

## **Assumptions underlying the Model Test Paper for BCDE**

1. Unless otherwise mentioned specifically, assume the following product specifications with respect to index futures:
  - a. The contract multiplier for Sensex futures is 50.
  - b. All the derivative contracts will expire on the last Thursday of the month.
  - c. The life of one series of Sensex futures contract is three months and at any point of time, we have three series open for trading.
  
2. Unless otherwise mentioned all figures denoting value are in terms of Rupees only. The abbreviation INR stands for Indian Rupees.
  
3. The value of securities contributed towards liquid assets are to be considered net of hair-cut.
  
4. With reference to the positions taken in the market, the "+" symbol is used to denote long positions and the "-" symbol to denote short
  
5. For calculating margins on spread positions, a calendar spread will be treated as naked positions in the far month contract 3 trading days before the near month contract expires.

**MODEL TEST PAPER FOR BCDE**

<b>Q. Id</b>	<b>Question</b>	<b>Option 1</b>	<b>Option 2</b>	<b>Option 3</b>	<b>Option 4</b>
1	If you sell a put option contract on a share with strike price of Rs. 245, market price of Rs. 260 and a premium of Rs. 41, how much is the maximum gain that you may have on expiry of this position?	286	41	219	None of the above
2	In case of a pure speculator, as distinguished from a hedger, futures trading is a business by itself as he has no offsetting commercial position	TRUE	FALSE		
3	You sold one XYZ Stock Futures contract at Rs. 248 and the lot size is 1,200. What is your profit (+) or loss (-), if you purchase the contract back at Rs. 251?	-2600	-3600	3600	None of the above
4	You bought a January XYZ Stock Futures contract at Rs. 268 and the lot size is 1,200. What is your profit (+) or loss (-), if you square off your position at at Rs. 227?	-48200	49200	-49200	None of the above
5	The underlying in case of a derivative may be	a share index	A Government bond	another derivative	All the A, B and C
6	You bought a January XYZ Stock Futures contract at Rs. 268 and the lot size is 1,200. What is your profit (+) or loss (-), if you square off your position at at Rs. 229?	-45800	46800	-46800	None of the above
7	You sold one XYZ Stock Futures contract at Rs. 248 and the lot size is 1,200. What is your profit (+) or loss (-), if you purchase the contract back at Rs. 254?	-6200	-7200	7200	None of the above
8	You sold one XYZ Stock Futures contract at Rs. 248 and the lot size is 1,200. What is your profit (+) or loss (-), if you purchase the contract back at Rs. 255?	-7400	-8400	8400	None of the above

9	Forward contract has to be settled by delivery of the asset on maturity or cancellation of the contract on or before maturity with the same counterparty	TRUE	FALSE		
10	You bought a January XYZ Stock Futures contract at Rs. 268 and the lot size is 1,200. What is your profit (+) or loss (-), if you square off your position at at Rs. 230?	-44600	45600	-45600	None of the above
11	You sold one XYZ Stock Futures contract Rs. 248 and the lot size is 1,200. What is your profit (+) or loss (-), if you purchase the contract back at Rs. 267?	-21800	-22800	22800	None of the above
12	You sold one XYZ Stock Futures contract Rs. 278 and the lot size is 1,200. What is your profit (+) or loss (-), if you purchase the contract back at Rs. 267?	14200	13200	-13200	None of the above
13	You sold one XYZ Stock Futures contract Rs. 278 and the lot size is 1,200. What is your profit (+) or loss (-), if you purchase the contract back at Rs. 270?	10600	9600	-9600	None of the above
14	If a mutual fund wants to increase its exposure to equity, say from 30% to 40%, without actual buying of equity in the cash market, it can buy index futures	TRUE	FALSE		
15	If a mutual fund wants to reduce its exposure to equity, say from 40% to 30%, without actual selling of equity holding, it can sell index futures	TRUE	FALSE		
16	An exchange traded futures contract and an OTC contract are similar in the following way:	Both are tailored instruments	Both require margin collection by a clearing house	Both are exposed to credit-risk i.e. risk of non-performance by counter party	None of the above

17	Which person will be able to hedge by Buying Futures?	A dairy farmer, who needs to sell his milk at a future date (Milk Futures).	A local baker, who needs to purchase wheat to make bread for a local hospital (Wheat Futures).	A jeweller, who needs gold to make jewellery (Gold Futures).	Both B and C.
18	You bought a January XYZ Stock Futures contract at Rs. 268 and the lot size is 1,200. What is your profit (+) or loss (-), if you square off your position at at Rs. 227?	-48200	49200	-49200	None of the above
19	You bought a January XYZ Stock Futures contract at Rs. 268 and the lot size is 1,200. What is your profit (+) or loss (-), if you square off your position at at Rs. 228?	-47000	48000	-48000	None of the above
20	A futures contract, to be able to operate and be liquid, should have both hedging participation and speculative appeal	TRUE	FALSE		
21	The formula to change the base year average market value is	new base year avg = old base year avg * new market value / old market value	new base year avg = old base year avg * old market value / new market value	neither A nor B	
22	You bought a January XYZ Stock Futures contract at Rs. 268 and the lot size is 1,200. What is your profit (+) or loss (-), if you square off your position at at Rs. 231?	-43400	44400	-44400	None of the above
23	Risk management and control is more complex in case of options than in case of futures	FALSE	TRUE		
24	Derivatives offer a cost efficient and convenient way for hedging against price risk	FALSE	TRUE		

25	You sold one XYZ Stock Futures contract at Rs. 248 and the lot size is 1,200. What is your profit (+) or loss (-), if you purchase the contract back at Rs. 264?	-18200	-19200	19200	None of the above
26	You sold one XYZ Stock Futures contract at Rs. 278 and the lot size is 1,200. What is your profit (+) or loss (-), if you purchase the contract back at Rs. 251?	33400	32400	-32400	None of the above
27	A vanilla derivative is the same as	an exotic derivative contract	a standard derivative contract	an equity derivative contract	None of the above
28	Which of the following are functions of a futures exchange?	Providing facilities for trading in futures	Ensuring smooth functioning of the exchange	Providing a clearing function	All of the above
29	Which of the following options will yield a profit to the purchaser?	An expired option that is "at-the-money"	An expired option that is "in-the-money"	An expired option that is "out-of-the-money"	None of the above
30	You sold one XYZ Stock Futures contract Rs. 278 and the lot size is 1,200. What is your profit (+) or loss (-), if you purchase the contract back at Rs. 254?	29800	28800	-28800	None of the above
31	A futures contract on SENSEX can be settled 0069n cash only.	TRUE	FALSE		
32	You bought a January XYZ Stock Futures contract at Rs. 268 and the lot size is 1,200. What is your profit (+) or loss (-), if you square off your position at at Rs. 233?	-41000	42000	-42000	None of the above
33	You bought a January XYZ Stock Futures contract at Rs. 268 and the lot size is 1,200. What is your profit (+) or loss (-), if you square off your position at at Rs. 234?	-39800	40800	-40800	None of the above
34	If you are exposed to a price-risk in an underlying - by hedging you would be able to	make the outcome more profitable	make the outcome more certain	make the outcome more compliant with regulations	All the options

35	You own 10,000 shares of ABC at price of Rs. 130. The stock has a beta of 1. You wish to create a perfect hedge by selling stock index futures. What should be the value of stock index futures that you should sell?	10000	130	1300000	None of the above
36	You own 10,000 shares of ABC at price of Rs. 140. The stock has a beta of 1. You wish to create a perfect hedge by selling stock index futures. What should be the value of stock index futures that you should sell?	10000	1400000	140	None of the above
37	A futures contract is generally referred to by its delivery month.	TRUE	FALSE		
38	You own 10,000 shares of ABC at price of Rs. 160. The stock has a beta of 1. You wish to create a perfect hedge by selling stock index futures. What should be the value of stock index futures that you should sell?	10000	1600000	160	None of the above
39	You sold one XYZ Stock Futures contract Rs. 278 and the lot size is 1,200. What is your profit (+) or loss (-), if you purchase the contract back at Rs. 251?	33400	32400	-32400	None of the above
40	You sold one XYZ Stock Futures contract Rs. 248 and the lot size is 1,200. What is your profit (+) or loss (-), if you purchase the contract back at Rs. 252?	-3800	-4800	4800	None of the above
41	The systematic risk of a portfolio can be reduced by hedging with stock index futures.	TRUE	FALSE		
42	You own 10,000 shares of ABC at price of Rs. 180. The stock has a beta of 1. You wish to create a perfect hedge by selling stock index futures. What should be the value of stock index futures that you should sell?	10000	1800000	180	None of the above

43	You sold one XYZ Stock Futures contract Rs. 278 and the lot size is 1,200. What is your profit (+) or loss (-), if you purchase the contract back at Rs. 262?	20200	19200	-19200	None of the above
44	You sold one XYZ Stock Futures contract Rs. 278 and the lot size is 1,200. What is your profit (+) or loss (-), if you purchase the contract back at Rs. 269?	11800	10800	-10800	None of the above
45	If you sell a put option contract on a share with strike price of Rs. 245, market price of Rs. 260 and a premium of Rs. 42, how much is the maximum gain that you may have on expiry of this position?	287	42	218	None of the above
46	When the asset underlying the futures contract is different from the asset whose price is to be hedged, it is called a cross hedge.	TRUE	FALSE		
47	The shares of XYZ Ltd are currently quoted at Rs. 100. Futures on this share are quoted at Rs. 112. In what situation would you buy these futures?	You expect the price of the share to move up by 5%.	You expect the price of the share to move up by 7%.	You expect the price of the share to move down by 25%.	You expect the price of the share to move up by 25%.
48	You sold one XYZ Stock Futures contract Rs. 248 and the lot size is 1,200. What is your profit (+) or loss (-), if you purchase the contract back at Rs. 250?	-1400	-2400	2400	None of the above
49	You sold one XYZ Stock Futures contract Rs. 248 and the lot size is 1,200. What is your profit (+) or loss (-), if you purchase the contract back at Rs. 252?	-3800	-4800	4800	None of the above
50	If you sell a call option contract on a share with strike price of Rs. 375, market price of Rs. 362 and a premium of Rs. 21, what is the maximum loss that you may have on expiry of this position?	338	Unlimited	396	None of the above
51	The shares of XYZ Ltd are currently quoted at Rs. 100. Futures on this share are quoted at Rs. 113. In what situation would you buy these futures?	You expect the price of the share to move up by 5%.	You expect the price of the share to move up by 7%.	You expect the price of the share to move down by 25%.	You expect the price of the share to move up by 25%.

52	The shares of XYZ Ltd are currently quoted at Rs. 100. Futures on this share are quoted at Rs. 114. In what situation would you buy these futures?	You expect the price of the share to move up by 5%.	You expect the price of the share to move up by 25%.	You expect the price of the share to move down by 25%.	You expect the price of the share to move up by 8%.
53	You bought a January XYZ Stock Futures contract at Rs. 268 and the lot size is 1,200. What is your profit (+) or loss (-), if you square off your position at at Rs. 281?	15600	-15600	14600	None of the above
54	The unsystematic risk can be reduced in a portfolio by hedging with index products.	TRUE	FALSE		
55	Cost of carry means the cost of holding stock of the underlying asset.	TRUE	FALSE		
56	In normal market, the forward contract having a longer time to maturity has a greater forward price.	TRUE	FALSE		
57	You sold one XYZ Stock Futures contract Rs. 278 and the lot size is 1,200. What is your profit (+) or loss (-), if you purchase the contract back at Rs. 265?	16600	15600	-15600	None of the above
58	If an investor instructs a broker either to buy or sell a certain number of contracts at a price or better one, the order is called	Market order	Limit order	Stop loss order	Spread order
59	If an investor instructs a broker either to buy or sell a certain number of contracts for the current market price, the instruction is called	market order	limit order	stop loss order	spread order
60	If you sell a put option contract on a share with strike price of Rs. 245, market price of Rs. 260 and a premium of Rs. 40, what is the maximum loss on expiry of this position?	40	205	165	None of the above

**Answers:**

<b>Q. Id</b>	<b>Answer</b>
1	41
2	True
3	-3600
4	-49200
5	All the A, B and C
6	-46800
7	-7200
8	-8400
9	True
10	-45600
11	-22800
12	13200
13	9600
14	True
15	True
16	None of the above
17	Both B and C
18	- 49200
19	-48000
20	True
21	$\text{new base year avg} = \text{old base year avg} * \text{new market value} / \text{old market value}$
22	-44400
23	True
24	True
25	-19200
26	32400
27	A standard derivative contract
28	All of the above
29	An expired option that is "in-the-money"
30	28800
31	True
32	-42000
33	-40800
34	Make the outcome more certain
35	1300000
36	1400000
37	True
38	1600000
39	32400
40	-4800
41	True
42	1800000
43	19200
44	10800
45	42
46	True

47	You expect the price of the share to move up by 25%.
48	-2400
49	-2800
50	Unlimited
51	You expect the price of the share to move up by 25%.
52	You expect the price of the share to move up by 25%.
53	15600
54	False
55	True
56	True
57	15600
58	Limit order
59	Market order
60	205