

**PAPER – 1: FINANCIAL REPORTING**

*Question No.1 is compulsory.*

*Answer any five questions from the remaining six questions.*

*Working notes should form part of the respective answers.*

*Wherever necessary, candidates are permitted to make suitable assumptions which should be disclosed by way of a note.*

**Question 1**

1. (a) *Primus Hospitals Ltd. had acquired 40 units of Doppler Scan machines from Holiver USA at a cost of US\$ 165,100 per unit in the beginning of financial year 2008-09. The prevailing rate of exchange was ₹ 50 to 1 US \$. The acquisition was partly funded out of a government grant of ₹ 5 crores. The grant relating to such machines was given with a rider that in the event of a change in management, the entity is bound to return the grant. In April 2011, 51% control in the company was taken over by an overseas investor. The expected productive period of such an asset is normally reckoned as 5 years. The depreciation rate adopted was 20% p.a. on S.L.M. basis. The company had incurred expenditure of US \$ 4000 towards bank charges and ₹ 7500 per unit as sea freight. You are also informed that neither capital reserve nor deferred income account has been maintained by the company. You are required to suggest the accounting treatment as a result of the return of the grant, in the light of the relevant AS.*
- (b) *The following balances are extracted from the books of Ram Ltd. a real estate company on 31<sup>st</sup> March, 2011 :*

|                                                              | Dr.<br>(₹ in '000) | Cr.<br>(₹ in '000) |
|--------------------------------------------------------------|--------------------|--------------------|
| Lease hold premises                                          | 42                 |                    |
| Equipment, fixtures and fittings at cost on 1.4.2010         | 264                |                    |
| Deprecation on equipments, fixtures and fittings on 1.4.2010 |                    | 164                |

*The following additional information's are also provided:*

- Depreciation on equipment, fittings and fixtures is provided @ 15% on written down value.*
- On 1<sup>st</sup> October 2010, the company moved to a new premise. The premise is on a 12 year lease and the lease premium paid amounted to ₹ 42,000. The company used sub-contract labour of ₹ 40,000 and materials at cost of ₹ 38,000 in the refurbishment of the premise. These are to be considered as part of the cost of lease hold premise.*

You are required to prepare the 'Notes to accounts' including significant accounting policies forming part of the financial statements, for disclosure of above facts and information provided.

- (c) On 1<sup>st</sup> April, 2010, a company offered 100 shares to each of its 500 employees at ₹ 50 per share. The employees are given a month to decide whether or not to accept the offer. The shares issued under the plan (ESPP) shall be subject to lock-in on transfers for three years from grant date. The market price of shares of the company on the grant dated is ₹ 60 per share. Due to post-vesting restrictions on transfer, the fair value of shares issued under the plan is estimated at ₹ 56 per share.

On 30<sup>th</sup> April, 2010, 400 employees accepted the offer and paid ₹ 30 per share purchased. Nominal value of each share is ₹ 10.

Record the issue of shares in the books of the company under the aforesaid plan.

- (d) From the following details, compute the total value of human resources of skilled and unskilled group of employees according to Lev and Schwartz (1971) model:

|                                                                    | Skilled  | Unskilled |
|--------------------------------------------------------------------|----------|-----------|
| (i) Annual average earning of an employee till the retirement age. | 60,000   | 40,000    |
| (ii) Age of retirement                                             | 65 years | 62 years  |
| (iii) Discount rate                                                | 15%      | 15%       |
| (iv) No. of employees in the group                                 | 30       | 40        |
| (v) Average age                                                    | 62 years | 60 years  |

(4 × 5 = 20 Marks)

Answer

- (a) Calculation of Revised Book Value of Machine as on 1<sup>st</sup> April, 2011

| Particulars                                                                  | (₹)                  |
|------------------------------------------------------------------------------|----------------------|
| Acquisition of 40 Doppler Scan machines [US \$ 165,100 x ₹ 50 x 40 machines] | 33,02,00,000         |
| Add: Bank charges paid (\$ 4,000 x ₹ 50)                                     | 2,00,000             |
| Add: Sea Freight on the above machines (₹ 7,500 per unit x 40 machines)      | <u>3,00,000</u>      |
| Total landed cost as on 1 <sup>st</sup> April, 2008                          | 33,07,00,000         |
| Less: Government grant                                                       | <u>(5,00,00,000)</u> |
| Value of 40 Doppler Scan machines                                            | 28,07,00,000         |

|                                                                                           |                       |
|-------------------------------------------------------------------------------------------|-----------------------|
| Less: Depreciation @ 20% for 3 years on SLM basis<br>(i.e ₹ 28,07,00,000 x 20% x 3 years) | <u>(16,84,20,000)</u> |
| WDV at the beginning of the year 2011-12                                                  | 11,22,80,000          |
| Add: Refund of government grant on 1 <sup>st</sup> April, 2011                            | <u>5,00,00,000</u>    |
| Revised book value of machine as on 1 <sup>st</sup> April, 2011                           | <u>16,22,80,000</u>   |

Note: As per para 16 of AS 6 'Depreciation Accounting', where the historical cost of a depreciable asset has undergone a change due to increase or decrease in long term liability on account of exchange fluctuations, price adjustments, changes in duties or similar factors, the depreciation on the revised unamortized depreciable amount should be provided prospectively over the residual useful life of the asset. In this case, on 1<sup>st</sup> April, 2011, the remaining useful life is only two years i.e. 2011-12 & 2012-13. Hence, the WDV of ₹ 16,22,80,000 is to be written off under SLM @ 50% each year i.e. ₹ 8,11,40,000 per year.

The government grant of ₹ 5 crores that becomes refundable should be accounted for as an extraordinary item as per AS 12 'Government Grants', with related disclosure of the increased depreciation of ₹ 2.5 crores (i.e. ₹ 8,11,40,000 – ₹ 5,61,40,000) consequent to the return of such grant.

- (b) Since the implicit rate of interest is not mentioned in the question, it is assumed that value of lease premium paid along with the refurbishment cost is the fair value of the leased asset. Accordingly, question has been solved assuming the lease as finance lease.

Notes on Accounts for the year ended 31<sup>st</sup> March, 2011:

The cost of leasehold premises includes the cost of refurbishment to the extent of ₹ 78,000 (Materials ₹ 38,000 + Labour ₹ 40,000).

Working Notes:

| (a) | Fixed Assets :                                                   | (₹ in 000) |            |
|-----|------------------------------------------------------------------|------------|------------|
|     | Equipment, fixtures & fittings                                   | 264        |            |
|     | * Lease hold premises (42+40+38)                                 | <u>120</u> |            |
|     |                                                                  | <u>384</u> |            |
| (b) | Depreciation                                                     |            |            |
|     | Equipment, fixtures & fittings as on 1.4.2010                    | 164        |            |
|     | For the year 2010-11                                             | <u>15</u>  | 179        |
|     | * Cost of leasehold premises written off [(42+40+38) x 1/12 x ½] |            | <u>5</u>   |
|     |                                                                  |            | <u>184</u> |

**Significant Accounting Policies**

1. Depreciation has been charged on equipment, fixtures & fittings on the basis of written down value method year after year. Equipment fixtures & fittings are shown at cost in the Balance Sheet & depreciation accumulated thereon is shown on the liability side of the balance sheet.
2. According to AS 19 'Leases', the lease has been classified as finance lease assuming that lessor has transferred substantially all the risks and rewards incident to ownership to Ram Ltd. At the inception of lease, asset under finance lease is capitalized in the books of the lessee with the corresponding liability wherein lease payments are recognized as an expense in the profit and loss account on a systematic basis (i.e straight line) over the lease term.

(c) Fair value of an ESPP = ₹ 56 – ₹ 50 = ₹ 6

Number of shares issued = 400 employees x 100 shares/employee = 40,000 shares

Fair value of ESPP which will be recognized as expenses in the year 2010-11

= 40,000 shares x ₹ 6 = ₹ 2,40,000

Vesting period = 1 month

Expenses recognized in 2010-11 = ₹ 2,40,000

**Journal Entry**

| Date       | Particulars                                  | Dr. (₹)   | Cr. (₹)   |
|------------|----------------------------------------------|-----------|-----------|
| 30.04.2010 | Bank A/c (40,000 shares x ₹ 50) Dr.          | 20,00,000 |           |
|            | Employees compensation expense A/c Dr.       | 2,40,000  |           |
|            | To Share Capital A/c (40,000 shares x ₹ 10)  |           | 4,00,000  |
|            | To Securities Premium (40,000 shares x ₹ 46) |           | 18,40,000 |
|            | (Being shares issued under ESPP @ ₹ 50)      |           |           |

(d) Value of Employees as per Lev and Schwartz method:

$$V = \sum_{t=t}^t \frac{I(t)}{(1+r)^{t-t}}$$

Where,

V = the human capital value of a person.

I(t) = the person's annual earnings up to retirement.

r = a discount rate specific to the person.

t = retirement age.

Value of Skilled Employees:

$$= \frac{60,000}{(1+0.15)^{65-62}} + \frac{60,000}{(1+0.15)^{65-63}} + \frac{60,000}{(1+0.15)^{65-64}}$$

$$= \frac{60,000}{(1+0.15)^3} + \frac{60,000}{(1+0.15)^2} + \frac{60,000}{(1+0.15)^1}$$

$$= ₹ 39,450.97 + ₹ 45,368.62 + ₹ 52,173.91 = ₹ 1,36,993.50$$

Total value of skilled employees is

$$₹ 1,36,993.50 \times 30 \text{ employees} = ₹ 41,09,805$$

Value of Unskilled Employees:

$$= \frac{40,000}{(1+0.15)^{62-60}} + \frac{40,000}{(1+0.15)^{62-61}}$$

$$= \frac{40,000}{(1+0.15)^2} + \frac{40,000}{(1+0.15)^1}$$

$$= ₹ 30,245.74 + ₹ 34,782.60 = ₹ 65,028.34$$

Total value of unskilled employees = ₹ 65,028.34 x 40 employees = ₹ 26,01,133.60

Total value of human resources (skilled and unskilled)

$$= ₹ 41,09,805 + ₹ 26,01,133.60 = ₹ 67,10,938.60.$$

## Question 2

Kim and Kin floated a new company KimKin Ltd. on 1<sup>st</sup> April 2010 with a capital of ₹ 5 lakhs represented by 50,000 ordinary shares of ₹ 10 each, subscribed equally by both groups.

Kimkin Ltd. made the following acquisitions on the same date:

- (1) 3,000 shares of ₹ 10 each in Klean Ltd. at ₹ 35,000
- (2) 10,000 shares of ₹ 10 each in Klinik Ltd. for ₹ 72,000
- (3) 8,000 equity shares of ₹ 10 each in Klear Ltd. for ₹ 92,000 and 200 8% Cumulative Preference shares @ ₹ 140 per share.

The following are the summarized Balance sheets of the three companies as on 31.03.2011

### Liabilities

|                                                       | Klean Ltd.(₹) | Klinik Ltd. (₹) | Klear Ltd. (₹) |
|-------------------------------------------------------|---------------|-----------------|----------------|
| Equity Share Capital                                  | 40,000        | 1,20,000        | 1,00,000       |
| 8% Cumulative Preference share Capital (₹ 100 shares) |               |                 | 25,000         |

|                       |               |                 |                 |
|-----------------------|---------------|-----------------|-----------------|
| Reserves (31.03.2010) | 3,000         |                 | 7,500           |
| Profit & Loss Account | 6,000         |                 | 15,000          |
| Sundry Creditors      | <u>2,900</u>  | <u>8,000</u>    | <u>7,500</u>    |
| Total                 | <u>51,900</u> | <u>1,28,000</u> | <u>1,55,000</u> |

## Assets

|                             | (₹)           | (₹)             | (₹)             |
|-----------------------------|---------------|-----------------|-----------------|
| Goodwill (self generated) * | 4,000         |                 | 15,000          |
| Freehold Land               | 8,000         | 52,000          | 50,000          |
| Plant & machinery           | 16,000        | 19,000          | 37,000          |
| Inventories                 | 8,900         | 25,000          | 26,000          |
| Sundry Debtors              | 4,000         | 12,000          | 15,500          |
| Bank                        | 11,000        | 2,000           | 11,500          |
| Profit & Loss A/c           | <u>.....</u>  | <u>18,000</u>   | <u>.....</u>    |
| Total                       | <u>51,900</u> | <u>1,28,000</u> | <u>1,55,000</u> |

You are supplied with the following information and requested to compile the Consolidated Balance Sheet as on 31<sup>st</sup> March 2011 of the entire Group.

1. The freehold land of Klear Ltd. carries a fair value of ₹ 65,000 as on 1-04-2010.
2. The plant & machinery of Klinik Ltd. to be depreciated by ₹ 3,000.
3. Inventories of Klean Ltd. are undervalued by ₹ 2,000.
4. On Balance Sheet date, Kimkin Ltd. owed Klean Ltd. ₹ 10,500 and is owed ₹ 8,200 by Klinik Ltd. Klear Ltd. is owed ₹ 1,300 by Klean Ltd. and ₹ 2,000 by Klinik Ltd.
5. The balances in Profit and Loss account on date of acquisition were : Klean Ltd. ₹ 2,000 (Cr) ; Klinik Ltd. ₹ 12,000 (Dr.) and Klear Ltd. ₹ 4,000 (Cr.)  
The credit balances of Klean Ltd. & Klear Ltd. were wholly distributed as dividends in June 2010.
6. During 2010-11 Klean Ltd. & Klear Ltd. declared and paid interim dividends of 8% and 10% respectively.
7. Klear Ltd. has discharged dividend obligations towards its preference shareholders up-to March 2009.

(16 Marks)

\* Since, as per para 35 of AS 26 'Intangible Assets' internally (self) generated goodwill should not be recognized as an asset in the balance sheet. Therefore, goodwill shown in the Balance Sheet may be read as goodwill (purchased).

## Answer

## Consolidated Balance Sheet of Kimkin Ltd. &amp; its subsidiaries as on 31-03-2011

| Liabilities                                                                  | ₹               | Assets                    | ₹               |
|------------------------------------------------------------------------------|-----------------|---------------------------|-----------------|
| Share Capital                                                                |                 | Fixed Assets              |                 |
| Authorised, Issued, Subscribed & Paid up 50,000 Ordinary shares of ₹ 10 each | 5,00,000        | Goodwill (4,000+15,000)   | 19,000          |
| Minority Interest                                                            | 62,390          | Freehold lands (W.N. 5)   | 1,25,000        |
| Reserves & Surplus                                                           |                 | Plant & Machinery (W.N 5) | 69,000          |
| Capital Reserve                                                              | 17,630          | Current Assets            |                 |
| Profit & Loss Account (W.N. 6)                                               | 20,580          | Inventories (W.N 5)       | 61,900          |
|                                                                              |                 | Debtors                   | 28,200          |
| Current Liabilities                                                          |                 | Bank Balances (W.N. 5)    | 3,14,900        |
| Creditors                                                                    | <u>19,600</u>   | Cash in transit (W.N 7)   | <u>2,200</u>    |
|                                                                              | <u>6,20,200</u> |                           | <u>6,20,200</u> |

## Working Notes:

| 1. | Analysis of profits                                                                    | ₹               | ₹              |
|----|----------------------------------------------------------------------------------------|-----------------|----------------|
|    | Klean Ltd.                                                                             | Capital         | Revenue        |
|    | Reserves as on 1 <sup>st</sup> April, 2010                                             | 3,000           |                |
|    | Profit and Loss account as on 1 <sup>st</sup> April, 2010 net of dividend              | 0               |                |
|    | Current year profits after interim dividend of ₹ 3,200                                 |                 | 6,000          |
|    | Appreciation in inventory value                                                        | <u>      </u>   | <u>2,000</u>   |
|    |                                                                                        | 3,000           | 8,000          |
|    | Less : Minority interest (1/4)                                                         | <u>(750)</u>    | <u>(2,000)</u> |
|    | Share of Kimkin Ltd. (3/4)                                                             | <u>2,250</u>    | <u>6,000</u>   |
|    | Klinic Ltd.                                                                            | Capital         | Revenue        |
|    | Loss on date of acquisition                                                            | (12,000)        |                |
|    | Current year loss after additional depreciation of ₹ 3,000 = (18,000 + 3,000 - 12,000) | <u>      </u>   | <u>(9,000)</u> |
|    |                                                                                        | (12,000)        | (9,000)        |
|    | Less: Minority interest (1/6)                                                          | <u>(2,000)</u>  | <u>(1,500)</u> |
|    | Share of Kimkin Ltd. (5/6)                                                             | <u>(10,000)</u> | <u>(7,500)</u> |

| Klear Ltd.                                                                               | Capital        | Revenue        |
|------------------------------------------------------------------------------------------|----------------|----------------|
|                                                                                          | ₹              | ₹              |
| Reserves as on 1st April, 2010                                                           | 7,500          |                |
| Profit & Loss as on 1 <sup>st</sup> April, 2010 net of dividend                          | 0              |                |
| Current year profits after interim dividend of ₹ 10,000                                  |                | 15,000         |
| Appreciation in freehold property value as on 01.04.2010                                 | 15,000         |                |
| Arrears of Preference Dividend of Minority's Preference Shares (as per para 27 of AS 21) | <u>(400)</u>   | <u>(400)</u>   |
|                                                                                          | 22,100         | 14,600         |
| Less: Minority Interest (1/5)                                                            | <u>(4,420)</u> | <u>(2,920)</u> |
| Share of Kimkin Ltd. (4/5)                                                               | <u>17,680</u>  | <u>11,680</u>  |

| 2. Cost of control/capital reserve                          |                | ₹                 |
|-------------------------------------------------------------|----------------|-------------------|
| Cost of Investment in Klean Ltd.                            | 35,000         |                   |
| Less: Pre-acquisition Dividend = $\frac{3}{4} \times 2,000$ | <u>(1,500)</u> | 33,500            |
| Cost of Investment in Clinic Ltd.                           |                | 72,000            |
| Cost of Equity Investment in Klear Ltd.                     | 92,000         |                   |
| Less: Pre-acquisition Dividend = $\frac{4}{5} \times 4,000$ | <u>(3,200)</u> | 88,800            |
| Cost of Investment in Cum-Preference shares in Klear Ltd.   |                | <u>28,000</u>     |
|                                                             |                | 2,22,300          |
| Less: Paid up Value of Equity Shares in Klean Ltd.          | 30,000         |                   |
| Paid up Value of Equity Shares in Clinic Ltd.               | 1,00,000       |                   |
| Paid up Value of Equity Shares in Klear Ltd.                | 80,000         |                   |
| Paid up Value of Preference Shares in Klear Ltd             | <u>20,000</u>  | <u>(2,30,000)</u> |
|                                                             |                | (7,700)           |
| Less: Capital Profits in Klean Ltd                          | 2,250          |                   |
| Capital Profits in Clinic Ltd.                              | (10,000)       |                   |
| Capital Profits in Klear Ltd                                | <u>17,680</u>  | <u>(9,930)</u>    |
| Capital Reserve                                             |                | <u>17,630</u>     |



## 3. Minority Interest

|                                | Klean Ltd (₹) | Klinik Ltd. (₹) | Klear Ltd. (₹) |
|--------------------------------|---------------|-----------------|----------------|
| Equity Share Capital           | 10,000        | 20,000          | 20,000         |
| Preference Share Capital       |               |                 | 5,000          |
| Arrears of Preference Dividend |               |                 | 800            |
| Capital Profits                | 750           | (2,000)         | 4,420          |
| Revenue Profits                | <u>2,000</u>  | <u>(1,500)</u>  | <u>2,920</u>   |
|                                | <u>12,750</u> | <u>16,500</u>   | <u>33,140</u>  |

## 4. Bank Account of Kimkin Ltd.

|                                                        | ₹               |                                                | ₹               |
|--------------------------------------------------------|-----------------|------------------------------------------------|-----------------|
| To Share Capital                                       | 5,00,000        | By investments in Klean Ltd.                   | 35,000          |
| To Investment in Klean Ltd. (Pre-acquisition Dividend) | 1,500           | By Investments in Klinik Ltd.                  | 72,000          |
| To Investment in Klear Ltd. (Pre-acquisition Dividend) | 3,200           | By Investments in Klear Ltd. (92,000 + 28,000) | 1,20,000        |
| To Dividend Received                                   |                 | By Klinik Ltd (Owings)                         | 8,200           |
| Klean Ltd.                                             | 2,400           | By Balance c/d                                 | 2,90,400        |
| Klear Ltd.                                             | 8,000           |                                                |                 |
| To Klean Ltd. (Owings)                                 | <u>10,500</u>   |                                                |                 |
|                                                        | <u>5,25,600</u> |                                                | <u>5,25,600</u> |

## 5. Statement showing consolidated balances

|                       | Land            | Plant         | Inventory     | Debtors          | Bank            | Creditors       |
|-----------------------|-----------------|---------------|---------------|------------------|-----------------|-----------------|
|                       | ₹               | ₹             | ₹             | ₹                | ₹               | ₹               |
| Kimkin Ltd.           |                 |               |               | 8,200            | 2,90,400        | 10,500          |
| Klean Ltd.            | 8,000           | 16,000        | 10,900        | 4,000            | 11,000          | 2,900           |
| Klinik Ltd.           | 52,000          | 16,000        | 25,000        | 12,000           | 2,000           | 8,000           |
| Klear Ltd.            | <u>65,000</u>   | <u>37,000</u> | <u>26,000</u> | <u>15,500</u>    | <u>11,500</u>   | <u>7,500</u>    |
|                       | 1,25,000        | 69,000        | 61,900        | 39,700           | 3,14,900        | 28,900          |
| Less: Mutual Owings   |                 |               |               | <u>(11,500)*</u> |                 | <u>(9,300)*</u> |
| Consolidated Balances | <u>1,25,000</u> | <u>69,000</u> | <u>61,900</u> | <u>28,200</u>    | <u>3,14,900</u> | <u>19,600</u>   |

\* According to the additional information given in the question, balance of Debtors A/c of Klean Ltd. should be ₹ 10,500 or more. However, Balance Sheet of Klean Ltd. showed sundry debtors of ₹ 4,000 only which is very low in comparison to ₹ 10,500. Therefore, it is presumed that the entry of ₹ 10,500 has been omitted in the books of Klean Ltd. Hence, no elimination of mutual owing in respect of ₹ 10,500 has been made while preparing the consolidated balance sheet.

## 6. Consolidated Revenue Profits

|                                                 | ₹             |
|-------------------------------------------------|---------------|
| Klean Ltd.                                      | 6,000         |
| Klinik Ltd.                                     | (7,500)       |
| Klear Ltd.                                      | <u>11,680</u> |
|                                                 | 10,180        |
| Add : Interim Dividend received (2,400 + 8,000) | <u>10,400</u> |
| Consolidated Profit and Loss A/c                | <u>20,580</u> |

## 7. Cash-in-Transit

|                                                                                              |                |
|----------------------------------------------------------------------------------------------|----------------|
| Amount due from Klinik Ltd. (₹ 8,200 ₹ 2,000)                                                | ₹ 10,200       |
| Less: Balance of Creditors of Klinik Ltd.<br>as on 31.3.2011 (as per separate balance sheet) | (₹ 8,000)      |
| Cash in transit                                                                              | <u>₹ 2,200</u> |

**Note:** As per the Companies Act 1956, Preference shareholders have preferential right for the receipt of dividend before equity dividend. However as per the information given in the question, preference dividend is in arrears for last 2 years and equity dividend (interim) is paid during the year 2010-11. In this regard, it may be noted the workings have been done solely on the basis of the information as given in the question.

## Question 3

As part of its expansion strategy White Ltd. has decided to amalgamate its business with that of Black Ltd. and new company Black & White Ltd. being incorporated on the 1<sup>st</sup> September 2010 having an authorized equity capital of 2 crore shares of ₹ 10 each. M/s Black & White Ltd. shall in turn acquire the entire ownership of White Ltd. and Black Ltd. in consideration for issuing its equity at 25% premium on 1<sup>st</sup> October, 2010. It is also agreed that the consideration shall be based on the product of the profits available to equity shareholders of each entity, times its PE multiple. The preference shareholders & debenture holders are to be satisfied by the issue of similar instruments in Black & White Ltd. on 1-10-2010 in lieu of their existing holdings. Accordingly the relevant information is supplied to you as under:

|                                                  | White Ltd. | Black Ltd. |
|--------------------------------------------------|------------|------------|
| Paid up Equity shares of ₹ 10 class (Nos)        | 3 Lakhs    | 1.2 Lakhs  |
| 8% Preference Shares ₹ 10 paid (Nos)             |            | 1 Lakh     |
| 5% Redeemable Debentures 2015 of ₹ 10 each (Nos) |            | 0.8 Lakh   |
| Profits before Interest & Taxation (₹)           | 6,00,000   | 4,40,000   |
| Price to Earnings Multiple                       | 15         | 10         |

To augment the Cash retention level of Black & White Ltd. it is decided that on 1<sup>st</sup> October, 2010 Black & White Ltd. shall collect full share application money for the issue 20,00,000 equity shares @40% premium under Private Placement. The allotment of the shares will be made on 31-12-2010 and such shares shall qualify for dividend from 2011 only.

Black & White Ltd. also shall avail a 12.50% TOD of 15 lakhs to meet its preliminary expenses and cost of working which amount to ₹12 lakhs and ₹ 2 lakhs respectively. The TOD will be availed on 1<sup>st</sup> November, 2010 and closed on 31<sup>st</sup> December, 2010. Preliminary expenditure is tax deductible @ 20% each year.

Due to an accounting omission the opening inventory of Black Ltd. of 5 lakh (actual value) & the closing stock of White Ltd. of 2.20 lakh was understated & overstated by 5% and 10% respectively.

The dividend schedule proposed is that all companies would pay interim dividend for equity, for the period from 1<sup>st</sup> October, 2010 to 31<sup>st</sup> December, 2010. The rates of dividend being White Ltd. @ 5%, Black Ltd. @ 2% and Black & White Ltd. @ 3.5%. The preference shareholders & debentureholders dues for the post take over period are discharged on 31.12.2010.

It is proposed that in the period October-December 2010, Black & White Ltd. would carry out trade in futures that would generate an absolute post tax return of 18% by using the funds generated from the Private Placement. The trades would be squared off on 31.12.2010. Proceeds from such transactions are not liable to withholding taxes.

You are required to prepare a projected Profit & Loss A/c for the period ended 31<sup>st</sup> December, 2010 and a Balance Sheet on that date for Black & White Ltd.

The corporation tax rate for the company is 40%.

(16 Marks)

Answer

**Projected Profit & Loss Account of Black & White for the period ended 31-12-2010**

| Particulars                                                | ₹                | Particulars                     | ₹                |
|------------------------------------------------------------|------------------|---------------------------------|------------------|
| To Working capital expenses                                | 2,00,000         | By Profits from Futures Trading | 84,00,000        |
| To Interest on TOD                                         | 31,250           | By Dividends received           | 1,74,000         |
| To Debenture interest                                      | 10,000           |                                 |                  |
| To Provision for tax @ 40% on pre-tax profit - ₹ 81,58,750 | 32,63,500        |                                 |                  |
| To Profit after tax                                        | <u>50,69,250</u> |                                 |                  |
|                                                            | <u>85,74,000</u> |                                 | <u>85,74,000</u> |

|                                        |                  |                                  |                  |
|----------------------------------------|------------------|----------------------------------|------------------|
| To Dividends (Equity & Preference)     | 2,06,760         | By Profit for the year after tax | 50,69,250        |
| To Profit transferred to Balance Sheet | <u>48,62,490</u> |                                  |                  |
|                                        | <u>50,69,250</u> |                                  | <u>50,69,250</u> |

**Projected Balance Sheet of Black & White Ltd. as at 31-12-2010**

| Liabilities                                                                                                                        | ₹                   | Assets                           | ₹                  |
|------------------------------------------------------------------------------------------------------------------------------------|---------------------|----------------------------------|--------------------|
| Authorised share capital                                                                                                           |                     | Investments in Subsidiaries      |                    |
| 2 crore Equity shares of ₹ 10 each                                                                                                 | <u>20,00,00,000</u> | In Equity shares at cost         | 66,70,000          |
| Issued, subscribed & paid up 25,33,600 Shares of ₹ 10 each (of the above 5,33,600 shares issued for consideration other than cash) | 2,53,36,000         | In preference shares at cost     | 10,00,000          |
| Preference Shares                                                                                                                  |                     | 5% Red. Deb 2015 of ₹ 10         | 8,00,000           |
| 1 lakh 8% Preference Shares ₹ 10 paid                                                                                              | 10,00,000           | Current Assets, Loans & Advances |                    |
| Reserves & Surplus                                                                                                                 |                     | Bank Balance                     | 3,49,25,990        |
| Securities Premium Account (93,34,000 – 12,00,000)                                                                                 | 81,34,000           |                                  |                    |
| Profit & Loss Account                                                                                                              | 48,62,490           |                                  |                    |
| Secured loan                                                                                                                       |                     |                                  |                    |
| 5% Red. Debentures 2015 of ₹ 10 each                                                                                               | 8,00,000            |                                  |                    |
| Current Liabilities & Provisions                                                                                                   |                     |                                  |                    |
| Provision for taxation                                                                                                             | <u>32,63,500</u>    |                                  |                    |
|                                                                                                                                    | <u>4,33,95,990</u>  |                                  | <u>4,33,95,990</u> |

**Note:**

- Dividend received is exempted income and is not subject to tax in the hands of recipient. It is assumed that rate of dividend given in the question is net of tax.
- Dividend distributed by Black and White Ltd. is subject to dividend distribution tax, if not net of tax.
- As per the Companies Act, 1956, the balance of securities premium account can be used for writing off the preliminary expenses. As the company is having sufficient balance in the

securities premium account, the amount of preliminary expenses is adjusted from the balance of securities premium account. As per para 56 of AS 26, when an expenditure is incurred to provide future economic benefits to an enterprise, but no intangible asset or other asset is acquired or created that can be recognized, then such an expenditure is recognized as an expense when it is incurred. However, whenever there is conflict in the treatment of a particular item as per Law / Statue & Accounting Standards then the Law / Statue will prevail. Accordingly, the above question has been solved by setting off the preliminary expenses from Securities Premium A/c. In this case it will be treated as permanent difference. Hence no DTA/DTL will be created.

4. Alternatively Students may follow the treatment prescribed by AS 26 and expense out the preliminary expenses in the year it is incurred. In that case Deferred tax liability will be created due to the temporary difference arising on account of the difference in the treatment of preliminary expense in the books of accounts and as per the Income tax Act, 1961.

#### Working Notes:

##### 1. Calculation of Rectified Profits

|                                                                            | White Ltd.(₹)                 | Black Ltd. (₹)               |
|----------------------------------------------------------------------------|-------------------------------|------------------------------|
| Value of inventory as given                                                | 2,20,000 (Overstated)         | 5,00,000 (Actual)            |
| Adjustment therein due to incorrect valuation will be reduced from profits | 2,20,000 x 10/110<br>= 20,000 | 5,00,000 x 5/100<br>= 25,000 |

##### 2. Computation of Shares to be issued as purchase consideration

|                                                                | White Ltd.<br>₹   | Black Ltd.<br>₹   |
|----------------------------------------------------------------|-------------------|-------------------|
| Profit before interest & tax                                   | 6,00,000          | 4,40,000          |
| Less: Reduction in profit due to incorrect inventory valuation | (20,000)          | (25,000)          |
| Less: Debenture interest                                       | _____             | <u>(40,000)</u>   |
| Profit before tax                                              | 5,80,000          | 3,75,000          |
| Less: Tax @ 40%                                                | <u>(2,32,000)</u> | <u>(1,50,000)</u> |
| Profit after tax (PAT)                                         | 3,48,000          | 2,25,000          |
| Less: Preference dividend                                      | _____             | <u>(80,000)</u>   |
| Profit available to equity shareholders [A]                    | <u>3,48,000</u>   | <u>1,45,000</u>   |

|                                                         |                  |                  |
|---------------------------------------------------------|------------------|------------------|
| Price Earnings Multiple [B]                             | 15               | 10               |
| Total Purchase Consideration to be given (A x B)        | <u>52,20,000</u> | <u>14,50,000</u> |
| Equity Share Capital (Purchase Consideration x 100/125) | 41,76,000        | 11,60,000        |
| Securities Premium (25% of the above)                   | 10,44,000        | 2,90,000         |

3. Bank Account

| Date       | Particulars                                                              |               | ₹                  | Date       | Particulars                                             | ₹                  |
|------------|--------------------------------------------------------------------------|---------------|--------------------|------------|---------------------------------------------------------|--------------------|
| 1.10.2010  | To Share Application Money (20,00,000 x ₹ 14)                            |               | 2,80,00,000        | 1.10.2010  | By Futures Trading A/c                                  | 2,80,00,000        |
| 1.11.2010  | To 12.5% TOD                                                             |               | 15,00,000          | 1.11.2010  | By Preliminary Expenses                                 | 12,00,000          |
| 31.12.2010 | To Future Trading A/c [(2,80,00,000 x (18/100) x (100/60) + 2,80,00,000) |               | 3,64,00,000        | 31.12.2010 | By Working Capital expenses                             | 2,00,000           |
| 31.12.2010 | To Dividend received                                                     |               |                    | 31.12.2010 | By Dividends Paid [(41,76,000 + 11,60,000) x 3.5/100]   | 1,86,760           |
|            | White Ltd (3,00,000 x 10 x 5%)                                           | 1,50,000      |                    | 31.12.2010 | By TOD Interest (15,00,000 x 12.5/100 x 2/12)           | 31,250             |
|            | Black Ltd. (1,20,000 x 10 x 2 %)                                         | <u>24,000</u> | 1,74,000           | 31.12.2010 | By Debenture Interest (80,000 x ₹ 10 x 5/100 x 3/12)    | 10,000             |
|            |                                                                          |               |                    | 31.12.2010 | By Preference Dividend (1,00,000 x ₹ 10 x 8/100 x 3/12) | 20,000             |
|            |                                                                          |               |                    | 31.12.2010 | By 12.5% TOD                                            | 15,00,000          |
|            |                                                                          |               |                    | 31.12.2010 | By Balance c/d                                          | <u>3,49,25,990</u> |
|            |                                                                          |               | <u>6,60,74,000</u> |            |                                                         | <u>6,60,74,000</u> |

Question 4

- (a) Prepare a value added statement for the year ended on 31.03.2011 and reconciliation of total value added with profit before taxation, from the profit and loss account of Paradise Ltd. for the year ended on 31-03-2011.

| Income:      | (₹ in lakhs)  |
|--------------|---------------|
| Sales        | 254.00        |
| Other income | <u>6.00</u>   |
| Total        | <u>260.00</u> |
| Expenditure: |               |

|                            |               |
|----------------------------|---------------|
| Operating cost             | 222.00        |
| Excise duty                | 11.20         |
| Interest on bank overdraft | 1.00          |
| Interest on 9% debentures  | <u>15.00</u>  |
|                            | <u>249.20</u> |
| Profit before depreciation | 10.80         |
| Depreciation               | <u>4.10</u>   |
| Profit before tax          | 6.70          |
| Provision for tax          | <u>2.40</u>   |
| Profit after tax           | 4.30          |
| Proposed dividend          | <u>0.30</u>   |
| Retained profit            | <u>4.00</u>   |

The following additional information are given:

- (i) Sales represents net sales after adjusting discounts, returns and sales tax.
  - (ii) Operating cost includes ₹ 82.00 lakhs as wages, salaries and other benefits to employees.
  - (iii) Bank overdraft is temporary.
- (b) Eagle Ltd. had acquired 51% in Sparrow Ltd. for ₹ 75.80 lakhs on April 1st, 2010. On the date of the acquisition Sparrow's Assets stood at ₹ 196 lakhs and liabilities at ₹ 16 lakhs. The Net asset position of Sparrow Ltd. as on 31<sup>st</sup> March, 2011 & 30<sup>th</sup> September 2011 were ₹ 280 lakhs & ₹ 395 lakhs respectively, the increase resulting from profits earned during the period.

On 1<sup>st</sup> October, 2011, 25.5% holdings were sold for ₹ 125 lakhs. You are required to explain the nature of the relationship between the two companies on the relevant dates and the accounting adjustments that are necessary as a result of any change in the relationship. The profit arising on part sale of investment, carrying value of the portion unsold & goodwill/capital reserve that arises on change in nature of the investment may also be worked out by you. (8 + 8 = 16 Marks)

Answer

- (a) Value Added Statement of M/s. Paradise Ltd.

|                                                |        | ₹ in lakhs |
|------------------------------------------------|--------|------------|
| Sales                                          |        | 254.00     |
| Less: Cost of bought in material and services: |        |            |
| Operating cost (₹ 222.00 lakhs – ₹ 82 lakhs)   | 140.00 |            |

|                                   |             |                 |
|-----------------------------------|-------------|-----------------|
| Excise duty                       | 11.20       |                 |
| Interest on bank overdraft        | <u>1.00</u> | <u>(152.20)</u> |
| Value added by trading activities |             | 101.80          |
| Add: Other income                 |             | <u>6.00</u>     |
| Total Value Added                 |             | <u>107.80</u>   |

## Application of value added

|                                                         |             | ₹ in lakhs    | %           |
|---------------------------------------------------------|-------------|---------------|-------------|
| To pay Employees:                                       |             |               |             |
| Wages, salaries and other benefits                      |             | 82.00         | 76.07       |
| To pay Government : Corporate tax                       |             | 2.40          | 2.23        |
| To pay Providers of Capital :                           |             |               |             |
| Interest on 9% debentures                               | 15.00       |               |             |
| Dividends                                               | <u>0.30</u> | 15.30         | 14.19       |
| To provide for Maintenance and Expansion of the Company |             |               |             |
| Depreciation                                            | 4.10        |               |             |
| Retained profit                                         | <u>4.00</u> | <u>8.10</u>   | <u>7.51</u> |
|                                                         |             | <u>107.80</u> | <u>100</u>  |

## Reconciliation between Total Value Added and Profit before Taxation:

|                                    | ₹ in lakhs    |
|------------------------------------|---------------|
| Profit before tax                  | 6.70          |
| Add back:                          |               |
| Depreciation                       | 4.10          |
| Wages, salaries and other benefits | 82.00         |
| Interest on debentures             | <u>15.00</u>  |
| Total Value Added                  | <u>107.80</u> |

- (b) Sparrow Ltd. became a subsidiary of Eagle Ltd. on 1<sup>st</sup> April 2010 when 51% thereof was acquired. The holding–subsidiary relationship continued till 30<sup>th</sup> September 2011 and from 1<sup>st</sup> October, 2011 the relationship between the two companies will change to Associate. As per para 24 of AS 21, “Consolidated Financial Statements”, the carrying value of the investment at the date it ceases to be subsidiary is regarded as cost thereafter. Accordingly, if the nature of the investee changes to that of an associate, the carrying amount of the investment in Consolidated Financial Statements of the investor, as on date it ceases to be a



subsidiary, would be considered as cost of investment in the associate. Goodwill or capital reserve arising on account of the change in the nature of the investment will be computed as on the date of such change. Accordingly, when a part of the investment takes the form of an investment in an associate, the results of operations of the subsidiary will be included in the consolidated statement of Profit and Loss for the period from the beginning of the period until it ceased to be a subsidiary.

**Ascertainment of Gain or Loss  
on the Disposal of the Part of the Investment in Sparrow Ltd.**

|                                                                              |                      | ₹                |
|------------------------------------------------------------------------------|----------------------|------------------|
| Proceeds received on sale of 25.5% holdings in Sparrow Ltd.                  |                      | 1,25,00,000      |
| Net Assets of Sparrow Ltd. on the date of disposal                           | 3,95,00,000          |                  |
| Less: Minority's interest in Sparrow Ltd. on the date of disposal            | <u>(1,93,55,000)</u> |                  |
| Share of Eagle Ltd. in Net Assets                                            | 2,01,45,000          |                  |
| Less: Capital reserve on acquisition (Refer W.N.)                            | <u>(16,00,000)</u>   |                  |
| Total value of investment in consolidated financial statements of Eagle Ltd. | <u>1,85,45,000</u>   |                  |
| Less: Carrying Value of investment disposed off<br>(1,85,45,000 x 25.5/51)   |                      | <u>92,72,500</u> |
| Profit on sale of 25.5% of investment                                        |                      | <u>32,27,500</u> |

| Carrying Value of the Investment retained in the Consolidated Financial Statements                       |                    | ₹                |
|----------------------------------------------------------------------------------------------------------|--------------------|------------------|
| Total value of investment in consolidated financial statements of Eagle Ltd.                             | 1,85,45,000        |                  |
| Less: Carrying value of investment disposed off                                                          | <u>(92,72,500)</u> |                  |
| Carrying Value of the investment retained in consolidated financial statements including capital reserve |                    | <u>92,72,500</u> |
| This amount of ₹ 92,72,500 would be used to apply the equity method of accounting as specified in AS 23  |                    |                  |

| Goodwill / Capital Reserve arising on the Carrying Value of Unsold Portion of the Investment                                                               |  |  | ₹                    |
|------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|----------------------|
| Carrying value of 25.5% holdings in Sparrow Ltd. as on 1 <sup>st</sup> October, 2011                                                                       |  |  | 92,72,500            |
| Less: Share in value of equity of Sparrow Ltd., as at date of investment when subsidiary relationship is transformed to an associate (3,95,00,000 x 25.5%) |  |  | <u>(1,00,72,500)</u> |
| Capital reserve arising on such investment under Equity method as per AS 23                                                                                |  |  | <u>(8,00,000)</u>    |

**Working Note:**

Calculation of Goodwill / Capital Reserve on the Date of Acquisition of Shares in Sparrow Ltd.

|                                                              | ₹                  |
|--------------------------------------------------------------|--------------------|
| Net Assets on Acquisition date (₹ 1,96,00,000 – ₹ 16,00,000) | <u>1,80,00,000</u> |
| 51% thereof                                                  | 91,80,000          |
| Less: Cost of investment                                     | <u>(75,80,000)</u> |
| Capital reserve on acquisition                               | <u>16,00,000</u>   |

**Question 5**

The following is the Balance Sheet of Bat Ltd. as on 31<sup>st</sup> March 2010:

| Liabilities                                                 | ₹           | Assets               | ₹           |
|-------------------------------------------------------------|-------------|----------------------|-------------|
| 3,00,000 Equity Shares of ₹ 10 each fully paid              | 30,00,000   | Goodwill             | 3,00,000    |
| 12.5% Redeemable preference shares of ₹ 100 each fully paid | 20,00,000   | Building             | 20,00,000   |
| General Reserve                                             | 15,00,000   | Plant & Machinery    | 22,00,000   |
| Profit & Loss A/c                                           | 3,00,000    | Furniture            | 10,00,000   |
| Secured Loan                                                | 10,00,000   | Investments          | 16,00,000   |
| Creditors                                                   | 30,00,000   | Stock                | 12,00,000   |
|                                                             |             | Debtors              | 20,00,000   |
|                                                             |             | Bank Balance         | 4,00,000    |
|                                                             |             | Preliminary Expenses | 1,00,000*   |
|                                                             | 1,08,00,000 |                      | 1,08,00,000 |

\* As per para 56 of AS 26 "intangible Assets", preliminary expenses should not appear in the Balance Sheet

*Additional Information:*

- (i) Fixed assets are worth 20% more than book value. Stock is overvalued by ₹ 1,00,000. Debtors are to be reduced by ₹ 40,000. Trade investments, which constitute 10% of the total investments are to be valued at 10% below cost.
- (ii) Trade investments were purchased on 1.4.2009. 50% of non-trade investments were purchased on 1.4.2008 and the rest on 1.4.2009. Non-trade investments yielded 15% return on cost.
- (iii) In 2008-2009, Furniture with a book value of ₹ 1,00,000 was sold for ₹ 50,000. This loss should be treated as non-recurring or extraordinary item for the purpose of calculating adjusted average profit.
- (iv) In 2007-2008, new machinery costing ₹ 2,00,000 was purchased, but wrongly charged to revenue. This amount should be adjusted taking depreciation at 10% on reducing value method.
- (v) Return on capital employed is 20% in similar business.
- (vi) goodwill is to be valued at two years purchase of super profits based on simple average profits of last four years.

Profit of last four years are as under:

| Year      | Amount (₹) |
|-----------|------------|
| 2006-2007 | 13,00,000  |
| 2007-2008 | 14,00,000  |
| 2008-2009 | 16,00,000  |
| 2009-2010 | 18,00,000  |

- (vii) It is assumed that preference dividend has been paid till date.
- (viii) Depreciation on the overall increased value of assets (worth 20% more than book value) need not be considered. Depreciation on the additional value of only plant and machinery to be considered taking depreciation at 10% on reducing value method while calculating average adjusted profit.

Find out the intrinsic value of the equity share. Ignore income tax and dividend tax. (16 Marks)

Answer

Calculation of Intrinsic Value of Equity Shares of Bat Ltd.

Net Assets available for Equity Shareholders.

|                     |  | ₹ | ₹         |
|---------------------|--|---|-----------|
| Goodwill (W.N.1)    |  |   | 4,14,484  |
| Sundry fixed assets |  |   | 64,14,960 |

|                                                         |           |           |                  |
|---------------------------------------------------------|-----------|-----------|------------------|
| Trade and non-trade investments<br>(1,44,000+14,40,000) |           |           | 15,84,000        |
| Debtors                                                 |           |           | 19,60,000        |
| Stock                                                   |           |           | 11,00,000        |
| Bank balance                                            |           |           | 4,00,000         |
| Total Assets                                            |           |           | 1,18,73,444      |
| Less: Outside liabilities                               |           |           |                  |
| Secured loan                                            | 10,00,000 |           |                  |
| Creditors                                               | 30,00,000 | 40,00,000 |                  |
| Preference share capital                                |           | 20,00,000 | (60,00,000)      |
| Net assets available for equity shareholders            |           |           | <u>58,73,444</u> |

Value of an equity share =  $\frac{\text{Net Assets Available to Equity Shareholders}}{\text{Number of Equity Shares}}$

$$= \frac{\text{₹ } 58,73,444}{3,00,000} = \text{₹ } 19.59 \text{ (approx)}$$

#### Working Notes:

#### 1. Calculation of Goodwill

##### (i) Capital Employed

|                                                | ₹                | ₹                  |
|------------------------------------------------|------------------|--------------------|
| Fixed assets:                                  |                  |                    |
| Building                                       | 20,00,000        |                    |
| Plant and machinery (₹ 22,00,000 + ₹ 1,45,800) | 23,45,800        |                    |
| Furniture                                      | <u>10,00,000</u> |                    |
|                                                | 53,45,800        |                    |
| Add: 20% Appreciation                          | <u>10,69,160</u> |                    |
|                                                | 64,14,960        |                    |
| Trade investments (₹ 16,00,000 x 10% x 90%)    | 1,44,000         |                    |
| Debtors (₹ 20,00,000 – ₹ 40,000)               | 19,60,000        |                    |
| Stock (₹ 12,00,000 – ₹ 1,00,000)               | 11,00,000        |                    |
| Bank Balance                                   | <u>4,00,000</u>  | 1,00,18,960        |
| Less: Outside liabilities:                     |                  |                    |
| Secured Loan                                   | 10,00,000        |                    |
| Creditors                                      | <u>30,00,000</u> | <u>(40,00,000)</u> |
| Capital employed                               |                  | <u>60,18,960</u>   |

## (ii) Future Maintainable Profit

## Calculation of Average Adjusted Profit

|                                                                                                  | 2006-<br>2007<br>₹ | 2007-<br>2008<br>₹ | 2008-<br>2009<br>₹ | 2009-2010<br>₹   |
|--------------------------------------------------------------------------------------------------|--------------------|--------------------|--------------------|------------------|
| Profit                                                                                           | 13,00,000          | 14,00,000          | 16,00,000          | 18,00,000        |
| Add: Capital expenditure on Machinery charged to revenue                                         | -                  | 2,00,000           | -                  | -                |
| Loss on sale of furniture                                                                        |                    |                    | 50,000             | -                |
|                                                                                                  | 13,00,000          | 16,00,000          | 16,50,000          | 18,00,000        |
| Less: Depreciation on machinery                                                                  | -                  | (20,000)           | (18,000)           | (16,200)         |
| Income from non-trade investments (W.N.2)                                                        |                    |                    | (1,08,000)         | (2,16,000)       |
| Reduction in the value of stock                                                                  | -                  | -                  | -                  | (1,00,000)       |
| Bad debts                                                                                        | -                  | -                  | -                  | (40,000)         |
| Adjusted Profit                                                                                  | 13,00,000          | 15,80,000          | 15,24,000          | 14,27,800        |
| Total adjusted profit for four years                                                             |                    |                    |                    | 58,31,800        |
| Average profit (₹ 58,31,800/4)                                                                   |                    |                    |                    | 14,57,950        |
| Less: Depreciation at 10% on Additional Value of Machinery<br>(22,00,000 + 1,45,800) x 20% x 10% |                    |                    |                    | (46,916)         |
| Average Adjusted Profit                                                                          |                    |                    |                    | <u>14,11,034</u> |

(iii) Normal Profit @ 20% on Capital Employed,

i.e. 20% on ₹ 60,18,960 = ₹ 12,03,792

(iv) Super Profit = Average Adjusted profit–Normal profit

= ₹ 14,11,034 – ₹ 12,03,792 = ₹ 2,07,242

(v) Goodwill

= 2 years' purchase of super profit

= ₹ 2,07,242 x 2 = ₹ 4,14,484

2. Trade investments = ₹ 16,00,000 x 10% x 90% = ₹ 1,44,000

Non-trade investment = ₹ 16,00,000 - ₹ 1,60,000 = ₹ 14,40,000

Non-trade investment purchased on 1.4.2008 = 50% of ₹ 14,40,000 = ₹ 7,20,000

Non-trade investment purchased on 1.4.2009 = ₹ 14,40,000 – ₹ 7,20,000 = ₹ 7,20,000

Income from non-trade investment:

In the year 2008-2009 : 7,20,000 x 15% = ₹ 1,08,000

In the year 2009-2010 :  $7,20,000 \times 15\% = ₹ 1,08,000$

$7,20,000 \times 15\% = ₹ 1,08,000$

₹ 2,16,000

#### Question 6

- (a) Life Industries Ltd (LIL) furnishes the following information from which you are required to calculate the prevailing Economic Value Added of the company and also explain the reason for the difference, if any, between the EVA as calculated by you and the MVA (Market Value Added) of LIL amounting to ₹ 14005 crores.

|                                              |                 |
|----------------------------------------------|-----------------|
| Common shares of ₹ 1,000 face value          | 1,58,200 units  |
| 12% Debentures ₹ 10 face value               | 50,00,000 units |
| Current tax rate                             | 30%             |
| Financial Leverage                           | 1.1 times       |
| Securities Premium Account (Rupees in lakhs) | 155             |
| Free Reserves (Rupees in lakhs)              | 154             |
| Capital Reserve (Rupees in lakhs)            | 109             |

It is a prevailing practice for companies in the industry to which LIL belongs to pay at least a dividend of 15% p.a. to its common shareholders.

- (b) Sparrow Holdings is a SEBI Registered Mutual Fund which made its maiden N.F.O (New Fund Offer) on 10<sup>th</sup> April, 2010 ₹ 10 face value per unit. Subscription was received for 90 lakhs units. An underwriting arrangement was also entered into with Affinity Capital Markets Ltd., that agreed to underwrite the entire NFO of 100 lakh units on a commission of 1.5%.

Out of the monies received ₹ 892.50 lakhs was invested in various capital market instruments. The marketing expenses for the N.F.O amounted to ₹ 11.25 lakhs. During the financial year ended March 2011 the Fund sold securities having cost of ₹ 127.25 lakh (FV ₹ 54.36 lakhs) for ₹ 141.25 lakhs. The fund in turn purchased securities for ₹ 130 lakhs. The management expenses of the fund are regulated by SEBI stipulations which state that the same shall not exceed 0.25% of the average funds invested during the year. The actual amount spent towards management expenses was ₹ 2.47 lakhs of which ₹ 47,000 was in arrear. The dividends earned on the investments held amounted to ₹ 2.51 lakhs of which a sum of ₹ 25,000 is yet to be collected. The fund distributed 80% of realized earnings. The closing market value of the portfolio was ₹ 1120.23 lakhs

You are required to determine the closing per unit NAV of the fund. (8 + 8 = 16 Marks)

Answer

(a) Computation of Economic Value Added

|                                                             | ₹ in lakhs   |
|-------------------------------------------------------------|--------------|
| Profit after tax                                            | 420          |
| Add: Interest net of tax = $60 \times \frac{100 - 30}{100}$ | <u>42</u>    |
| Return to providers of funds                                | 462          |
| Less: Cost of Capital                                       | <u>(342)</u> |
| Economic Value Added                                        | <u>120</u>   |

MVA of ₹ 14005 crore:

The MVA of ₹ 14005 crore is the difference between the current Market Value of LIL and the capital contributed by the fund providers. While EVA measures current earning efficiency of the company, MVA takes into consideration the EVA from not only the assets in place but also from the future projects/activities of the company. The difference between MVA over EVA thus represents the value attributed to the future potential of the company & may change from time to time based on market sentiments. In short the MVA is the net present value of all future EVA's.

Working Notes:

1. Calculation of Net Profit after interest and tax

Interest on Debentures = 50,00,000 units x 10 x 12% = ₹ 60,00,000

Therefore, Financial Leverage =  $\frac{\text{Profit before Interest \& taxes (PBIT)}}{\text{PBIT less Interest}}$

$$1.10 = \frac{\text{PBIT}}{\text{PBIT} - ₹ 60,00,000}$$

$$1.10 (\text{PBIT} - ₹ 60,00,000) = \text{PBIT}$$

$$1.10 \text{ PBIT} - ₹ 66,00,000 = \text{PBIT}$$

$$1.10 \text{ PBIT} - \text{PBIT} = ₹ 66,00,000$$

$$0.10 \text{ PBIT} = ₹ 66,00,000$$

$$\text{PBIT} = ₹ 6,60,00,000$$

Profit after interest but before tax = ₹ 6,60,00,000 – ₹ 60,00,000 = ₹ 6,00,00,000

Less: Income Tax @ 30% (₹ 1,80,00,000)

Profit After Interest & Tax ₹ 4,20,00,000

## 2. Calculation of Weighted Average Cost of Capital (WACC)

|                           | ₹ in lakhs | Amount (₹)<br>(1) | Weight<br>(2) | Cost%<br>(3) | WACC%<br>(4)=2x3 |
|---------------------------|------------|-------------------|---------------|--------------|------------------|
| Equity Shareholders' fund |            |                   |               |              |                  |
| Common Shares             | 1,582      |                   |               |              |                  |
| Securities Premium        | 155        |                   |               |              |                  |
| Free Reserves             | 154        |                   |               |              |                  |
| Capital Reserves          | <u>109</u> |                   |               |              |                  |
|                           |            | 2,000             | 0.80          | 15           | 12.00            |
| Debentureholders' fund    |            | 500               | 0.20          | 8.4 *        | 1.68             |
|                           |            | <u>2,500</u>      | <u>1.00</u>   |              | <u>13.68</u>     |

Cost of Capital = Capital Employed x WACC%

= ₹ 2,500 lakhs x 13.68%

= ₹ 342 lakhs

## (b) Calculation of Closing per unit of NAV of the fund

|                                      | ₹ in lakhs      |
|--------------------------------------|-----------------|
| Net Assets of Sparrow holding        |                 |
| Closing cash balance (W.N.2)         | 79.99           |
| Closing Market Value of Investments  | 1,120.23        |
| Accrued Dividends (collectable)      | <u>0.25</u>     |
|                                      | 1,200.47        |
| Less: Current Liabilities            |                 |
| Outstanding Management Fee (payable) | (0.47)          |
| Closing Net Assets (A)               | <u>1,200.00</u> |
| Units outstanding (in lakhs) (B)     | 100.00          |
| NAV per unit (A/B)                   | 12.00           |

Working Notes:

|                                                           | ₹ in lakhs      |
|-----------------------------------------------------------|-----------------|
| 1. Computation of opening cash balance                    |                 |
| Proceeds of NFO in full including underwriters commitment | 1000.00         |
| Less: Initial Purchase of Securities                      | <u>(892.50)</u> |

\* Rate of interest on debentures is taken net of tax of 30%.



|                                                     |                 |                 |
|-----------------------------------------------------|-----------------|-----------------|
|                                                     |                 | 107.50          |
| Less: Underwriting Commission                       | 15.00           |                 |
| Marketing Expenses                                  | 11.25           | (26.25)         |
| Opening Cash Balance                                |                 | 81.25           |
| 2. Computation of Closing cash balance              |                 |                 |
| Opening bank balance (W.N.1)                        |                 | 81.25           |
| Add: Proceeds from sale of securities               | 141.25          |                 |
| Dividends received on investment                    | <u>2.26</u>     | <u>143.51</u>   |
|                                                     |                 | 224.76          |
| Less: Cost of Securities purchased                  | 130.00          |                 |
| Management Expenses (W.N.3)                         | 1.76            |                 |
| Capital Gains Distributed ` (141.25 - 127.25 x 80%) | 11.20           |                 |
| Dividends Distributed ` (2.26 x 80%)                | <u>1.81</u>     | <u>(144.77)</u> |
| Closing cash balance                                |                 | <u>79.99</u>    |
| 3. Computation of Management Expenses Chargeable    |                 |                 |
| Actual Expense Incurred [A]                         |                 | 2.47            |
| Opening Investment Made                             | 892.50          |                 |
| Closing Funds Invested (892.50 - 127.25 + 130)      | <u>895.25</u>   |                 |
| Total                                               | <u>1,787.75</u> |                 |
| Average Funds Invested (1,787.75/2)                 | <u>893.875</u>  |                 |
| 0.25% of Average Funds Invested [B]                 |                 | 2.23            |
| Lower of A or B                                     |                 | 2.23            |
| Less: Amount unpaid                                 |                 | (0.47)          |
| Management expenses paid                            |                 | 1.76            |

## Question 7

Answer any **four** parts of the question:

- (a) Mega Ltd. issued ₹ 1,00,00,000 worth of 8% Debentures of face value ₹ 100 each on par value basis on 1<sup>st</sup> January, 2011. These debentures are redeemable at 12% premium at the end of 2014 or exchangeable for ordinary shares of Mega Ltd. on 1:1 basis. The interest rate for similar debentures that do not carry conversion entitlement is 12%. You are required to calculate the value of the debt portion of the above compound financial instrument. The present value of the rupee at the end of years 1 to 4 at 8% and 12% are supplied to you as:

|               | 8%    | 12%   |
|---------------|-------|-------|
| End of year 1 | 0.926 | 0.893 |
| End of year 2 | 0.857 | 0.797 |
| End of year 3 | 0.794 | 0.712 |
| End of year 4 | 0.735 | 0.636 |

- (b) G Ltd., acquired a machine on 1<sup>st</sup> April, 2005 for ₹ 7 crore that had an estimated useful life of 7 years. The machine is depreciated on straight line basis and does not carry any residual value. On 1<sup>st</sup> April, 2009, the carrying value of the machine was reassessed at ₹ 5.10 crore and the surplus arising out of the revaluation being credited to revaluation reserve. For the year ended March 2011, conditions indicating an impairment of the machine existed and the amount recoverable ascertained to be only ₹ 79 lakhs. You are required to calculate the loss on impairment of the machine and show how this loss is to be treated in the books of G Ltd. G Ltd., had followed the policy of writing down the revaluation surplus by the increased charge of depreciation resulting from the revaluation.
- (c) Fee Ltd. borrows a sum of ₹ 20 crore from Cofee Ltd., repayable as a single bullet payment at the end of 5 years. The interest thereon @ 5% p.a. is payable at yearly rests. Since the market is 8%, Fee Ltd. paid an origination fee of ₹ 2.40 crores to Cofee Ltd. to compensate Cofee Ltd. for the lower rate of interest. Apart from the above, there are no other transactions between the two parties. You are required to show the value at which Cofee Ltd., would recognize the loan and the annual interest thereon.
- (d) On 1<sup>st</sup> April 2010, a mutual fund scheme had 9 lakh units, face value of ₹ 10 each outstanding. The scheme earned ₹ 81 lakhs in 2010-11 out of which ₹ 45 lakhs was earned in first half year. 1 lakh units were sold on 30<sup>th</sup> September, 2010 at NAV ₹ 60. Show important accounting entries for sale of units and distribution of dividend at the end of 2010-11.
- (e) Bee Ltd., has entered into a contract by which it has the option to sell its identified property, plant and equipment (PPE) to Axe Ltd. for ₹ 100 lakhs after 3 years whereas its current market price is ₹ 150 lakhs. Is the put option of Bee Ltd., a financial instrument? Explain

(4 × 4 = 16 Marks)

#### Answer

- (a) Present value of Debentures redeemable in 2014 ₹ 71,23,200  
 $[\text{₹ } 1,00,00,000 \times 1.12 \times 0.636]$   
 Present value of interest on debentures  
 $[\text{₹ } 8,00,000 \times 3.038 \text{ (sum of 4 years discount factors @12\%)}]$  ₹ 24,30,400  
 Value of Debt component of the convertible debentures ₹ 95,53,600  
 \* Interest payable on debentures every year = ₹ 1,00,00,000 × 8% = ₹ 8,00,000.

## (b) Statement Showing Impairment Loss

| (₹ in crores)                                                                                                            |               |
|--------------------------------------------------------------------------------------------------------------------------|---------------|
| Carrying amount of the machine as on 1 <sup>st</sup> April 2005                                                          | 7.00          |
| Depreciation for 4 years i.e. 2005-06 to 2008-09 [ $\frac{7\text{crores}}{7\text{years}} \times 4\text{years}$ ]         | <u>(4.00)</u> |
| Carrying amount as on 31.03.2009                                                                                         | 3.00          |
| Add: Upward Revaluation (credited to Revaluation Reserve account)                                                        | <u>2.10</u>   |
| Carrying amount of the machine as on 1 <sup>st</sup> April 2009 (revalued)                                               | 5.10          |
| Less: Depreciation for 2 years i.e. 2009-10 & 2010-11 [ $\frac{5.10\text{crores}}{3\text{years}} \times 2\text{years}$ ] | <u>(3.40)</u> |
| Carrying amount as on 31.03.2011                                                                                         | 1.70          |
| Less: Recoverable amount                                                                                                 | <u>(0.79)</u> |
| Impairment loss                                                                                                          | 0.91          |
| Less: Balance in revaluation reserve as on 31.03.2011:                                                                   |               |
| Balance in revaluation reserve as on 31.03.2009                                                                          | 2.10          |
| Less: Enhanced depreciation met from revaluation reserve                                                                 |               |
| 2009-10 & 2010-11 = [(1.70 – 1.00) × 2 years]                                                                            | <u>(1.40)</u> |
| Impairment loss set off against revaluation reserve balance as per para 58 of AS 28 "Impairment of Assets"               | <u>(0.70)</u> |
| Impairment Loss to be debited to profit and loss account                                                                 | <u>0.21</u>   |

- (c) The fair value of the Loan to Cofee Ltd. is the present value of the interest it will receive over the next 5 years and the present value of repayment at the end of 5<sup>th</sup> year.

P.V. of interest discounted @ 8% = [(20,00,00,000 × 5%) × 3.9926] = ₹ 3,99,26,000 (A)

P.V. of principal amount = ₹ 20,00,00,000 discounted @ 8%

= ₹ 20,00,00,000 × 0.6806 = ₹ 13,61,20,000 (B)

Fair Value of Loan (A + B) i.e. ₹ 17,60,46,000 (i.e. approximately ₹ 17,60,00,000 which is loan amount net of origination fee)

Therefore, Cofee Ltd will recognize the loan at ₹ 17.60 crores only.

Coffee Ltd will recognize the interest using the effective interest rate method as worked out below:

| Year | Amortised Cost (Opening Balance) | Interest income @ 8% to be recognised | Total        | Payment received | Amortised Cost (Closing Balance) |
|------|----------------------------------|---------------------------------------|--------------|------------------|----------------------------------|
|      | (1)                              | (2)                                   | (3)          | (4)              | (5) = (3) – (4)                  |
| 1    | 17,60,00,000                     | 1,40,80,000                           | 19,00,80,000 | 1,00,00,000      | 18,00,80,000                     |
| 2    | 18,00,80,000                     | 1,44,06,400                           | 19,44,86,400 | 1,00,00,000      | 18,44,86,400                     |
| 3    | 18,44,86,400                     | 1,47,58,912                           | 19,92,45,312 | 1,00,00,000      | 18,92,45,312                     |
| 4    | 18,92,45,312                     | 1,51,39,625                           | 20,43,84,937 | 1,00,00,000      | 19,43,84,937                     |
| 5    | 19,43,84,937                     | 1,56,15,063*                          | 21,00,00,000 | 21,00,00,000     | Nil                              |

\*Note: The interest in the 5<sup>th</sup> year, has been adjusted in accordance to the value received on closure.

(d) Allocation of earnings

|                                                                         | Old unit holders<br>(9 lakh units) | New unit holders<br>(1 lakh units) | Total Earning |
|-------------------------------------------------------------------------|------------------------------------|------------------------------------|---------------|
|                                                                         | ₹ in lakhs                         |                                    |               |
| First half year (₹ 5.00/unit)                                           | 45.00                              | Nil                                | 45.00         |
| Second half year (₹ 3.60/unit)                                          | <u>32.40</u>                       | <u>3.60</u>                        | <u>36.00</u>  |
|                                                                         | 77.40                              | 3.60                               | 81.00         |
| Add: Equalisation payment recovered<br>(₹ 5 per unit x 10,00,000 units) |                                    |                                    | <u>5.00</u>   |
| Amount available for distribut                                          |                                    |                                    | <u>86.00</u>  |

Note: Equalisation payment = ₹ 45 lakhs/9 lakhs units = ₹ 5 per unit

Distribution of earning per unit

|                                                                | Old unit holders<br>₹ | New unit holders<br>₹ |
|----------------------------------------------------------------|-----------------------|-----------------------|
| Dividend distributed per unit<br>(₹ 86 lakhs /10,00,000 units) | 8.60                  | 8.60                  |
| Less: Equalisation payment per unit                            | <u>-</u>              | <u>(5.00)</u>         |
| Net distributed income                                         | <u>8.60</u>           | <u>3.60</u>           |

## Journal Entries

| Date    |                                                                                                                                                                                            | ₹  | ₹  |                                                                                         |
|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|----|-----------------------------------------------------------------------------------------|
| 30/9/10 | Bank A/c Dr.<br>To Unit capital A/c<br>To Reserves A/c<br>To Dividend Equalisation A/c<br>(Being amount of dividend equalization recovered from the investors along with the NAV per unit) | 65 |    | 1 lakh units x ₹ 65<br>1 lakh units x ₹ 10<br>1 lakh units x ₹ 50<br>1 lakh units x ₹ 5 |
| 31/3/11 | Dividend Equalisation A/c Dr.<br>To Revenue A/c<br>(Being dividend equalization transferred to revenue for equal distribution to all unitholders)                                          | 5  | 5  |                                                                                         |
| 31/3/11 | Revenue A/c Dr.<br>To Bank A/c<br>(Being dividend distributed to all unit holders @ ₹ 8.60 per unit)                                                                                       | 86 | 86 |                                                                                         |

- (e) As per AS 31, Financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity. In the given case, for the purpose of the definition of financial instrument, Property, Plant and Equipment do not qualify the definition of financial asset as per the standard.

To assess whether the put option of BEE Ltd., is a financial instrument or not it is necessary to evaluate the past practice of Bee Ltd. If Bee Ltd. has the past practice of settling net, then it becomes a financial instrument.

If Bee Ltd. intends to sell the identified Property, Plant and Equipment and settle by delivery and there is no past practice of settling net, then the contract should not be accounted for as financial instrument under AS 30 "Financial Instruments: Recognitions Measurement" and AS 31 "Financial Instrument: Presentation".