

## **BRAINWARE UNIVERSITY**

## Term End Examination 2021 - 22 Programme – Master of Business Administration Course Name – Financial Derivatives Course Code - FM402 (Semester IV)

Time allotted: 1 Hrs.15 Min. Full Marks: 60

[The figure in the margin indicates full marks.]

## Group-A

(Multiple Choice Type Question)  $1 \times 60 = 60$ Choose the correct alternative from the following: (1) Evidence of first derivative was observed inb) 19th century a) 20 th century c) in Greek History d) 500 years back (2) Both party gets and pays cash in derivatives. It is observed ina) Forward b) Futures c) Options d) Swaps (3) Only profit is made inb) speculation a) hedging c) arbitrage d) all of these (4) First derivative instrument in India has underlying asset ona) share b) index c) bond d) commodity (5) According to Gupta committee recommendations, minimum networth of a member involved in derivative trading should bea) 1 crore b) 3 crore c) 5 crore d) 10 crore (6) Separation of cash and derivative segment of an exchange in India is based on the recommendation ofa) Tandon Committee b) Sachar Committee c) Chore Committee d) Gupta Committee

(7) A Forward Rate Agreement is undertaken today. Loan will be taken after 2months

for atenure of 6 months. This forward contract is written as-

a) 0 X 2 FRA	b) 2 X 6 FRA
c) 2 X 8 FRA	d) 0 X 8 FRA
(8) Interest rate in FRA is calculated on the basis	of
a) Theory of absolute advantage	b) Term structure theory
c) Interest rate parity	d) Fisher's international effect
(9) An interest rate floor in currency swaps sets	
a) A maximum rate on floating interest rate payments.	b) A maximum rate on fixed interest rate payments.
c) A minimum rate on floating interest rate payments.	d) A minimum rate on fixed interest rate payments.
(10) In Forward contract of commodities, if F is the then cash and carry concept is applicable whe	÷
a) Fa>F	b) Fa
c) FA=F	d) all of these
(11) How clearing house of derivative market neut	ralises default risk-e
a) takes written guarantee	b) blocks required amountin the bank account
c) takes margin	d) marks margin on daily basis
(12) In daily marking margin call is made-	
a) if margin is reduced	b) if margin is zero
c) if margin balance is less than maintenance margin	d) any time when needed
(13) Risk as distinct from uncertainty considers	
a) Maximin approach	b) Qualitative approach
c) Maximax approach	d) Quantitative approach
(14) Financial risk does not include-	
a) Interest rate	b) Credit terms
c) Exchange rate	d) Marketing mix
(15) Financial derivatives does not include	
a) swaps	b) options
c) futures	d) loans
(16) Financial derivatives underlying assets includ	e
a) Bond	b) Share
c) Futures	d) None of them
(17) A bank manager through hedging can -	
a) Reduce interest rate risk	b) Increase reinvestment risk
c) Increase exchange rate risk	d) Increase probability gain
(18) Derivatives are traded in the market-	
a) Assets backed market	b) Cash flow backed market
c) Mortgage backed market	d) Derivative securities market
(19) House which guarantees that all buying and se exchange is called	elling will be made by the trader of
a) Trading house	b) Guarantee house
c) Clearing house	d) Professional house

(20) Identify false statement from the followings-	
a) Futures contracts allow fewer delivery options than forward contracts.	b) Futures contracts are more liquid than forward contracts
c) Futures contracts trade on a financial exchange	d) Futures contracts are marked to market
(21) Which of the following does the most to reduce	ee default risk for futures contracts?
a) Marking to market	b) Flexible delivery arrangements
c) Credit checks for both buyers and sellers	d) High liquidity
(22) Short hedging on commodity futures will mea	n
a) Buy futures & underlying asset	b) Buy underlying asset and sell futures
c) Sell futures & underlying asset	d) Sell underlying asset and buy futures
(23) Price risk of unhedged position is [S=spot rate	; P=price of underlying]
a) S1-S0	b) P1-P0
c) S0-F0	d) S1-F1
(24) If CovFS = 1, $\sigma$ F= $\sigma$ S then optimal hedge ratio	is-
a) less than one	b) greater than one
c) equal to one	d) any value is possible
(25) When speculator expects fall in price, he can s	speculate by
a) Long futures ans short on underlyings at t0	b) Long on futures at t0 and short the same at t1
c) Short on futures at t0 and then long the same at t1	d) Long on underlyings at t0 and short on futures at t0
(26) Strike price in option is defined as-	
a) Market price of underlying asset	b) Market price of option
c) Exercise price	d) Premium
(27) In a call option if S	
a) In the money	b) At the money
c) Out of money	d) Cannot be specified
(28) Price of a commodity futures in NCDEX on 2 in MCX is Rs. 6,800. It is a situation of	1st January is Rs.6,700. Same futures
a) Intercommodity spread	b) Intermarket spread
c) Calender spread	d) None of the above
(29) NIFTY derivatives was introduced in India on	-
a) 9st June 2001	b) 9th June 2000
c) 12th June 2000	d) 12th June 2001
(30) Profit/loss curve of put buyer and writer are	
a) Rising, falling	b) Falling, rising
c) Mirror image	d) Any combinations are possible
(31) Tailor made options are known as	
a) OTC option	b) Exchange traded option
c) American option	d) European option
(32) Value of an option is calculated by using	

a) PPT theory	b) Put call parity theory	
c) Carry cost model	d) Binomial model	
(33) Theta value in option indicates sensitivity of option price due to-		
a) Change in asset price	b) Time left for maturity	
c) Price of underlyings	d) Change in market interest	
(34) Difference between lognormal distribution and normal distribution is in the value of random variable. In lognormal distribution it will take-		
a) Only positive value	b) Only negative value	
c) Zero value	d) Positive, negative or zero all are possible	
(35) Merton Model for option valuation is modification of black schole model. It has helped in the removal of following assumption of Black-Schole model		
<ul> <li>a) a. Log normal price distribution not required</li> </ul>	b) Applicable on American call option	
c) Dividend payment within expiry period is possible	d) None of the above	
(36) Pay off of financial derivative is linked to-		
a) Securities that will be issued in future	b) Securities that are already issued	
c) Volatility of interest rate	d) Allowable rate of return specified by government	
(37) Reason of hedging a portfolio is-		
a) To increase probability of gains	b) To limit exposure to risk	
<ul> <li>c) To make profit from capital gains when interest rates falls</li> </ul>	d) All of them	
(38) Suppose there is a contract which enables investor to buy seurities on future date is known as-		
a) Short contract	b) Long contract	
c) Cross	d) Hedge	
(39) Investor having short contract is known as-		
a) Sell securities in future	b) Buy securities in future	
c) Hedge in the futures	d) Close out his position in the futures	
(40) Hedging in futures market eliminates		
a) Scope of future gain	b) Eliminates future loss	
<ul> <li>c) Eliminate both loss and profit making opportunities</li> </ul>	d) Increases earning potential of portfolio	
(41) Suppose a futures contract will expire in June. long position	Which particular action will offset	
a) Hold Futures until it expires	b) Sale futures contract	
c) Buy a new futures contract that expires in June	d) Buy a futures contract regardless of its expiration date	
(42) Using futures contract to diversify price risk is known as-		
a) Hedging	b) Speculating	
c) Arbitraging	d) Diversifying	
(43) Which one will cause increase in futures price when other factors are held constant		

<ul> <li>a) Higher income received while carrying the underlying asset</li> </ul>	b) Lower expected spot price for underlying asset
c) Lower risk free return	d) Higher expected spot price for underlying asset
(44) A call option has strike price of Rs.45. It is bot stock is Rs.42, estimate profit/loss	ught at Rs.4. If spot price of underlying
a) 3	b) -3
c) -4	d) -7
(45) Value of call and put are same in binomial tree	model of option. It happens for
a) European call and American call	b) European put and American put
c) European call and European put	d) American call and American put
(46) Consider buying of put option, probability that increases with the	a buyer would have negative payoff
a) increase in stock price	b) decrease in stock price
c) increase in maturity duration	d) decrease in maturity duration
(47) Consider call option writing, probability that a increases with the	buyer would have positive payoff
a) Increase in stock price	b) Decrease in stock price
c) Increase in maturity period	d) Decrease in maturity period
(48) Up front fees paid by buyer to seller in option	is known as-
a) Call premium	b) Discount premium
c) Strike premium	d) Exercise premium
(49) An investor has purchased 100 shares of a commonth price has increased to Rs.40. He has the his strategy of hedging this risk is-	- · · · · ·
a) Sell call on share	b) Buy call on share
c) Sell put on share	d) Buy put on share
(50) Investor has purchased 100 shares of a compar puts. A lot consists of 40 shares. Strike price is Suppose on maturity the spot price of share is	s Rs.50. Premium is Rs.3 per share.
a) Loss of Rs.3 per share	b) Gain of Rs. 4 per share
c) Gain of Rs.7 per share	d) Loss of Rs.7 per share
(51) An investor is expecting continuous fall in the shares at Rs.75. His objective is to buy it again. His risk will arise when its price rise. Hedging	when price will drop below this level.
a) Sell put of share X	b) Buy put of share X
c) Sell call of share X.	d) Buy call of share X
(52) An investor is long on 100 shares of X at Rs.5 Strike price is Rs.55 and premium is Rs.2. He	-
a) Rs.49	b) Rs.51
c) Rs.53	d) Rs.55
(53) Which one is true for SWAPTION	
a) Two derivative contract Swaps and Option	b) Right to enter into Swaps at the expiry of option

<ul> <li>c) Helpful for a firm paying fixed rate on borrowings and anticipate rise in future interest rate</li> </ul>	d) Helpful for a firm paying floating rate on borrowing and anticipate fall in interest rate in future	
(54) Write covered call is a strategy used by-		
a) Long in share & long in call	b) Long in share & write in call	
c) Long in share & long in put	d) Long in share & write in put	
(55) Protect put is a strategy when investor st	tockput	
a) Buy, buy	b) Buy, write	
c) Sell, buy	d) Sell, write	
(56) Spread Strategy is applied on		
a) Call option of two different share	b) Call option with different maturity period	
c) Call option with two different strike price	d) Call option on two different strike price & maturity	
(57) Bull spread strategy is used in a		
a) Booming market	b) Bearish Market	
c) Stable Market	d) Under any situation	
(58) An investor buys for Rs 3 a call with a strike price of Rs 30 and sells for rupee 1 a call with strike price of Rs 35. Calculate Maximum profit and maximum loss-		
a) Rs.3, Rs.2	b) Rs. 2, Rs. 3	
c) Rs.2, Rs.2	d) Rs.3, Rs.3	
(59) An investor buys for Rs 3 a call with a strike price of Rs 30 and sells for rupee 1 a call with strike price of Rs 35. Calculate break even price of stock on maturity.		
a) Rs.28	b) Rs.30	
c) Rs.32	d) Rs.35	
(60) Long Strangle is formed by buying a call at strike price	strike price and buying a put at	
a) Higher, lower	b) Lower, higher	
c) Higher, higher	d) Lower, lower	