O.57 XYZ, an Indian firm, will need to pay JAPANESE YEN (JY) 5,00,000 on 30th June. In order to hedge the risk involved in foreign currency transaction, the firm is considering two alternative methods i.e. forward market cover and currency option contract. On 1st April, following quotations (JY/INR) are made available: 3 months forward

Spot 1.9726/1.9923 1.9516/1.9711

The prices for forex currency option on purchase are as follows:

JY 2.125 Strike Price

JY 0.047

Call option (June) JY 0.098

Put option (June)

For excess or balance of JY covered, the firm would use forward rate as future spot rate.

You are required to recommend cheaper hedging alternative for XYZ.

[Nov. 2015] [5 Marks]

Ans.: Indian importer requires to pay Japanese Yen, therefore it needs to buy Japanese Yen and ask rate will be applicable. Since this is inverse quote, therefore, ask rate will be 1/bid.

(i) Forward Cover:

3 month Forward Rate =
$$\frac{1}{1.9726}$$
 = Rs. 0.5070/JY

Accordingly INR required for JY 5,00,000 (5,00,000 × ₹ 0.5070) ₹ 2,53,500

(ii) Option Cover:

As the Indian importer requires to pay Japanese Yen, therefore it needs to buy Japanese Yen so if call option is available on JPY it can buy it but the option is on INR and XYZ need to purchase JY 5,00,000, therefore it needs to sell INR, so, XYZ shall enter into a Put Option @ JY 2.125/INR

Accordingly, outflow in INR
$$\left(\frac{\text{JY } 5,00,000}{2.125}\right)$$
 = ₹ 2,35,294

Premium
$$\left(\frac{\text{INR } 2,35,294 \times 0.098}{1.9516}\right) = \frac{1.9516}{2,47,109}$$

Since, outflow of cash is less in case of Option same should be opted for. Further, if price of INR goes above JY 2.125/INR the outflow will further be reduced. Interest on premium is ignored.