd Semester: 2018-19

Course Code: FIN 305

Course Name: International Finance

Branch & Sem: MBA III Sem

Date: 29 October 2018

Time: 2 Hours

Max Marks: 40

Weightage: 20%

Instructions:

(i) Students can bring scientific calculator in the examination hall.

(ii) Calculators cannot be shared

Part A

Answer all the Questions. Each question carries four marks.

(3x4=12)

- 1. Which forward rate differential? Explain with one example.
- 2. The following data has been provided to you. Calculate forward premium and discount:
 - Spot: ₹ 69.90 ₹ 70.00
 - One month forward: ₹ 68.75 ₹ 69.00

Calculate the forward premium or discount?

- 3. What is cross currency rate? Explian with one example.
- 4. If real interest rate is 5 percent and the inflation rate is 8 percent, what would be the nominal interest rate?

Part B

Answer all the Questions. Each question carries eight marks.

(2x8=16)

5. Suppose that spot rate is Rs. 40/US \$ and three month forward rate is Rs. 40.28/US \$. The interest rate is 18% in Indian and the same of US is 12%. Suppose one person is borrowing \$1000 from USA and investing in India? What will be his gain or loss? What kind of arbitrage is it?

Date	US Dollar rate in rupee	GBP rate in rupee	GBP rate in US dollar
12-Oct-18	73.685	96.838	1.3155
11-Oct-18	74.050	98.001	1.3236
10-Oct-18	74.250	97.977	1.3196

You have ₹ 10,00,000. You thought to purchase US Dollar then to purchase GBP and converted GBP to ₹. What will be your gain or loss on these three days. Can this be your practical gain or loss?

Part C

Answer the Question. Question carries twelve marks.

(1x12=12)

The Indian rupee slipped below the 72 mark for the first time ever on Thursday even as US dollar NSE 0.05 % eased a bit in global markets. The local currency has fallen more than 12 per cent on a year-to date basis, making it one of the worst-performing currencies among emerging markets. Earlier in the day, the rupee resumed higher at 71.65 against vesterdav's of 71.75 closina the interbank foreign exchange market. A Reuters report said that the Reserve Bank of India was not spotted intervening after the rupee pierced the 72 level. It had been suspected of selling dollars earlier in the day. The rupee was trading 29 paise down at 72.05 at around 12.45 pm (IST). Soumya Kanti Ghosh, Group Chief Economic Adviser at SBI said the rupee depreciation of 13 per cent in 2018 and around 7 per cent since June 2018 when the RBI started hiking rates is largely in consonance will dollar strengthening against all currencies.

"The rupee could not have been immune to such and hence the current depreciation was long overdue and trends in NDF market (rupee at 75 and implied 1 year yield at 7.7 per cent) suggest the pain might not be just over yet." he added. Finance Minister Arun Jaitley on Wednesday attributed the fall in rupee to global factors and said there was no need for panic or knee-jerk reactions. He further said the RBI is doing whatever is necessary to deal with the situation. Meanwhile, a Reuters poll on Thursday showed that the bearish bets that rupee will weaken further rose to their highest level in five years over the past two weeks.

The rupee had its worst month in three years in August as crude rallied on speculation sanctions on Iran will shrink global supplies. The crude import bill for the world's fastest-growing oil user surged 76 per cent in July from a year earlier to \$10.2 billion. That pushed up the trade deficit to \$18 billion, the most in five years, a Bloombard report says. India imports nearly 83 per cent of its crude oil requirement.

7. Question:

- a. What is your views about the reaction of Finance Minister Arun Jaitley Explain your answer. (6 marks)
- b. Will India be able to stop ₹ depreciation against \$? What is your views. Explain your answer.



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PRESIDENCY UNIVERSITY BENGALURU

SCHOOL OF MANAGEMENT

END TERM FINAL EXAMINATION

Odd Semester: 2018-19

Date: 07 January 2019

Course Code: FIN 305

Time: 3 Hours

Course Name: International Finance

Max Marks: 80

Programme & Sem: MBA & III Sem

Weightage: 40%

Instructions:

(i) Students can bring scientific calculator in the examination hall.

(ii) Calculators cannot be shared

Part A

Answer all the Questions. Each question carries five marks.

(4Qx5M=20)

- 1. How stock exchange manage risk in future trading?
- 2. What is the difference between future and forward trading?
- 3. What is clearing house and what are its functions?
- 4. You have to pay \$1000000 to an exporter after 3 months. You made a forward contract with the bank and agreed to purchase the \$ at the rate ₹70. After 3 months the \$ rate may go up to ₹70.5 or ₹69.5. What will be your gain or loss in each case?

Part B

Answer all the Questions. Each question carries ten marks.

(3Qx10M=30)

- 5. Find out the size of variation margin call of a Euro futures contract with the help of the following data:
 - a. 1 euro future contract
 - b. Spot price is US \$2.50 / Euro 0.0040 is the standard deviation of daily changes in the price of future price
 - c. Probability of exhaustion is 0.05, value of w is 1.96 when N(w) is 0.975.
 - d. Number of days is 9 for which calculation is to be made.
 - e. One Euro future contract is 1,25,000 Euro.
 - f. Trading is taking place in NASDAQ
- 6. Exporter took long position in call option. Suppose the strike price is ₹74/\$. Today's spot price is ₹69/\$. Suppose spot price is steadily increasing and goes up to ₹84/\$ according to the list given below. What will be day wise gain or loss of the exporter? Suppose that call option buyer had paid a commission of ₹5 per contract.

Day	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Spot	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84
Price																

Find out the payoff graph for the exporter. Where will he be in out of the money, at the money and in the money? Where does he exercise the option?

7. Suppose an Indian exporter exports goods for \$ 62500. He will receive the amount after 3 months. The exporter fears a decrease in dollar value within two months when payments are to be received. Suppose the strike rate is Rs. 83.00 / \$, the premium is Rs. 0.05/\$ and the spot rate at maturity is Rs. 82.80 /\$. Will exporter take long or short position in which option put or call?

Part C

Answer all the Questions.

(2Q=30Marks)

8.

USDINR									
Trade Date	Instrument	Volume (Contracts)	Turnover (₹ crs)	Premium Value (in ₹ crs)	OI				
04-Dec-2018	OPTCUR	1369927	9,728.68	57.71	20,57,451				
03-Dec-2018	OPTCUR	2020091	14,301.79	82.86	19,39,676				
30-Nov-2018	OPTCUR	1832241	12,941.14	78.41	17,25,070				
29-Nov-2018	OPTCUR	2132690	15,157.09	94.54	15,47,986				

The above table provides 4 days trading details of USD and Indian Rupee in National Stock Exchange of India.

(15 marks)

- a. What does "OPTCUR" indicate?
- b. What is Volume (Contracts)?
- c. What is Turnover (₹ in crs)?
- d. What does OI indicate? When does OI increase or decrease?
 - 9. Read the case and answer the questions.

Derivatives are financial securities that don't have an independent value and rely on the value of an underlying asset. Futures and options are two popular derivatives in the capital market. A futures contract can be on a stock or an index. If you buy a stock future, it means you have bought the stock with a promise to pay at a future date. If you sell a stock future, it means you have to deliver the stock to the buyer at a future date. On an exchange, these contracts can be settled without actual delivery, by adjusting the funds or cash against the contracts' value.

An options contract is of two types, call or put. A call option gives the buyer the right to claim a particular stock or index at a predetermined price. A put option gives the buyer the right to sell a particular stock or index at a predetermined price. You have to pay a premium to buy an option, which is market determined and based on: the underlying stock or index, the option time period and the stock's volatility. You buy a call option if you expect the stock's price to rise, and a put option if you expect it to fall.

Contracts for futures and options are usually for 1, 2 or 3 months. Unlike options, in which a premium is involved, a futures contract is priced as per the underlying stock. For example, a Nifty50 futures contract is valued at 8,581 for a contract ending on 27 October and 8,623 for a contract ending on 24 November. Say, the current value of Nifty 50 is 8,570, the futures reflect a mildly positive sentiment. So, the futures reflects the expectation of where the index will be when the contract ends. This difference in price, between the futures and cash market, is used by speculators and arbitragers. If it works out at expiry, you stand to gain. If the market moves against your view, you stand to make losses. Gains and losses can be unlimited, depending on how much the index moves against your bet. In futures, both the buyer and seller have an obligation to complete the trade at the end of the contract period.

With options, there is no obligation to fulfil the contract because a premium is paid for buying the option. It gives you a non-binding option to buy or sell the underlying stock or index. Hence, the losses are limited, but gains can be unlimited as the contract's price is fixed. Both securities, however, are risky and require some margin money as collateral against the contract.

- a. What are the differences between the future and option contract? (5 M)
- b. How future contracts are priced? How can the gain in future contract be unlimited? (5 M)
- c. How gain in option contract can be unlimited? Explain properly. (5 M)