PAPER – 14 : STRATEGIC FINANCIAL MANAGMENT
SUGGESTED ANSWERS
SECTION – A

1.

(i)	(B)
(ii)	(B)
(iii)	(B)
(iv)	(C)
(v)	(B)
(vi)	(C)
(vii)	(A)
(viii)	(C)
(ix)	(B)
(x)	(B)
(xi)	(C)
(xii)	(A)
(xiii)	(C)
(xiv)	(D)
(xv)	(B)

SECTION - B

2. (a)

(i) Net Present Value (NPV) of the Project = ₹ 4,18,279

(ii) **Advise:** Since the NPV is positive (i.e. ₹ 4,18,279) BATECH Ltd. is advised to introduce artificial intelligence (AI) while making computers.

2. (b)

Lease Rental (after Tax) = ₹ 6,59,764

Lease Rental (before tax) = ₹ 10,15,022

So, PONTs Ltd. should quote ₹ 10,15,022 for Annual Lease Rental.

3. (a)

(i) NPV under Best Case Scenario = ₹ 10,626 Lakh
NPV under Worst Case Scenario = ₹ 1,948.80 Lakh

(ii) From the Scenario analysis, it is revealed that Net present value (NPV) of the said project is expect to be between ₹ 1,948.80 Lakh and ₹ 10,626 Lakh with the Base Case Scenario, (most likely) to be ₹ 8,365.90 Lakh. Hence, NPV is likely to vary within the range ₹ 1,948.80 Lakh to ₹ 10,626 Lakh

3. (b)

The present value per share of Raxon Ltd's equity will be ₹ 40.13

4. (a)

(i) Conversion Value of Debenture = ₹ 1,000
(ii) Market Conversion Price = ₹ 48
(iii) Conversion Premium per share = ₹ 8
(iv) Ratio of Conversion Premium = 0.2 i.e. 20 %
(v) Premium over Straight Value of Debenture = 20 %
(vi) Favourable Income Differential per share = ₹ 2.20

4. (b)

(i)

Reward to Variability (Sharpe Ratio) :

Mutual Fund	R_j	R_f	$(R_j - R_f)$	σ_i	Reward to Variability	Ranking
RE Fund	16	7	9	14.663	0.614	4
HE Fund	21	7	14	17.436	0.803	2
AE Fund	16	7	9	10.198	0.883	1
TE Fund	14	7	7	11.225	0.624	3

(ii)

Reward to Volatility (Treynor Ratio) :

Mutual Fund	R_j	R_f	$(R_j - R_f)$	β_i	Reward to Volatility	Ranking
RE Fund	16	7	9	0.734	12.262	4
HE Fund	21	7	14	0.891	15.713	2
AE Fund	16	7	9	0.494	18.219	1
TE Fund	14	7	7	0.550	12.727	3

5. (a)

(i) Sensitivity of returns of each stock :
AB Ltd. = 1.00
BM Ltd. = 1.27
CX Ltd. = 0.75

(ii) Covariance between any 2 Stocks = $\beta_1 \beta_2 \sigma_{m^2}$

Stock / Beta	1.00	1.27	0.75
AB Ltd.	625	285.75	168.75
BM Ltd.	285.75	400	214.31
CX Ltd.	168.75	214.31	225

(i) Total Risk (Variance) of the equally Weighted Portfolio = 287.50
(ii) Systematic Risk of the Portfolio = 229.52

5. (b)

(i) Portfolio Sensitivity :
Factor – 1: = 0.45
Factor – 2: = 0.35

(ii) Portfolio Sensitivity :
Factor – 1: = 0.90
Factor – 2: = 0.70

(iii) Expected Return Premium for Factor-2 = 5%

Alternative Answer
Expected Return Premium for Factor-2 is (–) 25%

6. (a)

(i) Portfolio beta = 1.30

(ii) Risk- Free Securities to be acquired = ₹ 1,500 Lakh

(iii) Number of Shares of each company to be disposed off:

Shares	No. of Shares to be disposed off (Lakh)
P Ltd.	1.80
Q Ltd.	2.40
R Ltd.	1.20

(iv) Proportion of Q Ltd. = 54.67%

6 (b)

(i) Call Option Value using Binomial Model:
Call Option = ₹ 25.85

Value of Call Option using Risk Neutral Model:
Call Option = ₹ 25.86

(ii) Since Value of Call Option (₹ 25.85) under Binomial Model is almost equal to the valuation Call Option (₹ 25.86) under Risk Neutral Model it is justified that value of Call option under both Models is almost same.

7. (a)

(i) **Forward Cover :**
3 Month Forward Rate = ₹ 0.6359 / JY
Accordingly INR required for JY 10000000 = ₹ 63.59 Lakh

(ii) **Option Cover :**
To purchase JY 10000000, SONTEX LTD. shall enter into a Put option @ JY 1.5855 / INR.
Accordingly Outflow in INR = ₹ 63,07,159
Add Premium = ₹ 4,05,978
Total Cash Outflow =₹ 67,13,137

Decision:
Since the Outflow of Cash (₹ 63,59,000) is the lowest in case of FORWARD COVER, the same would be most advantageous to SONTEX Ltd.

7. (b)

(i)	Proceeds of Exports in INR = ₹ 10 Million. Position of Inflows under three Currencies will be as follows:			
	Currency	Invoice at Spot Rate	Expected Rate after three Months	Conversion in INR after three Months
	$	$ 121802.680	₹ 83.537	₹ 1,01,75,030.48
	€	€ 129617.628	₹ 78.307	₹ 1,01,49,967.60
	£	£ 99354.198	₹ 101.908	₹ 1,01,24,987.61

(ii)	Payment of Import in INR = ₹ 5 Million. Position of Outflows under three Currencies will be as follows :			
	Currency	Invoice at Spot Rate	Expected Rate after three Months	Conversion in INR after three Months
	$	$ 60827.251	₹85.077	₹51,75,000.03
	€	€ 64766.839	₹79.516	₹51,49,999.97
	£	£ 49627.792	₹103.269	₹51,25,012.45

Recommendation:

Since cash inflow is highest (₹1,01,75,030.48) in case of $, the invoicing for proceeds of export should be in $ (Dollars Currency). Further, Since cash outflow is least (₹51,25,012.45) in case of £, the invoicing for payment of import should in £ (Pound Sterling Currency).

8. (a)

The advantages of Digital Financial Services are appended below:

(i) **Improved Customer experience.**
Digital technologies have changed the way how financial services were provided. Now, Customers enjoy a whole lot of information before the services can be availed. Also, there is the possibility of comparing products and services of different producers and providers before placing an order.

(ii) **Ease of access.**
Because of intervention of digital technology, services can be accessed very easily. The customers need not to visit the branches of the service providers anymore. Everything is possible with click of a mouse.

(iii) **Streamlined operations.**
Financial services in this digital era is much streamlined. Everything is so well planned. For example, in case of insurance services, from enquiry to customer on boarding, claim management to settlement, everything is now being done online and with minimum requirement of submission of physical documents. Even KYC is also being done electronically.

(iv) **Reduction in cost of delivery**
Due to enhanced use of digital technology, companies are operating with minimum physical facilities and manpower. This has contributed heavily towards the profitability of the organizations. This saving is being shared with the Customers in the form of reduction in fees.

8. (b)

The features of Global Depository Receipt (GDR) are aligned below:

(i) **Underlying Shares:**
Each GDR may represent one or more underlying share, which are physically held by the Custodian appointed by the Depository Bank.

(ii) **Entry in Company's Books:**
In the Company's books, the Depository Bank's name appears as the holder of the shares.

(iii) **Returns:**
Depository gets the dividends from the Company (in local currency) and distributes them to the holders of the Depository Receipts after converting into dollars at the going rate of exchange.

(iv) **Negotiable:**
GDRs are exchangeable with the underlying share either at any time, or after the lapse of a particular period of time, generally 45 Days.

(v) **Globally Marketed:**
GDRs are marketed globally without being confined to borders of any market or country as it can be traded in more than one country.

(vi) **Settlement:**
GDRs are settled through CEDEL, & Euro Clear International Book Entry Systems.

8. (c)

Different type of securities issued by the special purpose vehicle (SPV) in securitization transactions are as follows:

(i) **Pass Through Certificates:**
In case of a pass-through certificate, payments to investors depend upon the cash flow from the assets backing such certificates. That is to say, as and when cash (principal and interest) is received from the original borrower by the SPV, it is passed on to the holders of certificates at regular intervals and the entire principal is returned with the retirement of the assets packed in the pool.

(ii) **Pay Through Certificates:**
Pay through certificates has a multiple maturity structure depending upon the maturity pattern of underlying assets. Thus, the SPV can issue two or three different types of securities with different maturity patterns like short term, medium term and long term.

(iii) **Preferred Stock Certificates:**
These are issued by a subsidiary company against the trade debts and consumer receivables of its parent company. In other words, subsidiary companies buy the trade debts and receivables of parent companies to enjoy liquidity.

(iv) **Asset Backed Commercial Papers:**
This type of structure is mostly prevalent in mortgage-backed securities. Under this the SPV purchases portfolio of mortgages from different sources (various lending institution) and they are combined into a single group on the basis of interest rate, maturity dates and underlying collaterals.

(v) **Interest Only Certificates:**
In case of these certificates, payments are made to investors only from the interest incomes earned from the assets securitized.

(vi) **Principal Only Certificates:**
As the very name suggest payment are made to the investors only from the repayment of principal by the original borrower. These certificates enable speculative dealings since the speculators know well that the interest rate movements would affect the bond value immediately.