

**GN(A) 18 (Issued 2005)**

## **Guidance Note on Accounting for Employee Share-based Payments**

### **Foreword**


In today's modern business world, human capital has become one of the most important resources. The enterprises are, therefore, more than ever interested not only in retaining their employees but also for attracting the best talent from outside. This has led to the enterprises adopting non-traditional methods of making payments to their employees. Employee share-based payment is one of such methods, the use of which has increased significantly during recent times. Now-a-days, not only more and more enterprises are adopting this method of compensating their employees but also such payments, once thought of as a perquisite only for top executives, is percolating down the line in the organisation. Emergence of share-based payment as an important means of employee compensation has also generated heated debate on the manner of accounting for such payments. In this scenario, a need was being felt, all over the world, for laying down sound accounting principles for all types of employee share-based payments.

I am happy to note that the Research Committee, realising the need for accounting for employee share-based compensation in India, has formulated this Guidance Note on Accounting for Employee Share-based Payments. The Guidance Note provides extensive guidance on accounting for various aspects of such payments.

I wish to place on record my deep appreciation of Shri Anuj Goyal, Chairman, Research Committee, Officers of the Technical Directorate and various interest groups who have made invaluable contribution in the finalisation of this Guidance Note.

I am confident that this Guidance Note will be immensely useful not only to the members but also to others concerned.

New Delhi  
January 3, 2005



Sunil Goyal  
*President*

## **Preface**

Employee share-based payments generally involve grant of shares or stock options to the employees at a concessional price or a future cash payment based on the increase in the price of the shares from a specified level. Such payments are known with a variety of names. In any case, these payments now-a-days constitute an important part of the overall remuneration package of the employees, in various industries. The basic objective of such payments is to compensate employees for their services and/or to provide an incentive to the employees for remaining in the employment of the enterprise and for improving their performance. In this scenario, the issue of recognition and measurement of services received under an employee share-based payment plan assumes great significance. To provide guidance on this issue as well as on other related issues, the Research Committee has formulated this Guidance Note on Accounting for Employee Share-based Payments.

The Guidance Note recognises that there are two methods of accounting for employee share-based payments, viz., the fair value method and the intrinsic value method and permits the enterprises to use either of the two methods for accounting for such payments. However, an enterprise using the intrinsic value method is required to make extensive fair value disclosures. The Guidance Note is a comprehensive document that deals with various significant aspects of such plans including those related to performance conditions, modifications to the terms and conditions of the grant of shares or stock options, reload feature, cash-settled employee share-based payment plans, employee share-based payment plans with cash alternatives, graded vesting, earnings-per-share implications, accounting for employee share-based payments administered through a trust, etc. The Guidance Note also recommends detailed disclosure requirements. The appendices to the Guidance Note provide detailed guidance on measurement of fair value of shares and stock options, including determination of various inputs to the option-pricing models and examples to illustrate application of various principles recommended in the Guidance Note.

I would like to take this opportunity to place on record my deep appreciation of the efforts put in by Shri Abizer Diwanji and Shri Harshu Ghate, two experts in the area, who contributed in the preparation of the basic draft of the Guidance Note. I am also thankful to various interest groups for giving their invaluable comments and suggestions during the preparation of the

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Guidance Note. My thanks are also due to Shri S.C. Vasudeva, my esteemed colleague on the Research Committee and the Central Council, for his invaluable support and contribution in the finalisation of the Guidance Note. I would also like to thank all other members of the Research Committee, namely, Shri V. Murali (Vice-Chairman), Shri Sunil Goyal (President), Shri K.S. Vikamsey (Vice-President), Shri Abhijit Bandyopadhyay, Shri Charanjot Singh Nanda, Shri Harinderjit Singh, Shri Pawan Kumar Sharma, Shri Rajkumar S. Adukia, Shri Akhilesh Ranjan, Shri Sidharth Kumar Birla and members co-opted on the Committee for their suggestions and inputs.

I sincerely compliment Dr. Avinash Chander, Technical Director, Ms. Anuradha Jain, Secretary to the Research Committee, and Shri Vishal Bansal, Sr. Technical Officer, for their invaluable contribution and efforts at various stages of the finalisation of the Guidance Note.

I am confident that this Guidance Note will go a long way in establishing best accounting practices in respect of accounting for employee share-based payment plans and will be useful to the members and others concerned.



New Delhi  
January 3, 2005

Anuj Goyal  
*Chairman*  
*Research Committee*

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# **Guidance Note on Accounting for Employee Share-based Payments\***

*(The following is the text of the Guidance Note on Accounting for Employee Share-based Payments, issued by the Council of the Institute of Chartered Accountants of India.)*

### **Introduction**

1. Some employers use share-based payments as a part of remuneration package for their employees. Such payments generally take the forms of Employee Stock Option Plans (ESOPs), Employee Stock Purchase Plans (ESPPs) and stock appreciation rights. ESOPs are plans under which an enterprise grants options for a specified period to its employees to purchase its shares at a fixed or determinable price. ESPPs are plans under which the enterprise grants rights to its employees to purchase its shares at a stated price at the time of public issue or otherwise. Stock appreciation rights is a form of employee share-based payments whereby the employees become entitled to a future cash payment or shares based on the increase in the price of the shares from a specified level over a specified period. Apart from using share-based payments to compensate employees for their services, such payments are also used by an employer as an incentive to the employees to remain in its employment or to reward them for their efforts in improving its performance.

2. Recognising the need for establishing uniform sound accounting principles and practices for all types of share-based payments, the Accounting Standards Board of the Institute of Chartered Accountants of India is developing an Accounting Standard covering various types of share-

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\* Guidance Note on Accounting for Employee Share-based Payments incorporates limited revision made pursuant to the decision taken at the 267<sup>th</sup> meeting of the Council held on March 12-14, 2007 at New Delhi. An announcement in this regard was placed on March 29, 2007 on the website of the Institute and published in the May, 2007 issue of 'The Chartered Accountant'. Accordingly, paras 42A & 42B have been added and Appendix VI has been revised subsequent to the above announcement of the Institute.

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based payments including employee share-based payments. However, as the formulation of the Standard is likely to take some time, the Institute has decided to bring out this Guidance Note. The Guidance Note recognises that there are two methods of accounting for employee share-based payments, viz., the fair value method and the intrinsic value method and permits as an alternative the intrinsic value method with fair value disclosures. Once the Accounting Standard dealing with Share-based Payments comes into force, this Guidance Note will automatically stand withdrawn.

### **Scope**

3. This Guidance Note establishes financial accounting and reporting principles for employee share-based payment plans, viz., ESOPs, ESPPs and stock appreciation rights. For the purposes of this Guidance Note, the term 'employee' includes a director of the enterprise, whether whole time or not.

4. For the purposes of this Guidance Note, a transfer of shares or stock options of an enterprise by its shareholders to its employees is also an employee share-based payment, unless the transfer is clearly for a purpose other than payment for services rendered to the enterprise. This also applies to transfers of shares or stock options of the parent of the enterprise, or shares or stock options of another enterprise in the same group<sup>1</sup> as the enterprise, to the employees of the enterprise.

5. For the purposes of this Guidance Note, a transaction with an employee in his/her capacity as a holder of shares of the enterprise is not an employee share-based payment. For example, if an enterprise grants all holders of a particular class of its shares the right to acquire additional shares or stock options of the enterprise at a price that is less than the fair value of those shares or stock options, and an employee receives such a right because he/she is a holder of shares or stock options of that particular class, the granting or exercise of that right is not subject to the requirements of this Guidance Note.

6. For the purposes of this Guidance Note, a grant of shares to the employees at the time of public issue is not an employee share-based payment if the price and other terms at which the shares are offered to employees are the same or similar to those at which the shares have been offered to general investors, for example, in a public issue an enterprise

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<sup>1</sup> A 'Group' is a parent and all its subsidiaries.

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grants shares to its employees as a preferential allotment while the price and other terms remain the same as those to other investors.

### **Definitions**

7. For the purpose of this Guidance Note, the following terms are used with the meanings specified:

*Employee Stock Option* is a contract that gives the employees of the enterprise the right, but not the obligation, for a specified period of time to purchase or subscribe to the shares of the enterprise at a fixed or determinable price.

*Employee Stock Option Plan* is a plan under which the enterprise grants Employee Stock Options.

*Employee Stock Purchase Plan* is a plan under which the enterprise offers shares to its employees as part of a public issue or otherwise.

*Equity* is the residual interest in the assets of an enterprise after deducting all its liabilities.

*Exercise* means making of an application by the employee to the enterprise for issue of shares against the option vested in him in pursuance of the Employee Stock Option Plan.

*Exercise Period* is the time period after vesting within which the employee should exercise his right to apply for shares against the option vested in him in pursuance of the Employee Stock Option Plan.

*Expected Life of an Option* is the period of time from grant date to the date on which an option is expected to be exercised.

*Exercise Price* is the price payable by the employee for exercising the option granted to him in pursuance of the Employee Stock Option Plan.

*Fair Value* is the amount for which stock option granted or a share offered for purchase could be exchanged between knowledgeable, willing parties in an arm's length transaction.

*Grant Date* is the date at which the enterprise and its employees agree to the terms of an employee share-based payment plan. At grant date, the enterprise confers on the employees the right to cash or shares of the enterprise, provided the specified vesting conditions, if any, are met. If that

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agreement is subject to an approval process, (for example, by shareholders), grant date is the date when that approval is obtained.

*Intrinsic Value* is the amount by which the quoted market price of the underlying share in case of a listed enterprise or the value of the underlying share determined by an independent valuer in case of an unlisted enterprise, exceeds the exercise price of an option.

*Market Condition* is a condition upon which the exercise price, vesting or exercisability of a share or a stock option depends that is related to the market price of the shares of the enterprise, such as attaining a specified share price or a specified amount of intrinsic value of a stock option, or achieving a specified target that is based on the market price of the shares of the enterprise relative to an index of market prices of shares of other enterprises.

*Reload Feature* is a feature that provides for an automatic grant of additional stock options whenever the option holder exercises previously granted options using the shares of the enterprise, rather than cash, to satisfy the exercise price.

*Reload Option* is a new stock option granted when a share of the enterprise is used to satisfy the exercise price of a previous stock option.

*Repricing* of an employee stock option means changing the existing exercise price of the option to a different price.

*Stock Appreciation Rights* are the rights that entitle the employees to receive cash or shares for an amount equivalent to any excess of the market value of a stated number of enterprise's shares over a stated price. The form of payment may be specified when the rights are granted or may be determined when they are exercised; in some plans, the employee may choose the form of payment.

*Vest* is to become entitled to receive cash or shares on satisfaction of any specified vesting conditions under an employee share-based payment plan.

*Vesting Period* is the period between the grant date and the date on which all the specified vesting conditions of an employee share-based payment plan are to be satisfied.

*Vesting Conditions* are the conditions that must be satisfied for the employee to become entitled to receive cash, or shares of the enterprise, pursuant to an employee share-based payment plan. Vesting conditions

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include service conditions, which require the employee to complete a specified period of service, and performance conditions, which require specified performance targets to be met (such as a specified increase in the enterprise's share price over a specified period of time).

*Volatility* is a measure of the amount by which a price has fluctuated (historical volatility) or is expected to fluctuate (expected volatility) during a period. The volatility of a share price is the standard deviation of the continuously compounded rates of return on the share over a specified period.

## **Accounting**

8. For accounting purposes, employee share-based payment plans are classified into the following categories:

- (a) *Equity-settled*: Under these plans, the employees receive shares.
- (b) *Cash-settled*: Under these plans, the employees receive cash based on the price (or value) of the enterprise's shares.
- (c) *Employee share-based payment plans with cash alternatives*: Under these plans, either the enterprise or the employee has a choice of whether the enterprise settles the payment in cash or by issue of shares.

9. A share-based payment plan falling in the above categories can be accounted for by adopting the fair value method or the intrinsic value method. The accounting treatment recommended hereinbelow is based on the fair value method. The application of the intrinsic value method is explained thereafter in paragraph 40.

## **Equity-settled Employee Share-based Payment Plans**

### **Recognition**

10. An enterprise should recognise as an expense (except where service received qualifies to be included as a part of the cost of an asset) the services received in an equity-settled employee share-based payment plan when it receives the services, with a corresponding credit to an appropriate



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equity account, say, 'Stock Options Outstanding Account'. This account is transitional in nature as it gets ultimately transferred to another equity account such as share capital, securities premium account and/or general reserve as recommended in the subsequent paragraphs of this Guidance Note.

11. If the shares or stock options granted vest immediately, the employee is not required to complete a specified period of service before becoming unconditionally entitled to those instruments. In the absence of evidence to the contrary, the enterprise should presume that services rendered by the employee as consideration for the instruments have been received. In this case, on the grant date, the enterprise should recognise services received in full with a corresponding credit to the equity account.

12. If the shares or stock options granted do not vest until the employee completes a specified period of service, the enterprise should presume that the services to be rendered by the employee as consideration for those instruments will be received in the future, during the vesting period. The enterprise should account for those services as they are rendered by the employee during the vesting period, on a time proportion basis, with a corresponding credit to the equity account.

#### *Determination of vesting period*

13. A grant of shares or stock options to an employee is typically conditional on the employee remaining in the employment of the enterprise for a specified period of time. Thus, if an employee is granted stock options conditional upon completing three years' service, then the enterprise should presume that the services to be rendered by the employee as consideration for the stock options will be received in the future, over that three-year vesting period.

14. There might be performance conditions that must be satisfied, such as the enterprise achieving a specified growth in profit or a specified increase in the share price of the enterprise. Thus, if an employee is granted stock options conditional upon the achievement of a performance condition and remaining in the employment of the enterprise until that performance condition is satisfied, and the length of the vesting period varies depending on when that performance condition is satisfied, the enterprise should presume that the services to be rendered by the employee as consideration for the stock options will be received in the future, over the expected vesting period. The enterprise should estimate the length of the expected vesting period at grant date, based on the most likely outcome of the performance

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condition. If the performance condition is a market condition, the estimate of the length of the expected vesting period should be consistent with the assumptions used in estimating the fair value of the options granted, and should not be subsequently revised. If the performance condition is not a market condition, the enterprise should revise its estimate of the length of the vesting period, if necessary, if subsequent information indicates that the length of the vesting period differs from previous estimates.

## **Measurement**

15. Typically, shares (under ESPPs) or stock options (under ESOPs) are granted to employees as part of their remuneration package, in addition to a cash salary and other employment benefits. Usually, it is not possible to measure directly the services received for particular components of the employee's remuneration package. It might also not be possible to measure the fair value of the total remuneration package independently, without measuring directly the fair value of the shares or stock options granted. Furthermore, shares or stock options are sometimes granted as part of a bonus arrangement, rather than as a part of basic pay, e.g., as an incentive to the employees to remain in the employment of the enterprise or to reward them for their efforts in improving the performance of the enterprise. By granting shares or stock options, in addition to other remuneration, the enterprise is paying additional remuneration to obtain additional benefits. Estimating the fair value of those additional benefits is likely to be difficult. Because of the difficulty of measuring directly the fair value of the services received, the enterprise should measure the fair value of the employee services received by reference to the fair value of the shares or stock options granted.

### *Determining the fair value of shares or stock options granted*

16. An enterprise should measure the fair value of shares or stock options granted at the grant date, based on market prices if available, taking into account the terms and conditions upon which those shares or stock options were granted (subject to the requirements of paragraphs 18 to 21). If market prices are not available, the enterprise should estimate the fair value of the instruments granted using a valuation technique to estimate what the price of those instruments would have been on the grant date in an arm's length transaction between knowledgeable, willing parties. The valuation technique should be consistent with generally accepted valuation methodologies for pricing financial instruments (e.g., use of an option pricing

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model for valuing stock options) and should incorporate all factors and assumptions that knowledgeable, willing market participants would consider in setting the price (subject to the requirements of paragraphs 18 to 21).

17. Appendix I contains further guidance on the measurement of the fair value of shares and stock options, focusing on the specific terms and conditions that are common features of a grant of shares or stock options to employees.

### *Treatment of vesting conditions*

18. Vesting conditions, other than market conditions, should not be taken into account when estimating the fair value of the shares or stock options at the grant date. Instead, vesting conditions should be taken into account by adjusting the number of shares or stock options included in the measurement of the transaction amount so that, ultimately, the amount recognised for employee services received as consideration for the shares or stock options granted is based on the number of shares or stock options that eventually vest. Hence, on a cumulative basis, no amount is recognised for employee services received if the shares or stock options granted do not vest because of failure to satisfy a vesting condition (i.e., these are forfeited<sup>2</sup>), e.g., the employee fails to complete a specified service period, or a performance condition is not satisfied, subject to the requirements of paragraph 20.

19. To apply the requirements of paragraph 18, the enterprise should recognise an amount for the employee services received during the vesting period based on the best available estimate of the number of shares or stock options expected to vest and should revise that estimate, if necessary, if subsequent information indicates that the number of shares or stock options expected to vest differs from previous estimates. On vesting date, the enterprise should revise the estimate to equal the number of shares or stock options that ultimately vest, subject to the requirements of paragraph 20.

20. Market conditions, such as a target share price upon which vesting (or exercisability) is conditioned, should be taken into account when estimating the fair value of the shares or stock options granted. Therefore, for grants of shares or stock options with market conditions, the enterprise should recognise the services received from an employee who satisfies all

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<sup>2</sup> The term 'forfeiture' is used to refer only to an employee's failure to earn a vested right to obtain shares or stock options because the specified vesting conditions are not satisfied.

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other vesting conditions (e.g., services received from an employee who remains in service for the specified period of service), irrespective of the fact whether that market condition is satisfied.

### *Treatment of a reload feature*

21. For options with a reload feature, the reload feature should not be taken into account when estimating the fair value of options granted at the grant date. Instead, a reload option should be accounted for as a new option grant, if and when a reload option is subsequently granted.

### **After vesting date**

22. On exercise of the right to obtain shares or stock options, the enterprise issues shares on receipt of the exercise price. The shares so issued should be considered to have been issued at the consideration comprising the exercise price and the corresponding amount standing to the credit of the relevant equity account (e.g., Stock Options Outstanding Account). In a situation where the right to obtain shares or stock option expires unexercised, the balance standing to the credit of the relevant equity account should be transferred to general reserve.

Appendix II contains various illustrations of the accounting for equity-settled employee share-based payment plans that do not involve modifications to the terms and conditions of the grants.

### **Modifications to the terms and conditions on which shares or stock options were granted, including cancellations and settlements**

23. An enterprise might modify the terms and conditions on which the shares or stock options were granted. For example, it might reduce the exercise price of options granted to employees (i.e., reprice the options), which increases the fair value of those options.

24. The enterprise should recognise, as a minimum, the services received measured at the grant date fair value of the shares or stock options granted, unless those shares or stock options do not vest because of failure to satisfy a vesting condition (other than a market condition) that was specified at grant date. This applies irrespective of (a) any modifications to the terms and conditions on which the shares or stock options were granted, or (b) a cancellation or settlement of that grant of shares or stock options.

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In addition, the enterprise should recognise the effects of modifications that increase the total fair value of the employee share-based payment plan or are otherwise beneficial to the employee.

25. The requirements of paragraph 24 should be applied as follows:

- (a) If the modification increases the fair value of the shares or stock options granted (e.g., by reducing the exercise price), measured immediately before and after the modification, the enterprise should include the incremental fair value granted in the measurement of the amount recognised for services received as consideration for the shares or stock options granted. The incremental fair value granted is the difference between the fair value of the modified shares or stock options and that of the original shares or stock options, both estimated as at the date of the modification. If the modification occurs during the vesting period, the incremental fair value granted is included in the measurement of the amount recognised for services received over the period from the modification date until the date when the modified shares or stock options vest, in addition to the amount based on the grant date fair value of the original shares or stock options, which is recognised over the remainder of the original vesting period. If the modification occurs after the vesting date, the incremental fair value granted is recognised immediately, or over the vesting period if the employee is required to complete an additional period of service before becoming unconditionally entitled to those modified shares or stock options.
- (b) Similarly, if the modification increases the number of shares or stock options granted, the enterprise should include the fair value of the additional shares or stock options granted, measured at the date of the modification, in the measurement of the amount recognised for services received as consideration for the shares or stock options granted, consistent with the requirements in (a) above. For example, if the modification occurs during the vesting period, the fair value of the additional shares or stock options granted is included in the measurement of the amount recognised for services received over the period from the modification date until the date when the additional shares or stock options vest, in addition to the amount based on the grant date fair value

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of the shares or stock options originally granted, which is recognised over the remainder of the original vesting period.

- (c) If the enterprise modifies the vesting conditions in a manner that is beneficial to the employee, for example, by reducing the vesting period or by modifying or eliminating a performance condition (other than a market condition, changes to which are accounted for in accordance with (a) above), the enterprise should take the modified vesting conditions into account when applying the requirements of paragraphs 18 to 20.

26. Furthermore, to apply the requirements of paragraph 24, if the enterprise modifies the terms or conditions of the shares or stock options granted in a manner that reduces the total fair value of the employee share-based payment plan, or is not otherwise beneficial to the employee, the enterprise should nevertheless continue to account for the services received as consideration for the shares or stock options granted as if that modification had not occurred (other than a cancellation of some or all the shares or stock options granted, which should be accounted for in accordance with paragraph 27). For example:

- (a) if the modification reduces the fair value of the shares or stock options granted, measured immediately before and after the modification, the enterprise should not take into account that decrease in fair value and should continue to measure the amount recognised for services received as consideration for the shares or stock options based on the grant date fair value of the shares or stock options granted.
- (b) if the modification reduces the number of shares or stock options granted to an employee, that reduction should be accounted for as a cancellation of that portion of the grant, in accordance with the requirements of paragraph 27.
- (c) if the enterprise modifies the vesting conditions in a manner that is not beneficial to the employee, for example, by increasing the vesting period or by modifying or adding a performance condition (other than a market condition, changes to which are accounted for in accordance with (a) above), the enterprise should not take the modified vesting conditions into account when applying the requirements of paragraphs 18 to 20.

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27. If the enterprise cancels or settles a grant of shares or stock options during the vesting period (other than a grant cancelled by forfeiture when the vesting conditions are not satisfied):

- (a) the enterprise should account for the cancellation or settlement as an acceleration of vesting, and should therefore recognise immediately the amount that otherwise would have been recognised for services received over the remaining vesting period.
- (b) any payment made to the employee on the cancellation or settlement of the grant should be deducted from the relevant equity account (e.g., Stock Options Outstanding Account) except to the extent that the payment exceeds the fair value of the shares or stock options granted, measured at the cancellation/settlement date. Any such excess should be recognised as an expense.
- (c) if new shares or stock options are granted to the employee as replacement for the cancelled shares or stock options, the enterprise should account for the granting of replacement shares or stock options in the same way as a modification of the original grant of shares or stock options, in accordance with paragraphs 24 to 26. For the purposes of the aforesaid paragraphs, the incremental fair value granted is the difference between the fair value of the replacement shares or stock options and the net fair value of the cancelled shares or stock options, at the date the replacement shares or stock options are granted. The net fair value of the cancelled shares or stock options is their fair value, immediately before the cancellation, less the amount of any payment made to the employee on cancellation of the shares or stock options that is deducted from the relevant equity account in accordance with (b) above.

28. If an enterprise settles in cash vested shares or stock options, the payment made to the employee should be accounted for as a deduction from the relevant equity account (e.g., Stock Options Outstanding Account) except to the extent that the payment exceeds the fair value of the shares or stock options, measured at the settlement date. Any such excess should be recognised as an expense.

Appendix III contains illustrations on modifications to the terms and conditions on which stock options were granted.

## **Cash-settled Employee Share-based Payment Plans**

29. An enterprise might grant rights such as stock appreciation rights to employees as part of their remuneration package, whereby the employees will become entitled to a future cash payment (rather than shares), based on the increase in the share price of the enterprise from a specified level over a specified period of time. Or an enterprise might grant to its employees a right to receive a future cash payment by granting to them a right to shares (including shares to be issued upon the exercise of stock options) that are redeemable, either mandatorily (e.g., upon cessation of employment) or at the option of the employee.

### **Recognition**

30. An enterprise should recognise as an expense (except where service received qualifies to be included as a part of the cost of an asset) the services received in a cash-settled employee share-based payment plan when it receives the services with a corresponding increase in liability by creating a provision therefor.

31. The enterprise should recognise the services received, and the liability to pay for those services, as the employees render service. For example, some stock appreciation rights vest immediately, and the employees are therefore not required to complete a specified period of service to become entitled to the cash payment. In the absence of evidence to the contrary, the enterprise should presume that the services rendered by the employees in exchange for the stock appreciation rights have been received. Thus, the enterprise should recognise immediately the services received and a liability to pay for them. If the stock appreciation rights do not vest until the employees have completed a specified period of service, the enterprise should recognise the services received, and a liability to pay for them, as the employees render service during that period.

### **Measurement**

32. For cash-settled employee share-based payment plan, the enterprise should measure the services received and the liability incurred at the fair value of the liability. Until the liability is settled, the enterprise should



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remeasure the fair value of the liability at each reporting date and at the date of the settlement, with any changes in fair value recognised in profit or loss for the period.

33. The liability should be measured, initially and at each reporting date until settled, at the fair value of the stock appreciation rights, by applying an option pricing model taking into account the terms and conditions on which the stock appreciation rights were granted, and the extent to which the employees have rendered service to date.

Appendix IV contains an illustration of a cash-settled employee share-based payment plan.

## **Employee Share-based Payment Plans with Cash Alternatives**

### **Employee share-based payment plans in which the terms of the arrangement provide the employee with a choice of settlement**

34. If an enterprise has granted the employees the right to choose whether a share-based payment plan is settled in cash or by issuing shares, the plan has two components, viz., (i) liability component, i.e., the employees' right to demand settlement in cash, and (ii) equity component, i.e., the employees' right to demand settlement in shares rather than in cash. The enterprise should first measure, on the grant date, fair value of the employee share-based payment plan presuming that all employees will exercise their option in favour of cash settlement. The fair value so arrived at should be considered as the fair value of the liability component. The enterprise should also measure the fair value of the employee share-based payment plan presuming that all employees will exercise their option in favour of equity settlement. In case the fair value under equity- settlement is greater than the fair value under cash- settlement, the excess should be considered as the fair value of the equity component. Otherwise, the fair value of the equity component should be considered as zero. The fair value of the equity component should be accounted for in accordance with the recommendations in respect of 'Equity-settled employee share-based payment plan'. The fair value of the liability component should be accounted for in accordance with the recommendations in respect of 'Cash-settled employee share-based payment plan'.

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35. At the date of settlement, the enterprise should remeasure the liability to its fair value. If the enterprise issues shares on settlement rather than paying cash, the amount of liability should be treated as the consideration for the shares issued.

36. If the enterprise pays in cash on settlement rather than issuing shares, that payment should be applied to settle the liability in full. By electing to receive cash on settlement, the employees forgo their right to receive shares. The enterprise should transfer any balance in the relevant equity account (e.g., Stock Options Outstanding Account) to general reserve.

Appendix V contains an illustration of an employee share-based payment plan with cash alternatives.

### **Employee share-based payment plans in which the terms of the arrangement provide the enterprise with a choice of settlement**

37. For an employee share-based payment plan in which the terms of the arrangement provide the enterprise with the choice of whether to settle in cash or by issuing shares, the enterprise should determine whether it has a present obligation to settle in cash and account for the share-based payment plan accordingly. The enterprise has a present obligation to settle in cash if the choice of settlement in shares has no commercial substance (e.g., because the enterprise is legally prohibited from issuing shares), or the enterprise has a past practice or a stated policy of settling in cash, or generally settles in cash whenever the employee asks for cash settlement.

38. If the enterprise has a present obligation to settle in cash, it should account for the transaction in accordance with the requirements in respect of 'Cash-settled employee share-based payment plan'.

39. If no such obligation exists, the enterprise should account for the transaction in accordance with the requirements in respect of 'Equity-settled employee share-based payment plan'. Upon settlement:

- (a) If the enterprise elects to settle in cash, the cash payment should be accounted for as a deduction from the relevant equity account (e.g., Stock Options Outstanding Account) except as noted in (c) below.

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- (b) If the enterprise elects to settle by issuing shares, the balance in the relevant equity account should be treated as consideration for the shares issued except as noted in (c) below.
- (c) If the enterprise elects the settlement alternative with the higher fair value (e.g., the enterprise elects to settle in cash the amount of which is more than the fair value of the shares had the enterprise elected to settle in shares), as at the date of settlement, the enterprise should recognise an additional expense for the excess value given, i.e., the difference between the cash paid and the fair value of the shares that would otherwise have been issued, or the difference between the fair value of the shares issued and the amount of cash that would otherwise have been paid, whichever is applicable.

## **Intrinsic Value Method**

40. Accounting for employee share-based payment plans dealt with hereto before is based on the fair value method. There is another method known as the 'Intrinsic Value Method' for valuation of employee share-based payment plans. Intrinsic value, in the case of a listed company, is the amount by which the quoted market price of the underlying share exceeds the exercise price of an option. For example, an option with an exercise price of Rs. 100 on an equity share whose current quoted market price is Rs. 125, has an intrinsic value of Rs. 25 per share on the date of its valuation. If the quoted market price is not available on the grant date then the share price nearest to that date is taken. In the case of a non-listed company, since the shares are not quoted on a stock exchange, value of its shares is determined on the basis of a valuation report from an independent valuer. For accounting for employee share-based payment plans, the intrinsic value may be used, *mutatis mutandis*, in place of the fair value as described in paragraphs 10 to 39.

Examples of equity-settled employee share-based payment plan and cash-settled employee share-based payment plan, using intrinsic value method, are given in Illustration 1 of Appendix II and the Illustration in Appendix IV, respectively.

## **Recommendation**

41. It is recommended that accounting for employee share-based payment plans should be based on the fair value approach as described in paragraphs 10 to 39. However, intrinsic value method as described in paragraph 40 is also permitted.

## **Graded Vesting**

42. In case the options/shares granted under an employee stock option plan do not vest on one date but have graded vesting schedule, total plan should be segregated into different groups, depending upon the vesting dates. Each of such groups would be having different vesting period and expected life and, therefore, each vesting date should be considered as a separate option grant and evaluated and accounted for accordingly. For example, suppose an employee is granted 100 options which will vest @ 25 options per year at the end of the third, fourth, fifth and sixth years. In such a case, each tranche of 25 options would be evaluated and accounted for separately.

42A. As an alternative to the accounting treatment specified in paragraph 42, in case the options/shares are granted under graded vesting plan with only service conditions, an enterprise has an option to recognise the share-based compensation cost on a straight-line basis over the requisite service period for the entire award (i.e., over the requisite service period of the last separately vesting portion of the award). However, the amount of compensation cost recognised at any date must at least equal the portion of the grant-date value of the award that is vested at that date.

42B. An enterprise should make a policy decision as to whether to follow the accounting treatment specified in paragraph 42 or paragraphs 42A.

An illustration of an employee share-based payment plan having graded vesting is given in Appendix VI.

## **Employee Share-based Payment Plan Administered through a Trust**

43. An enterprise may administer an employee share-based payment

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plan through a trust constituted for this purpose. The trust may have different kinds of arrangements, for example, the following:

- (a) The enterprise allots shares to the trust as and when the employees exercise stock options.
- (b) The enterprise provides finance to the trust for subscription to the shares issued by the enterprise at the beginning of the plan.
- (c) The enterprise provides finance to the trust to purchase shares from the market at the beginning of the plan.

44. Since the trust administers the plan on behalf of the enterprise, it is recommended that irrespective of the arrangement for issuance of the shares under the employee share-based payment plan, the enterprise should recognise in its separate financial statements the expense on account of services received from the employees in accordance with the recommendations contained in this Guidance Note. Various aspects of accounting for employee share-based payment plan administered through a trust under the arrangements mentioned above, are illustrated in Appendix VII, for the purpose of preparation of separate financial statements.

45. For the purpose of preparation of consolidated financial statements as per Accounting Standard (AS) 21, 'Consolidated Financial Statements', issued by the Institute of Chartered Accountants of India, the trust created for the purpose of administering employee share-based compensation, should not be considered. This is because the standard requires consolidation of only those controlled enterprises which provide economic benefits to the enterprise and, accordingly, consolidation of entities, such as, gratuity trust, provident fund trust, etc., is not required. The nature of a trust established for administering employee share-based compensation plan is similar to that of a gratuity trust or a provident fund trust as it does not provide any economic benefit to the enterprise in the form of, say, any return on investment.

## **Earnings Per Share Implications**

46. For the purpose of calculating Basic Earnings Per Share as per Accounting Standard (AS) 20, 'Earnings Per Share', shares or stock options granted pursuant to an employee share-based payment plan, including shares or options issued to an ESOP trust, should not be included in the shares outstanding till the employees have exercised their right to obtain

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shares or stock options, after fulfilling the requisite vesting conditions. Till such time, shares or stock options so granted should be considered as dilutive potential equity shares for the purpose of calculating Diluted Earnings Per Share. Diluted Earnings Per Share should be based on the actual number of shares or stock options granted and not yet forfeited, unless doing so would be anti-dilutive.

47. For computations required under paragraph 35 of AS 20 with regard to shares or stock options granted pursuant to an employee share-based payment plan, the assumed proceeds from the issues should include the exercise price and the unamortised compensation cost which is attributable to future services.

An example to illustrate computation of Earnings Per Share in a situation where the enterprise has granted stock options to its employees is given in Appendix VIII.

## **Disclosures**

48. An enterprise should describe the method used to account for the employee share-based payment plans. Where an enterprise uses the intrinsic value method, it should also disclose the impact on the net results and EPS – both basic and diluted – for the accounting period, had the fair value method been used.

49. An enterprise should disclose information that enables users of the financial statements to understand the nature and extent of employee share-based payment plans that existed during the period.

50. To give effect to the principle in paragraph 49, the enterprise should disclose at least the following:

- (a) a description of each type of employee share-based payment plan that existed at any time during the period, including the general terms and conditions of each plan, such as vesting requirements, the maximum term of options granted, and the method of settlement (e.g., whether in cash or equity). An enterprise with substantially similar types of plans may aggregate this information, unless separate disclosure of each arrangement is necessary to satisfy the principle in paragraph 49.

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- (b) the number and weighted average exercise prices of stock options for each of the following groups of options:
  - (i) outstanding at the beginning of the period;
  - (ii) granted during the period;
  - (iii) forfeited during the period;
  - (iv) exercised during the period;
  - (v) expired during the period;
  - (vi) outstanding at the end of the period; and
  - (vii) exercisable at the end of the period.
- (c) for stock options exercised during the period, the weighted average share price at the date of exercise. If options were exercised on a regular basis throughout the period, the enterprise may instead disclose the weighted average share price during the period.
- (d) for stock options outstanding at the end of the period, the range of exercise prices and weighted average remaining contractual life (comprising the vesting period and the exercise period). If the range of exercise prices is wide, the outstanding options should be divided into ranges that are meaningful for assessing the number and timing of additional shares that may be issued and the cash that may be received upon exercise of those options.

51. An enterprise should disclose the following information to enable users of the financial statements to understand how the fair value of shares or stock options granted, during the period, was determined:

- (a) for stock options granted during the period, the weighted average fair value of those options at the grant date and information on how that fair value was measured, including:
  - (i) the option pricing model used and the inputs to that model, including the weighted average share price, exercise price, expected volatility, option life (comprising the vesting period and the exercise period), expected dividends, the risk-free interest rate and any other inputs to the model, including the method used and the assumptions made to incorporate the effects of expected early exercise;

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- (ii) how expected volatility was determined, including an explanation of the extent to which expected volatility was based on historical volatility; and
  - (iii) whether and how any other features of the option grant were incorporated into the measurement of fair value, such as a market condition.
- (b) for other instruments granted during the period (i.e., other than stock options), the number and weighted average fair value of those instruments at the grant date, and information on how that fair value was measured, including:
- (i) if fair value was not measured on the basis of an observable market price, how it was determined;
  - (ii) whether and how expected dividends were incorporated into the measurement of fair value; and
  - (iii) whether and how any other features of the instruments granted were incorporated into the measurement of fair value.
- (c) for employee share-based payment plans that were modified during the period:
- (i) an explanation of those modifications;
  - (ii) the incremental fair value granted (as a result of those modifications); and
  - (iii) information on how the incremental fair value granted was measured, consistently with the requirements set out in (a) and (b) above, where applicable.

52. An enterprise should disclose the following information to enable users of the financial statements to understand the effect of employee share-based payment plans on the profit or loss of the enterprise for the period and on its financial position:

- (a) the total expense recognised for the period arising from employee share-based payment plans in which the services received did not qualify for recognition as a part of the cost of



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an asset and hence were recognised immediately as an expense, including separate disclosure of that portion of the total expense that arises from transactions accounted for as equity-settled employee share-based payment plans;

- (b) for liabilities arising from employee share-based payment plans:
  - (i) the total carrying amount at the end of the period; and
  - (ii) the total intrinsic value at the end of the period of liabilities for which the right of the employee to cash or other assets had vested by the end of the period (e.g., vested stock appreciation rights).

Appendix IX contains illustrative disclosures.

## **Effective Date**

53. This Guidance Note applies to employee share-based payment plans the grant date in respect of which falls on or after April 1, 2005.

## **Appendix I**

# **Estimating the Fair Value of Shares or Stock Options Granted**

1. The appendix discusses measurement of the fair value of shares and stock options granted, focusing on the specific terms and conditions that are common features of a grant of shares or stock options to employees. Therefore, it is not exhaustive.

### **Shares**

2. The fair value of the shares granted should be measured at the market price of the shares of the enterprise (or an estimated value based on the valuation report of an independent valuer, if the shares of the enterprise are not publicly traded), adjusted to take into account the terms and conditions upon which the shares were granted (except for vesting conditions that are excluded from the measurement of fair value in accordance with paragraphs 18 to 20 of the text of the Guidance Note).

3. For example, if the employee is not entitled to receive dividends during the vesting period, this factor should be taken into account when estimating the fair value of the shares granted. Similarly, if the shares are subject to restrictions on transfer after vesting date, that factor should be taken into account, but only to the extent that the post-vesting restrictions affect the price that a knowledgeable, willing market participant would pay for that share. For example, if the shares are actively traded in a deep and liquid market, post-vesting transfer restrictions may have little, if any, effect on the price that a knowledgeable, willing market participant would pay for those shares. Restrictions on transfer or other restrictions that exist during the vesting period should not be taken into account when estimating the grant date fair value of the shares granted, because those restrictions stem from the existence of vesting conditions, which are accounted for in accordance with paragraphs 18 to 20 of the text of the Guidance Note.

### **Stock Options**

4. For stock options granted to employees, in many cases market prices are not available, because the options granted are subject to terms and

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conditions that do not apply to traded options. If traded options with similar terms and conditions do not exist, the fair value of the options granted should be estimated by applying an option pricing model.

5. The enterprise should consider factors that knowledgeable, willing market participants would consider in selecting the option pricing model to apply. For example, many employee options have long lives, are usually exercisable during the period between vesting date and the end of the life of the option, and are often exercised early. These factors should be considered when estimating the grant date fair value of the options. For many enterprises, this might preclude the use of the Black-Scholes-Merton formula, which does not allow for the possibility of exercise before the end of the option's life (comprising the vesting period and the exercise period) and may not adequately reflect the effects of expected early exercise. It also does not allow for the possibility that expected volatility and other model inputs might vary over the option's life. However, for stock options with relatively short contractual lives (comprising the vesting period and the exercise period), or that must be exercised within a short period of time after vesting date, the factors identified above may not apply. In these instances, the Black-Scholes-Merton formula may produce a value that is substantially the same as a more flexible option pricing model.

6. All option pricing models take into account, as a minimum, the following factors:

- (a) the exercise price of the option;
- (b) the life of the option;
- (c) the current price of the underlying shares;
- (d) the expected volatility of the share price;
- (e) the dividends expected on the shares (if appropriate); and
- (f) the risk-free interest rate for the life of the option.

7. Other factors that knowledgeable, willing market participants would consider in setting the price should also be taken into account (except for vesting conditions and reload features that are excluded from the measurement of fair value in accordance with paragraphs 18 to 21 of the text of the Guidance Note).

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8. For example, a stock option granted to an employee typically cannot be exercised during specified periods (e.g., during the vesting period or during periods specified, if any, by securities regulators). This factor should be taken into account if the option pricing model applied would otherwise assume that the option could be exercised at any time during its life. However, if an enterprise uses an option pricing model that values options that can be exercised only at the end of the options' life, no adjustment is required for the inability to exercise them during the vesting period (or other periods during the options' life), because the model assumes that the options cannot be exercised during those periods.

9. Similarly, another factor common to employee stock options is the possibility of early exercise of the option, for example, because the option is not freely transferable, or because the employee must exercise all vested options upon cessation of employment. The effects of expected early exercise should be taken into account, as discussed in paragraphs 16 to 21 of this Appendix.

10. Factors that a knowledgeable, willing market participant would not consider in setting the price of a stock option should not be taken into account when estimating the fair value of stock options granted. For example, for stock options granted to employees, factors that affect the value of the option from the perspective of the individual employee only are not relevant to estimating the price that would be set by a knowledgeable, willing market participant.

### **Inputs to option pricing models**

11. In estimating the expected volatility of and dividends on the underlying shares, the objective is to approximate the expectations that would be reflected in a current market or negotiated exchange price for the option. Similarly, when estimating the effects of early exercise of employee stock options, the objective is to approximate the expectations that an outside party with access to detailed information about employees' exercise behaviour would develop based on information available at the grant date.

12. Often, there is likely to be a range of reasonable expectations about future volatility, dividends and exercise behaviour. If so, an expected value should be calculated, by weighting each amount within the range by its associated probability of occurrence.

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13. Expectations about the future are generally based on experience, modified if the future is reasonably expected to differ from the past. In some circumstances, identifiable factors may indicate that unadjusted historical experience is a relatively poor predictor of future experience. For example, if an enterprise with two distinctly different lines of business disposes of the one that was significantly less risky than the other, historical volatility may not be the best information on which to base reasonable expectations for the future.

14. In other circumstances, historical information may not be available. For example, a newly listed enterprise will have little, if any, historical data on the volatility of its share price. Unlisted and newly listed enterprises are discussed further below.

15. In summary, an enterprise should not simply base estimates of volatility, exercise behaviour and dividends on historical information without considering the extent to which the past experience is expected to be reasonably predictive of future experience.

### **Expected early exercise**

16. Employees often exercise stock options early, for a variety of reasons. For example, employee stock options are typically non-transferable. This often causes employees to exercise their stock options early, because that is the only way for the employees to liquidate their position. Also, employees who cease employment are usually required to exercise any vested options within a short period of time, otherwise the stock options are forfeited. This factor also causes the early exercise of employee stock options. Other factors causing early exercise are risk aversion and lack of wealth diversification.

17. The means by which the effects of expected early exercise are taken into account depends upon the type of option pricing model applied. For example, expected early exercise could be taken into account by using an estimate of the expected life of the option (which, for an employee stock option, is the period of time from grant date to the date on which the option is expected to be exercised) as an input into an option pricing model (e.g., the Black-Scholes-Merton formula). Alternatively, expected early exercise could be modelled in a binomial or similar option pricing model that uses contractual life as an input.

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18. Factors to consider in estimating early exercise include:
- (a) the length of the vesting period, because the stock option typically cannot be exercised until the end of the vesting period. Hence, determining the valuation implications of expected early exercise is based on the assumption that the options will vest. The implications of vesting conditions are discussed in paragraphs 18 to 20 of the text of the Guidance Note.
  - (b) the average length of time similar options have remained outstanding in the past.
  - (c) the price of the underlying shares. Experience may indicate that the employees tend to exercise options when the share price reaches a specified level above the exercise price.
  - (d) the employee's level within the organisation. For example, experience might indicate that higher-level employees tend to exercise options later than lower-level employees (discussed further in paragraph 21 of this Appendix).
  - (e) expected volatility of the underlying shares. On average, employees might tend to exercise options on highly volatile shares earlier than on shares with low volatility.

19. As noted in paragraph 17 of this Appendix, the effects of early exercise could be taken into account by using an estimate of the option's expected life as an input into an option pricing model. When estimating the expected life of stock options granted to a group of employees, the enterprise could base that estimate on an appropriately weighted average expected life for the entire employee group or on appropriately weighted average lives for subgroups of employees within the group, based on more detailed data about employees' exercise behaviour (discussed further below).

20. Separating an option grant into groups for employees with relatively homogeneous exercise behaviour is likely to be important. Option value is not a linear function of option term; value increases at a decreasing rate as the term lengthens. For example, if all other assumptions are equal, although a two-year option is worth more than a one-year option, it is not worth twice as much. That means that calculating estimated option value on the basis of a single weighted average life that includes widely differing

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individual lives would overstate the total fair value of the stock options granted. Separating options granted into several groups, each of which has a relatively narrow range of lives included in its weighted average life, reduces that overstatement.

21. Similar considerations apply when using a binomial or similar model. For example, the experience of an enterprise that grants options broadly to all levels of employees might indicate that top-level executives tend to hold their options longer than middle-management employees hold theirs and that lower-level employees tend to exercise their options earlier than any other group. In addition, employees who are encouraged or required to hold a minimum amount of their employer's shares or stock options, might on average exercise options later than employees not subject to that provision. In those situations, separating options by groups of recipients with relatively homogeneous exercise behaviour will result in a more accurate estimate of the total fair value of the stock options granted.

### **Expected volatility**

22. Expected volatility is a measure of the amount by which a price is expected to fluctuate during a period. The measure of volatility used in option pricing models is the annualised standard deviation of the continuously compounded rates of return on the share over a period of time. Volatility is typically expressed in annualised terms that are comparable regardless of the time period used in the calculation, for example, daily, weekly or monthly price observations.

23. The rate of return (which may be positive or negative) on a share for a period measures how much a shareholder has benefited from dividends and appreciation (or depreciation) of the share price.

24. The expected annualised volatility of a share is the range within which the continuously compounded annual rate of return is expected to fall approximately two-thirds of the time. For example, to say that a share with an expected continuously compounded rate of return of 12 per cent has a volatility of 30 per cent means that the probability that the rate of return on the share for one year will be between -18 per cent (12% - 30%) and 42 per cent (12% + 30%) is approximately two-thirds. If the share price is Rs.100 at the beginning of the year and no dividends are paid, the year-end share price would be expected to be between Rs. 83.53 (Rs.100 ×  $e^{-0.18}$ ) and Rs.152.20 (Rs. 100 ×  $e^{0.42}$ ) approximately two-thirds of the time.

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25. Factors to be considered in estimating expected volatility include:
- (a) Implied volatility from traded stock options on the shares of the enterprise, or other traded instruments of the enterprise that include option features (such as convertible debt), if any.
  - (b) The historical volatility of the share price over the most recent period that is generally commensurate with the expected term of the option (taking into account the remaining contractual life of the option and the effects of expected early exercise).
  - (c) The length of time shares of an enterprise have been publicly traded. A newly listed enterprise might have a high historical volatility, compared with similar enterprises that have been listed longer. Further guidance for newly listed enterprises is given in paragraph 26 of this Appendix.
  - (d) The tendency of volatility to revert to its mean, i.e., its long-term average level, and other factors indicating that expected future volatility might differ from past volatility. For example, if share price of an enterprise was extraordinarily volatile for some identifiable period of time because of a failed takeover bid or a major restructuring, that period could be disregarded in computing historical average annual volatility.
  - (e) Appropriate and regular intervals for price observations. The price observations should be consistent from period to period. For example, an enterprise might use the closing price for each week or the highest price for the week, but it should not use the closing price for some weeks and the highest price for other weeks.

#### *Newly listed enterprises*

26. As noted in paragraph 25 of this Appendix, an enterprise should consider historical volatility of the share price over the most recent period that is generally commensurate with the expected option term. If a newly listed enterprise does not have sufficient information on historical volatility, it should nevertheless compute historical volatility for the longest period for which trading activity is available. It could also consider the historical volatility of similar enterprises following a comparable period in their lives. For example, an enterprise that has been listed for only one year and grants options with an average expected life of five years might consider the



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pattern and level of historical volatility of enterprises in the same industry for the first six years in which the shares of those enterprises were publicly traded.

### *Unlisted enterprises*

27. An unlisted enterprise will not have historical information upon which to base an estimate of expected volatility. It will therefore have to estimate expected volatility by some other means. The enterprise could consider the historical volatility of similar listed enterprises, for which share price or option price information is available, to use as the basis for an estimate of expected volatility. Alternatively, volatility of unlisted enterprises can be taken as zero.

### **Expected dividends**

28. Whether expected dividends should be taken into account when measuring the fair value of shares or stock options granted depends on whether the employees are entitled to dividends or dividend equivalents. For example, if employees were granted options and are entitled to dividends on the underlying shares or dividend equivalents (which might be paid in cash or applied to reduce the exercise price) between grant date and exercise date, the options granted should be valued as if no dividends will be paid on the underlying shares, i.e., the input for expected dividends should be zero. Similarly, when the grant date fair value of shares granted to employees is estimated, no adjustment is required for expected dividends if the employees are entitled to receive dividends paid during the vesting period.

29. Conversely, if the employees are not entitled to dividends or dividend equivalents during the vesting period (or before exercise, in the case of an option), the grant date valuation of the rights to shares or options should take expected dividends into account. That is to say, when the fair value of an option grant is estimated, expected dividends should be included in the application of an option pricing model. When the fair value of a share grant is estimated, that valuation should be reduced by the present value of dividends expected to be paid during the vesting period.

30. Option pricing models generally call for expected dividend yield. However, the models may be modified to use an expected dividend amount rather than a yield. An enterprise may use either its expected yield or its expected payments. If the enterprise uses the latter, it should consider its historical pattern of increases in dividends. For example, if policy of an

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enterprise has generally been to increase dividends by approximately 3 per cent per year, its estimated option value should not assume a fixed dividend amount throughout the option's life unless there is evidence that supports that assumption.

31. Generally, the assumption about expected dividends should be based on publicly available information. An enterprise that does not pay dividends and has no plans to do so should assume an expected dividend yield of zero. However, an emerging enterprise with no history of paying dividends might expect to begin paying dividends during the expected lives of its employee stock options. Those enterprises could use an average of their past dividend yield (zero) and the mean dividend yield of an appropriately comparable peer group.

### **Risk-free interest rate**

32. Typically, the risk-free interest rate is the implied yield currently available on zero-coupon government issues, with a remaining term equal to the expected term of the option being valued (based on the option's remaining contractual life and taking into account the effects of expected early exercise). It may be necessary to use an appropriate substitute, if no such government issues exist or circumstances indicate that the implied yield on zero-coupon government issues is not representative of the risk-free interest rate. Also, an appropriate substitute should be used if market participants would typically determine the risk-free interest rate by using that substitute, rather than the implied yield of zero-coupon government issues, when estimating the fair value of an option with a life equal to the expected term of the option being valued.

### **Capital structure effects**

33. Typically, third parties, not the enterprise, write traded stock options. When these stock options are exercised, the writer delivers shares to the option holder. Those shares are acquired from existing shareholders. Hence the exercise of traded stock options has no dilutive effect.

34. In contrast, if stock options are written by the enterprise, new shares are issued when those stock options are exercised. Given that the shares will be issued at the exercise price rather than the current market price at the date of exercise, this actual or potential dilution might reduce the share price, so that the option holder does not make as large a gain on exercise

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as on exercising an otherwise similar traded option that does not dilute the share price.

35. Whether this has a significant effect on the value of the stock options granted depends on various factors, such as the number of new shares that will be issued on exercise of the options compared with the number of shares already issued. Also, if the market already expects that the option grant will take place, the market may have already factored the potential dilution into the share price at the date of grant.

36. However, the enterprise should consider whether the possible dilutive effect of the future exercise of the stock options granted might have an impact on their estimated fair value at grant date. Option pricing models can be adapted to take into account this potential dilutive effect.

## Appendix II

# Equity-settled Employee Share-based Payment Plans

## Illustration 1 : Stock Options with Service Condition only

### (A) Accounting during the vesting period

At the beginning of year 1, an enterprise grants 300 options to each of its 1,000 employees. The contractual life (comprising the vesting period and the exercise period) of options granted is 6 years. The other relevant terms of the grant are as below:

Vesting Period	3 years
Exercise Period	3 years
Expected Life	5 years
Exercise Price	Rs. 50
Market Price	Rs. 50
Expected forfeitures per year	3%

The fair value of options, calculated using an option pricing model, is Rs. 15 per option. Actual forfeitures, during the year 1, are 5 per cent and at the end of year 1, the enterprise still expects that actual forfeitures would average 3 per cent per year over the 3-year vesting period. During the year 2, however, the management decides that the rate of forfeitures is likely to continue to increase, and the expected forfeiture rate for the entire award is changed to 6 per cent per year. It is also assumed that 840 employees have actually completed 3 years vesting period.

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***Suggested Accounting Treatment***

Year 1

1. At the grant date, the enterprise estimates the fair value of the options expected to vest at the end of the vesting period as below:

$$\begin{aligned} &\text{No. of options expected to vest} \\ &= 300 \times 1,000 \times 0.97 \times 0.97 \times 0.97 = 2,73,802 \text{ options} \end{aligned}$$

$$\begin{aligned} &\text{Fair value of options expected to vest} \\ &= 2,73,802 \text{ options} \times \text{Rs. } 15 = \text{Rs. } 41,07,030 \end{aligned}$$

2. At the balance sheet date, since the enterprise still expects actual forfeitures to average 3 per cent per year over the 3-year vesting period, no change is required in the estimates made at the grant date. The enterprise, therefore, recognises one-third of the amount estimated at (1) above (i.e., Rs. 41,07,030/3) towards the employee services received by passing the following entry:

Employee compensation expense A/c	Dr. Rs. 13,69,010	
	To Stock Options Outstanding A/c	Rs. 13,69,010

(Being compensation expense recognised in respect of the ESOP)

3. Credit balance in the 'Stock Options Outstanding A/c' may be disclosed in the balance sheet under a separate heading, between 'Share Capital' and 'Reserves and Surplus'.

Year 2

1. At the end of the financial year, management has changed its estimate of expected forfeiture rate from 3 per cent to 6 per cent per year. The revised number of options expected to vest is 2,49,175 (3,00,000 x .94 x .94). Accordingly, the fair value of revised options expected to vest is Rs. 37,37,625 (2,49,175 x Rs. 15). Consequent to the change in the expected forfeitures, the expense to be recognised during the year are determined as below:

Revised total fair value	Rs. 37,37,625
Revised cumulative expense at the end of year 2= (Rs. 37,37,625 x 2/3)	= Rs. 24,91,750

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Expense already recognised in year 1 = Rs. 13,69,010

Expense to be recognised in year 2 = Rs. 11,22,740

2. The enterprise recognises the amount determined at (1) above (i.e., Rs. 11,22,740) towards the employee services received by passing the following entry:

Employee compensation expense A/c	Dr. Rs. 11,22,740	
	To Stock Options Outstanding A/c	Rs. 11,22,740

(Being compensation expense recognised in respect of the ESOP)

3. Credit balance in the 'Stock Options Outstanding A/c' may be disclosed in the balance sheet under a separate heading, between 'Share Capital' and 'Reserves and Surplus'.

Year 3

1. At the end of the financial year, the enterprise would examine its actual forfeitures and make necessary adjustments, if any, to reflect expense for the number of options that actually vested. Considering that 840 employees have completed three years vesting period, the expense to be recognised during the year is determined as below:

No. of options actually vested = 840 x 300 = 2,52,000	
Fair value of options actually vested (Rs. 2,52,000 x Rs. 15) =	Rs. 37,80,000
Expense already recognised	<u>Rs. 24,91,750</u>
Expense to be recognised in year 3	<u>Rs. 12,88,250</u>

2. The enterprise recognises the amount determined at (1) above towards the employee services received by passing the following entry:

Employee compensation expense A/c	Dr. Rs. 12,88,250	
	To Stock Options Outstanding A/c	Rs. 12,88,250

(Being compensation expense recognised in respect of ESOP)

3. Credit balance in the 'Stock Options Outstanding A/c' may be disclosed in the balance sheet under a separate heading, between 'Share Capital' and 'Reserves and Surplus'.

## **(B) Accounting at the time of exercise/expiry of the vested options**

Continuing Illustration 1(A) above, the following further facts are provided:

- (a) 200 employees exercise their right to obtain shares vested in them in pursuance of the ESOP at the end of year 5 and 600 employees exercise their right at the end of year 6.
- (b) Rights of 40 employees expire unexercised at the end of the contractual life of the option, i.e., at the end of year 6.
- (c) Face value of one share of the enterprise is Rs. 10.

### *Suggested Accounting Treatment*

1. On exercise of the right to obtain shares, the enterprise issues shares to the respective employees on receipt of the exercise price. The shares so issued are considered to have been issued on a consideration comprising the exercise price and the corresponding amount standing to the credit of the Stock Options Outstanding Account. In the present case, the exercise price is Rs. 50 per share and the amount of compensation expense recognised in the 'Stock Options Outstanding A/c' is Rs. 15 per option. The enterprise, therefore, considers the shares to be issued at a price of Rs. 65 per share.

2. The amount to be recorded in the 'Share Capital A/c' and the 'Securities Premium A/c', upon issuance of the shares, is calculated as below:

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Particulars	Exercise Date	
	Year-end 5	Year-end 6
No. of employees exercising option	200	600
No. of shares issued on exercise @ 300 per employee	60,000	1,80,000
Exercise Price received @ Rs. 50 per share	30,00,000	90,00,000
Corresponding amount recognised in the 'Stock Options Outstanding A/c' @ Rs. 15 per option	9,00,000	27,00,000
<i>Total Consideration</i>	39,00,000	1,17,00,000
Amount to be recorded in 'Share Capital A/c' @ Rs. 10 per share	6,00,000	18,00,000
Amount to be recorded in 'Securities Premium A/c' @ Rs. 55 per share	33,00,000	99,00,000
<i>Total</i>	39,00,000	1,17,00,000

3. The enterprise passes the following entries at end of year 5 and year 6, respectively, to record the shares issued to the employees upon exercise of options vested in them in pursuance of the Employee Stock Option Plan:

Year 5 Bank A/c Dr. Rs. 30,00,000  
 Stock Options Outstanding A/c Dr. Rs. 9,00,000  
     To Share Capital A/c Rs. 6,00,000  
     To Securities Premium A/c Rs. 33,00,000

(Being shares issued to the employees against the options vested in them in pursuance of the Employee Stock Option Plan)

Year 6 Bank A/c Dr. Rs. 90,00,000  
 Stock Options Outstanding A/c Dr. Rs. 27,00,000  
     To Share Capital A/c Rs. 18,00,000  
     To Securities Premium A/c Rs. 99,00,000

(Being shares issued to the employees against the options vested in them in pursuance of the Employee Stock Option Plan)



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4. At the end of year 6, the balance of Rs. 1,80,000 (i.e., 40 employees x 300 options x Rs. 15 per option) standing to the credit of the Stock Options Outstanding Account, in respect of vested options expiring unexercised, is transferred to general reserve by passing the following entry:

Stock Options Outstanding A/c Dr.	Rs. 1,80,000	
To General Reserve		Rs. 1,80,000

(Being the balance standing to the credit of the Stock Options Outstanding Account, in respect of vested options expired unexercised, transferred to the general reserve)

### **(C) Intrinsic value method**

The accounting treatment suggested in Illustrations 1(A) and 1(B) above is based on the fair value method. In case the enterprise follows the intrinsic value method instead of the fair value method, it would not recognise any compensation expense since the market price of the underlying share at the grant date is the same as the exercise price and the intrinsic value of the options is nil. However, in case the market price of the underlying share at the grant date is more than the exercise price, say, Rs. 52 per share, then the difference of Rs. 2 between the market value and the exercise price would be the intrinsic value of the option. In such a case, the enterprise would treat the said intrinsic value as compensation expense over the vesting period on the lines of Illustrations 1(A) and 1(B) above.

### **Illustration 2: Grant with a Performance Condition, in which the Length of the Vesting Period varies**

At the beginning of year 1, the enterprise grants 100 stock options to each of its 500 employees, conditional upon the employees remaining in the employment of the enterprise during the vesting period. The options will vest at the end of year 1 if the earnings of the enterprise increase by more than 18 per cent; at the end of year 2 if the earnings of the enterprise increase by more than an average of 13 per cent per year over the two-year period; and at the end of year 3 if the earnings of the enterprise increase by more than an average of 10 per cent per year over the three-year period. The fair value of the options, calculated at the grant date using an option pricing model, is Rs. 30 per option. No dividends are expected to be paid over the three-year period.

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By the end of year 1, the earnings of the enterprise have increased by 14 per cent, and 30 employees have left. The enterprise expects that earnings will continue to increase at a similar rate in year 2, and, therefore, expects that the options will vest at the end of year 2. The enterprise expects, on the basis of a weighted average probability, that a further 30 employees will leave during year 2, and, therefore, expects that options will vest in 440 employees at the end of year 2.

By the end of year 2, the earnings of the enterprise have increased by only 10 per cent and, therefore, the options do not vest at the end of year 2. 28 employees have left during the year. The enterprise expects that a further 25 employees will leave during year 3, and that the earnings of the enterprise will increase by at least 6 per cent, thereby achieving the average of 10 per cent per year.

By the end of year 3, 23 employees have left and the earnings of the enterprise have increased by 8 per cent, resulting in an average increase of 10.67 per cent per year. Therefore, 419 employees received 100 shares each at the end of year 3.

### **Suggested Accounting Treatment**

1. In the given case, the length of the vesting period varies, depending on when the performance condition is satisfied. In such a situation, as per paragraph 14 of the text of the Guidance Note, the enterprise estimates the length of the expected vesting period, based on the most likely outcome of the performance condition, and revises that estimate, if necessary, if subsequent information indicates that the length of the vesting period is likely to differ from previous estimates.
2. The enterprise determines the compensation expense to be recognised each year as below:

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<b>Particulars</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>
Length of the expected vesting period (at the end of the year)	2 years	3 years	3 years
No. of employees expected to meet vesting conditions	440 employees	417 employees	419 employees
No. of options expected to vest	44,000	41,700	41,900
Fair value of options expected to vest @ Rs. 30 per option (Rs.)	13,20,000	12,51,000	12,57,000
Compensation expense accrued till the end of year (Rs.)	6,60,000 [13,20,000 /2]	8,34,000 (12,51,000 * 2/3)	12,57,000
Compensation expense recognised till the end of previous year (Rs.)	Nil	6,60,000	8,34,000
<b>Compensation expense to be recognised for the year (Rs.)</b>	<b>6,60,000</b>	<b>1,74,000</b>	<b>4,23,000</b>

### **Illustration 3 : Grant with a Performance Condition, in which the number of Stock Options varies**

At the beginning of year 1, an enterprise grants stock options to each of its 100 employees working in the sales department. The stock options will vest at the end of year 3, provided that the employees remain in the employment of the enterprise, and provided that the volume of sales of a particular product increases by at least an average of 5 per cent per year. If the volume of sales of the product increases by an average of between 5 per cent and 10 per cent per year, each employee will receive 100 stock options. If the volume of sales increases by an average of between 10 per cent and 15 per cent each year, each employee will receive 200 stock options. If the volume of sales increases by an average of 15 per cent or more, each employee will receive 300 stock options.

On the grant date, the enterprise estimates that the stock options have a fair value of Rs. 20 per option. The enterprise also estimates that the

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volume of sales of the product will increase by an average of between 10 per cent and 15 per cent per year, and therefore expects that, for each employee who remains in service until the end of year 3, 200 stock options will vest. The enterprise also estimates, on the basis of a weighted average probability, 20 per cent of employees will leave before the end of year 3.

By the end of year 1, seven employees have left and the enterprise still expects that a total of 20 employees will leave by the end of year 3. Hence, the enterprise expects that 80 employees will remain in service for the three-year period. Product sales have increased by 12 per cent and the enterprise expects this rate of increase to continue over the next 2 years.

By the end of year 2, a further five employees have left, bringing the total to 12 to date. The enterprise now expects that only three more employees will leave during year 3, and therefore expects that a total of 15 employees will have left during the three-year period, and hence 85 employees are expected to remain. Product sales have increased by 18 per cent, resulting in an average of 15 per cent over the two years to date. The enterprise now expects that sales increase will average 15 per cent or more over the three-year period, and hence expects each sales employee to receive 300 stock options at the end of year 3.

By the end of year 3, a further two employees have left. Hence, 14 employees have left during the three-year period, and 86 employees remain. The sales of the enterprise have increased by an average of 16 per cent over the three years. Therefore, each of the 86 employees receives 300 stock options.

### **Suggested Accounting Treatment**

Since the number of options varies depending on the outcome of a performance condition that is not a market condition, the effect of that condition (i.e., the possibility that the number of stock options might be 100, 200 or 300) is not taken into account when estimating the fair value of the stock options at grant date. Instead, the enterprise revises the transaction amount to reflect the outcome of that performance condition, as illustrated below.

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Year	Calculation	Compensation expense for period (Rs.)	Cumulative compensation expense (Rs.)
1	80 employees × 200 options × Rs. 20 × 1/3	1,06,667	1,06,667
2	(85 employees × 300 options × Rs. 20 × 2/3) – Rs. 1,06,667	2,33,333	3,40,000
3	(86 employees × 300 options × Rs. 20 × 3/3) – Rs. 3,40,000	1,76,000	5,16,000

#### **Illustration 4: Grant with a Performance Condition, in which the Exercise Price varies**

At the beginning of year 1, an enterprise grants 10,000 stock options to a senior executive, conditional upon the executive remaining in the employment of the enterprise until the end of year 3. The exercise price is Rs. 40. However, the exercise price drops to Rs. 30 if the earnings of the enterprise increase by at least an average of 10 per cent per year over the three-year period.

On the grant date, the enterprise estimates that the fair value of the stock options, with an exercise price of Rs. 30, is Rs. 16 per option. If the exercise price is Rs. 40, the enterprise estimates that the stock options have a fair value of Rs. 12 per option. During year 1, the earnings of the enterprise increased by 12 per cent, and the enterprise expects that earnings will continue to increase at this rate over the next two years. The enterprise, therefore, expects that the earnings target will be achieved, and hence the stock options will have an exercise price of Rs. 30. During year 2, the earnings of the enterprise increased by 13 per cent, and the enterprise continues to expect that the earnings target will be achieved.

During year 3, the earnings of the enterprise increased by only 3 per cent, and therefore the earnings target was not achieved. The executive completes three years' service, and therefore satisfies the service condition. Because the earnings target was not achieved, the 10,000 vested stock options have an exercise price of Rs. 40.

### **Suggested Accounting Treatment**

Because the exercise price varies depending on the outcome of a performance condition that is not a market condition, the effect of that performance condition (i.e. the possibility that the exercise price might be Rs. 40 and the possibility that the exercise price might be Rs. 30) is not taken into account when estimating the fair value of the stock options at the grant date. Instead, the enterprise estimates the fair value of the stock options at the grant date under each scenario (i.e. exercise price of Rs. 40 and exercise price of Rs. 30) and ultimately revises the transaction amount to reflect the outcome of that performance condition, as illustrated below:

<b>Year</b>	<b>Calculation</b>	<b>Compensation expense for period (Rs.)</b>	<b>Cumulative compensation expense (Rs.)</b>
1	10,000 options x Rs. 16 x 1/3	53,333	53,333
2	(10,000 options x Rs. 16 x 2/3) – Rs. 53,333	53,334	1,06,667
3	(10,000 options x Rs. 12 x 3/3) – Rs. 1,06,667	13,333	1,20,000

### **Illustration 5: Grant with a Market Condition**

At the beginning of year 1, an enterprise grants 10,000 stock options to a senior executive, conditional upon the executive remaining in the employment of the enterprise until the end of year 3. However, the stock options cannot be exercised unless the share price has increased from Rs. 50 at the beginning of year 1 to above Rs. 65 at the end of year 3. If the share price is above Rs. 65 at the end of year 3, the stock options can be exercised at any time during the next seven years, i.e. by the end of year 10.

The enterprise applies a binomial option pricing model, which takes into account the possibility that the share price will exceed Rs. 65 at the end of year 3 (and hence the stock options become exercisable) and the possibility that the share price will not exceed Rs. 65 at the end of year 3 (and hence the options will not become exercisable). It estimates the fair value of the stock options with this market condition to be Rs. 24 per option.

## Suggested Accounting Treatment

Because paragraph 20 of the text of the Guidance Note requires the enterprise to recognise the services received from an employee who satisfies all other vesting conditions (e.g., services received from an employee who remains in service for the specified service period), irrespective of whether that market condition is satisfied, it makes no difference whether the share price target is achieved. The possibility that the share price target might not be achieved has already been taken into account when estimating the fair value of the stock options at the grant date. Therefore, if the enterprise expects the executive to complete the three-year service period, and the executive does so, the enterprise recognises the following amounts in years 1, 2 and 3:

Year	Calculation	Compensation expense for period (Rs.)	Cumulative compensation expense (Rs.)
1	10,000 options × Rs. 24 × 1/3	80,000	80,000
2	(10,000 options × Rs. 24 × 2/3) – Rs. 80,000	80,000	1,60,000
3	(10,000 options × Rs. 24) – Rs. 1,60,000	80,000	2,40,000

As noted above, these amounts are recognised irrespective of the outcome of the market condition. However, if the executive left during year 2 (or year 3), the amount recognised during year 1 (and year 2) would be reversed in year 2 (or year 3). This is because the service condition, in contrast to the market condition, was not taken into account when estimating the fair value of the stock options at grant date. Instead, the service condition is taken into account by adjusting the transaction amount to be based on the number of shares or stock options that ultimately vest, in accordance with paragraphs 18 and 19 of the text of the Guidance Note.

## **Illustration 6: Grant with a Market Condition, in which the Length of the Vesting Period varies**

At the beginning of year 1, an enterprise grants 10,000 stock options with a ten-year life to each of ten senior executives. The stock options will vest and become exercisable immediately if and when the share price of the enterprise increases from Rs. 50 to Rs. 70, provided that the executive remains in service until the share price target is achieved.

The enterprise applies a binomial option pricing model, which takes into account the possibility that the share price target will be achieved during the ten-year life of the options, and the possibility that the target will not be achieved. The enterprise estimates that the fair value of the stock options at grant date is Rs. 25 per option. From the option pricing model, the enterprise determines that the mode of the distribution of possible vesting dates is five years. In other words, of all the possible outcomes, the most likely outcome of the market condition is that the share price target will be achieved at the end of year 5. Therefore, the enterprise estimates that the expected vesting period is five years. The enterprise also estimates that two executives will have left by the end of year 5, and therefore expects that 80,000 stock options (10,000 stock options x 8 executives) will vest at the end of year 5.

Throughout years 1-4, the enterprise continues to estimate that a total of two executives will leave by the end of year 5. However, in total three executives leave, one in each of years 3, 4 and 5. The share price target is achieved at the end of year 6. Another executive leaves during year 6, before the share price target is achieved.

### **Suggested Accounting Treatment**

Paragraph 14 of the text of the Guidance Note requires the enterprise to recognise the services received over the expected vesting period, as estimated at grant date, and also requires the enterprise not to revise that estimate. Therefore, the enterprise recognises the services received from the executives over years 1 to 5. Hence, the transaction amount is ultimately based on 70,000 stock options (10,000 stock options x 7 executives who remain in service at the end of year 5). Although another executive left during year 6, no adjustment is made, because the executive had already completed the expected vesting period of 5 years. Therefore, the enterprise recognises the following amounts in years 1-5:



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Year	Calculation	Compensation expense for period (Rs.)	Cumulative compensation expense (Rs.)
1	80,000 options x Rs. 25 x 1/5	4,00,000	4,00,000
2	(80,000 options x Rs. 25 x 2/5) – Rs. 4,00,000	4,00,000	8,00,000
3	(80,000 options x Rs. 25 x 3/5) – Rs. 8,00,000	4,00,000	12,00,000
4	(80,000 options x Rs. 25 x 4/5) – Rs. 12,00,000	4,00,000	16,00,000
5	(70,000 options x Rs. 25) – Rs. 16,00,000	1,50,000	17,50,000

### **Illustration 7: Employee Share Purchase Plan**

An enterprise offers all its 1,000 employees the opportunity to participate in an employee stock purchase plan. The employees have two weeks to decide whether to accept the offer. Under the terms of the plan, the employees are entitled to purchase a maximum of 100 shares each. The purchase price will be 20 per cent less than the market price of the shares of the enterprise at the date the offer is accepted, and the purchase price must be paid immediately upon acceptance of the offer. All shares purchased must be held in trust for the employees, and cannot be sold for five years. The employee is not permitted to withdraw from the plan during that period. For example, if the employee ceases employment during the five-year period, the shares must nevertheless remain in the plan until the end of the five-year period. Any dividends paid during the five-year period will be held in trust for the employees until the end of the five-year period.

In total, 800 employees accept the offer and each employee purchases, on average, 80 shares, i.e., the employees purchase a total of 64,000 shares. The weighted-average market price of the shares at the purchase date is Rs. 30 per share, and the weighted-average purchase price is Rs. 24 per share.

## **Suggested Accounting Treatment**

Paragraph 15 of the text of the Guidance Note provides that the enterprise should measure the fair value of the employee services received by reference to the fair value of the shares or stock options granted. To apply this requirement, it is necessary first to determine the type of instrument granted to the employees. Although the plan is described as an employee stock purchase plan (ESPP), some ESPPs include option features and are therefore, in effect, stock option plans. For example, an ESPP might include a 'lookback feature', whereby the employee is able to purchase shares at a discount, and choose whether the discount is applied to the share price of the enterprise at the date of grant or its share price at the date of purchase. Or an ESPP might specify the purchase price, and then allow the employees a significant period of time to decide whether to participate in the plan. Another example of an option feature is an ESPP that permits the participating employees to cancel their participation before or at the end of a specified period and obtain a refund of amounts previously paid into the plan.

However, in this example, the plan includes no option features. The discount is applied to the share price at the purchase date, and the employees are not permitted to withdraw from the plan.

Another factor to consider is the effect of post-vesting transfer restrictions, if any. Paragraph 3 of the Appendix I to the Guidance Note states that, if shares are subject to restrictions on transfer after vesting date, that factor should be taken into account when estimating the fair value of those shares, but only to the extent that the post-vesting restrictions affect the price that a knowledgeable, willing market participant would pay for that share. For example, if the shares are actively traded in a deep and liquid market, post-vesting transfer restrictions may have little, if any, effect on the price that a knowledgeable, willing market participant would pay for those shares.

In this example, the shares are vested when purchased, but cannot be sold for five years after the date of purchase. Therefore, the enterprise should consider the valuation effect of the five-year post-vesting transfer restriction. This entails using a valuation technique to estimate what the price of the restricted share would have been on the purchase date in an arm's length transaction between knowledgeable, willing parties. Suppose that, in this example, the enterprise estimates that the fair value of each restricted share is Rs. 28. In this case, the fair value of the instruments granted is Rs. 4 per

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share (being the fair value of the restricted share of Rs. 28 less the purchase price of Rs. 24). Because 64,000 shares were purchased, the total fair value of the instruments granted is Rs. 2,56,000.

In this example, there is no vesting period. Therefore, in accordance with paragraph 11 of the text of the Guidance Note, the enterprise should recognise an expense of Rs. 2,56,000 immediately.

## **Appendix III**

# **Modifications to the Term and Conditions of Equity-settled Employee Share-based Payment Plans**

### **Illustration 1: Grant of Stock Options that are Subsequently Repriced**

At the beginning of year 1, an enterprise grants 100 stock options to each of its 500 employees. The grant is conditional upon the employee remaining in service over the next three years. The enterprise estimates that the fair value of each option is Rs. 15. On the basis of a weighted average probability, the enterprise estimates that 100 employees will leave during the three-year period and therefore forfeit their rights to the stock options.

Suppose that 40 employees leave during year 1. Also suppose that by the end of year 1, the share price of the enterprise has dropped, and the enterprise reprices its stock options, and that the repriced stock options vest at the end of year 3. The enterprise estimates that a further 70 employees will leave during years 2 and 3, and hence the total expected employee departures over the three-year vesting period is 110 employees. During year 2, a further 35 employees leave, and the enterprise estimates that a further 30 employees will leave during year 3, to bring the total expected employee departures over the three-year vesting period to 105 employees. During year 3, a total of 28 employees leave, and hence a total of 103 employees ceased employment during the vesting period. For the remaining 397 employees, the stock options vested at the end of year 3.

The enterprise estimates that, at the date of repricing, the fair value of each of the original stock options granted (i.e., before taking into account the repricing) is Rs. 5 and that the fair value of each repriced stock option is Rs. 8.

## Suggested Accounting Treatment

Paragraph 24 of the text of the Guidance Note requires the enterprise to recognise the effects of modifications that increase the total fair value of the employee share-based payment plans or are otherwise beneficial to the employee. If the modification increases the fair value of the shares or stock options granted (e.g., by reducing the exercise price), measured immediately before and after the modification, paragraph 25(a) of the text of this Guidance Note requires the enterprise to include the incremental fair value granted (i.e., the difference between the fair value of the modified instrument and that of the original instrument, both estimated as at the date of the modification) in the measurement of the amount recognised for services received as consideration for the instruments granted. If the modification occurs during the vesting period, the incremental fair value granted is included in the measurement of the amount recognised for services received over the period from the modification date until the date when the modified instruments vest, in addition to the amount based on the grant date fair value of the original instruments, which is recognised over the remainder of the original vesting period.

The incremental value is Rs. 3 per stock option (Rs. 8 – Rs. 5). This amount is recognised over the remaining two years of the vesting period, along with remuneration expense based on the original option value of Rs. 15.

The amounts recognised towards employees services received in years 1-3 are as follows:

Year	Calculation	Compensation expense for period (Rs.)	Cumulative compensation expense (Rs.)
1	(500 – 110) employees × 100 options × Rs. 15 × 1/3	1,95,000	1,95,000
2	(500 – 105) employees × 100 options × (Rs. 15 × 2/3 + Rs. 3 × 1/2) – Rs. 1,95,000	2,59,250	4,54,250
3	(500 – 103) employees × 100 options × (Rs. 15 + Rs. 3) – Rs. 4,54,250	2,60,350	7,14,600

## **Illustration 2: Grant of Stock Options with a Vesting Condition that is Subsequently Modified**

At the beginning of year 1, the enterprise grants 1,000 stock options to each member of its sales team, conditional upon the employees remaining in the employment of the enterprise for three years, and the team selling more than 50,000 units of a particular product over the three-year period. The fair value of the stock options is Rs. 15 per option at the date of grant.

During year 2, the enterprise increases the sales target to 1,00,000 units. By the end of year 3, the enterprise has sold 55,000 units, and the stock options do not vest. Twelve members of the sales team have remained in service for the three-year period.

### **Suggested Accounting Treatment**

Paragraph 19 of the text of the Guidance Note requires, for a performance condition that is not a market condition, the enterprise to recognise the services received during the vesting period based on the best available estimate of the number of shares or stock options expected to vest and to revise that estimate, if necessary, if subsequent information indicates that the number of shares or stock options expected to vest differs from previous estimates. On vesting date, the enterprise revises the estimate to equal the number of instruments that ultimately vested. However, paragraph 24 of the text of the Guidance Note requires, irrespective of any modifications to the terms and conditions on which the instruments were granted, or a cancellation or settlement of that grant of instruments, the enterprise to recognise, as a minimum, the services received, measured at the grant date fair value of the instruments granted, unless those instruments do not vest because of failure to satisfy a vesting condition (other than a market condition) that was specified at grant date. Furthermore, paragraph 26(c) of the text of this Guidance Note specifies that, if the enterprise modifies the vesting conditions in a manner that is not beneficial to the employee, the enterprise does not take the modified vesting conditions into account when applying the requirements of paragraphs 18 to 20 of the text of the Guidance Note.

Therefore, because the modification to the performance condition made it less likely that the stock options will vest, which was not beneficial to the employee, the enterprise takes no account of the modified performance condition when recognising the services received. Instead, it continues to

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recognise the services received over the three-year period based on the original vesting conditions. Hence, the enterprise ultimately recognises cumulative remuneration expense of Rs. 1,80,000 over the three-year period (12 employees × 1,000 options × Rs. 15).

The same result would have occurred if, instead of modifying the performance target, the enterprise had increased the number of years of service required for the stock options to vest from three years to ten years. Because such a modification would make it less likely that the options will vest, which would not be beneficial to the employees, the enterprise would take no account of the modified service condition when recognising the services received. Instead, it would recognise the services received from the twelve employees who remained in service over the original three-year vesting period.

## Appendix IV

# Cash-settled Employee Share-based Payment Plans

Continuing, Illustration 1(A) of Appendix II, suppose the enterprise has granted stock appreciation rights (SARs) to its employees, instead of the options whereby the enterprise pays cash to the employees equal to the intrinsic value of the SARs as on the exercise date. The SARs are granted on the condition that the employees remain in its employment for the next three years. The contractual life [comprising the vesting period (3 years) and the exercise period (2 years)] of SARs is 5 years.

The other facts of the Illustration are the same as those in Illustration 1(A) of Appendix II. However, it is also assumed that at the end of year 3, 400 employees exercise their SARs, another 300 employees exercise their SARs at the end of year 4 and the remaining 140 employees exercise their SARs at the end of year 5.

The enterprise estimates the fair value of the SARs at the end of each year in which a liability exists and the intrinsic value of the SARs at the end of years 3, 4 and 5. The values estimated by the enterprise are as below:

Year	Fair Value	Intrinsic Value
1	Rs. 15.30	
2	Rs. 16.50	
3	Rs. 19.20	Rs. 16.00
4	Rs. 21.30	Rs. 21.00
5		Rs. 26.00



## Suggested Accounting Treatment

1. The expense to be recognised each year in respect of SARs are determined as below:

### Year 1

No. of SARs expected to vest (as per the original estimate)

$$1,000 \times 300 \times 0.97 \times 0.97 \times 0.97 = 2,73,802 \text{ SARs}$$

Provision required at the year-end

$$2,73,802 \text{ SARs} \times \text{Rs. } 15.30 \times 1/3 = \text{Rs. } 13,96,390$$

Less: provision at the beginning of the year Nil

Expense for the year Rs. 13,96,390

### Year 2

No. of SARs expected to vest (as per the revised estimate)

$$1,000 \times 300 \times 0.94 \times 0.94 \times 0.94 = 2,49,175 \text{ SARs}$$

Provision required at the year-end

$$2,49,175 \text{ SARs} \times \text{Rs. } 16.50 \times 2/3 = \text{Rs. } 27,40,925$$

Less: provision at the beginning of the year Rs. (13,96,390)

Expense for the year Rs. 13,44,535

### Year 3

No. of SARs actually vested

$$840 \text{ employees} \times 300 \text{ SARs} = 2,52,000 \text{ SARs}$$

No. of SARs exercised at the year-end

$$400 \text{ employees} \times 300 \text{ SARs} = \underline{1,20,000 \text{ SARs}}$$

No. of SARs outstanding at the year-end 1,32,000 SARs

Provision required in respect of SARs outstanding at the year-end

$$1,32,000 \text{ SARs} \times \text{Rs. } 19.20 = \text{Rs. } 25,34,400$$

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<i>Plus: Cash paid on exercise of SARs by employees</i>	
1,20,000 SARs x Rs. 16.00 =	<u>Rs. 19,20,000</u>
<i>Total</i>	Rs. 44,54,400
<i>Less: provision at the beginning of the year</i>	<u>Rs. (27,40,925)</u>
<i>Expense for the year</i>	<u>Rs. 17,13,475</u>
<u><i>Year 4</i></u>	
No. of SARs outstanding at the beginning of the year	1,32,000 SARs
No. of SARs exercised at the year-end 300 employees x 300 SARs	<u>90,000 SARs</u>
No. of SARs outstanding at the year-end	<u>42,000 SARs</u>
Provision required in respect of SARs outstanding at the year-end 42,000 SARs x Rs. 21.30 =	Rs. 8,94,600
<i>Plus: Cash paid on exercise of SARs</i>	
90,000 SARs x Rs. 21.00 =	<u>Rs. 18,90,000</u>
<i>Total</i>	Rs. 27,84,600
<i>Less: provision at the beginning of the year</i>	<u>Rs. (25,34,400)</u>
<i>Expense for the year</i>	<u>Rs. 2,50,200</u>
<u><i>Year 5</i></u>	
No. of SARs outstanding at the beginning of the year	42,000 SARs
No. of SARs exercised at the year-end 140 employees x 300 SARs	<u>42,000 SARs</u>
No. of SARs outstanding at the year-end	<u>Nil</u>
Provision required in respect of SARs outstanding at the year-end	Nil
<i>Plus: Cash paid on exercise of SARs</i>	

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42,000 SARs x Rs. 26.00 =	<u>Rs. 10,92,000</u>
<i>Total</i>	Rs. 10,92,000
Less: provision at the beginning of the year	<u>Rs. (8,94,600)</u>
Expense for the year	<u>Rs. 1,97,400</u>

2. The enterprise passes the following entry, in each of the years, to recognise the compensation expense determined as above:

Employee compensation expense A/c	Dr. _____
To Provision for payment of SARs A/c	_____

(Being compensation expense recognised in respect of SARs)

3. The enterprise passes the following entry, in the years 3, 4 and 5, to record the cash paid on exercise of SARs:

Provision for payment of SARs A/c	Dr. _____
To Bank A/c	_____

(Being cash paid on exercise of SARs)

4. Balance in the 'Provision for payment of SARs Account', outstanding at year-end, is disclosed in the balance sheet, as a provision under the heading 'Current Liabilities and Provisions'.

### **Intrinsic Value Method**

The accounting treatment suggested above is based on the fair value method. In case the enterprise has followed the intrinsic value method instead of the fair value method, it would make all the computations suggested above on the basis of intrinsic value of SARs on the respective dates instead of the fair value. To illustrate, suppose the intrinsic value of SARs at the grant date is Rs. 6 per right. The intrinsic values of the SARs on the subsequent dates are as below:

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Year	Intrinsic Value
1	Rs. 9.00
2	Rs. 12.00
3	Rs. 16.00
4	Rs. 21.00
5	Rs. 26.00

In the above case, the enterprise would determine the expense to be recognised each year in respect of SARs as below:

Year 1

No. of SARs expected to vest (as per the original estimate)

$$1,000 \times 300 \times 0.97 \times 0.97 \times 0.97 = 2,73,802 \text{ SARs}$$

Provision required at the year-end

$$2,73,802 \text{ SARs} \times \text{Rs. } 9.00 \times 1/3 = \text{Rs. } 8,21,406$$

Less: provision at the beginning of the year \_\_\_\_\_ Nil

Expense for the year Rs. 8,21,406

Year 2

No. of SARs expected to vest (as per the revised estimate)

$$1,000 \times 300 \times 0.94 \times 0.94 \times 0.94 = 2,49,175 \text{ SARs}$$

Provision required at the year-end

$$2,49,175 \text{ SARs} \times \text{Rs. } 12.00 \times 2/3 = \text{Rs. } 19,93,400$$

Less: provision at the beginning of the year Rs. (8,21,406)

Expense for the year Rs. 11,71,994

Year 3

No. of SARs actually vested

$$840 \text{ employees} \times 300 \text{ SARs} = 2,52,000 \text{ SARs}$$

No. of SARs exercised at the year-end

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400 employees x 300 SARs	<u>1,20,000 SARs</u>
No. of SARs outstanding at the year-end	<u>1,32,000 SARs</u>
Provision required in respect of SARs outstanding at the year-end	
1,32,000 SARs x Rs. 16.00 =	Rs. 21,12,000
<i>Plus:</i> Cash paid on exercise of SARs by employees	
1,20,000 SARs x Rs. 16.00 =	<u>Rs. 19,20,000</u>
<i>Total</i>	Rs. 40,32,000
<i>Less:</i> provision at the beginning of the year	<u>Rs. (19,93,400)</u>
Expense for the year	<u>Rs. 20,38,600</u>

Year 4

No. of SARs outstanding at the beginning of the year	1,32,000 SARs
No. of SARs exercised at the year-end	
300 employees x 300 SARs	<u>90,000 SARs</u>
No. of SARs outstanding at the year-end	<u>42,000 SARs</u>
Provision required in respect of SARs outstanding at the year-end	
42,000 SARs x Rs. 21.00 =	Rs. 8,82,000
<i>Plus:</i> Cash paid on exercise of SARs	
90,000 SARs x Rs. 21.00 =	<u>Rs. 18,90,000</u>
<i>Total</i>	Rs. 27,72,000
<i>Less:</i> provision at the beginning of the year	<u>Rs. (21,12,000)</u>
Expense for the year	<u>Rs. 6,60,000</u>

Year 5

No. of SARs outstanding at the beginning of the year	42,000 SARs
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No. of SARs exercised at the year-end	
140 employees x 300 SARs	<u>42,000 SARs</u>
No. of SARs outstanding at the year-end	<u>          Nil</u>
Provision required in respect of SARs outstanding at the year-end	Nil
<i>Plus:</i> Cash paid on exercise of SARs	
42,000 SARs x Rs. 26.00 =	<u>Rs. 10,92,000</u>
<i>Total</i>	Rs. 10,92,000
<i>Less:</i> provision at the beginning of the year	<u>Rs. (8,82,000)</u>
Expense for the year	<u>Rs. 2,10,000</u>

## Appendix V

# Employee Share-based Payment Plan with Cash Alternatives

Illustration : An enterprise grants to an employee the right to choose either a cash payment equal to the value of 1,000 shares, or 1,200 shares. The grant is conditional upon the completion of three years' service. If the employee chooses the equity alternative, the shares must be held for three years after vesting date. The face value of shares is Rs. 10 per share.

At grant date, the fair value of the shares of the enterprise (without considering post-vesting restrictions) is Rs. 50 per share. At the end of years 1, 2 and 3, the said fair value is Rs. 52, Rs. 55 and Rs. 60 per share respectively. The enterprise does not expect to pay dividends in the next three years. After taking into account the effects of the post-vesting transfer restrictions, the enterprise estimates that the grant date fair value of the equity alternative is Rs. 48 per share. At the end of year 3, the employee chooses:

**Scenario 1:** The cash alternative

**Scenario 2:** The equity alternative

### Suggested Accounting Treatment

1. The employee share-based payment plan granted by the enterprise has two components, viz., (i) a liability component, i.e., the employees' right to demand settlement in cash, and (ii) an equity component, i.e., the employees' right to demand settlement in shares rather than in cash. The enterprise measures, on the grant date, the fair value of two components as below:

Fair value under equity settlement 1,200 shares x Rs. 48 =	Rs. 57,600
Fair value under cash settlement 1,000 shares x Rs. 50 =	<u>Rs. 50,000</u>
Fair value of the equity component (Rs. 57,600 – Rs. 50,000) =	<u>Rs. 7,600</u>

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Fair value of the liability component Rs. 50,000

2. The enterprise calculates the expense to be recognised in respect of the liability component at the end of each year as below:

Year 1

Provision required at the year-end	
1,000 x Rs. 52.00 x 1/3 =	Rs. 17,333
Less: provision at the beginning of the year	<u>Nil</u>
Expense for the year	<u>Rs. 17,333</u>

Year 2

Provision required at the year-end	
1,000 x Rs. 55.00 x 2/3 =	Rs. 36,667
Less: provision at the beginning of the year	<u>Rs. 17,333</u>
Expense for the year	<u>Rs. 19,334</u>

Year 3

Provision required at the year-end	
1,000 x Rs. 60.00 =	Rs. 60,000
Less: provision at the beginning of the year	<u>Rs. 36,667</u>
Expense for the year	<u>Rs. 23,333</u>

3. The expense to be recognised in respect of the equity component at the end of each year is one third of the fair value (Rs. 7,600) determined at (1) above.

4. The enterprise passes the following entry at the end of each of the years to recognise compensation expense towards liability component determined at (2) above:

Employee compensation expense A/c Dr. _____	
To Provision for liability component of employee share-based payment plan	_____



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(Being compensation expense recognised in respect of liability component of employee share-based payment plan with cash alternative)

5. The enterprise passes the following entry at the end of each of the year to recognise compensation expense towards equity component determined at (3) above:

Employee compensation expense A/c	Dr. _____
To Stock Options Outstanding A/c	_____

(Being compensation expense recognised in respect of equity component of employee share-based payment plan with cash alternative)

6. Provision for liability component of employee share-based payment plan, outstanding at year-end, is disclosed in the balance sheet, as a provision under the heading 'Current Liabilities and Provisions'. Credit balance in the 'Stock Options Outstanding A/c' is disclosed under a separate heading, between 'Share Capital' and 'Reserves and Surplus'.

7. The enterprise passes the following entry on the settlement of the employee share-based payment plan with cash alternative:

**Scenario 1: The cash alternative**

Provision for liability component of employee share-based payment plan	Dr. Rs. 60,000
To Bank A/c	Rs. 60,000

(Being cash paid on exercise of cash alternative under the employee share-based payment plan)

Stock Options Outstanding A/c	Dr. Rs. 7,600
To General Reserve	Rs. 7,600

(Being the balance standing to the credit of the Stock Options Outstanding Account transferred to the general reserve upon exercise of cash alternative)

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**Scenario 2: The equity alternative**

Stock Options Outstanding A/c	Dr. Rs. 7,600	
Provision for liability component of employee share-based payment plan	Dr. Rs. 60,000	
To Share Capital A/c (1,000 shares x Rs. 10)		Rs. 10,000
To Securities Premium A/c		Rs. 57,600

(Being shares issued on exercise of equity alternative under the employee share-based payment plan)

## Appendix VI

### Graded Vesting

Continuing Illustration 1(A) of Appendix II, suppose that the options granted vest according to a graded schedule of 25 per cent at the end of the year 1, 25 per cent at the end of the year 2, and the remaining 50 per cent at the end of the year 3. The expected lives of the options that vest at the end of the year 1, 2 and 3 are 2.5 years, 4 years and 5 years respectively. The fair values of these options, computed based on their respective expected lives, are Rs. 10, Rs. 13 and Rs. 15 per option, respectively. It is also assumed that expected forfeiture rate is 3% per year and does not change during the vesting period.

#### Suggested Accounting Treatment

A. *If accounting treatment specified in paragraph 42 is followed.*

1. Since the options granted have a graded vesting schedule, the enterprise segregates the total plan into different groups, depending upon the vesting dates and treats each of these groups as a separate plan.

2. The enterprise determines the number of options expected to vest under each group as below:

<u>Vesting Date (Year-end)</u>	<u>Options expected to vest</u>
1 300 options x 1,000 employees x 25% x 0.97	= 72,750 options
2 300 options x 1,000 employees x 25% x 0.97 x 0.97	= 70,568 options
3 300 options x 1,000 employees x 50% x 0.97 x 0.97 x 0.97	<u>=1,36,901 options</u>
<i>Total options expected to vest</i>	<u>2,80,219 options</u>

3. Total compensation expense for the options expected to vest is determined as follows:

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<b>Vesting Date (Year-end)</b>	<b>Expected Vesting (No. of Options)</b>	<b>Value per Option (Rs.)</b>	<b>Compensation Expense (Rs.)</b>
1	72,750	10	7,27,500
2	70,568	13	9,17,384
3	1,36,901	15	20,53,515
<i>Total</i>			36,98,399

4. Compensation expense, determined as above, is recognised over the respective vesting periods. Thus, the compensation expense of Rs. 7,27,500 attributable to 72,750 options that vest at the end year 1, is allocated to the year 1. The expense of Rs. 9,17,384 attributable to the 70,568 options that vest at the end of year 2 is allocated over their 2-year vesting period (year 1 and year 2). The expense of Rs. 20,53,515 attributable to the 1,36,901 options that vest at the end of year 3 is allocated over their 3-year vesting period (year 1, year 2 and year 3). Total compensation expense of Rs. 36,98,399, determined at the grant date, is attributed to the years 1, 2 and 3 as below:

<b>Vesting Date (End of year)</b>	<b>Cost to be recognised</b>		
	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>
1	7,27,500		
2	4,58,692	4,58,692	
3	6,84,505	6,84,505	6,84,505
Cost for the year	18,70,697	11,43,197	6,84,505
Cumulative cost	18,70,697	30,13,894	36,98,399

### **Intrinsic Value Method**

The accounting treatment suggested above is based on the fair value method. In case the enterprise has followed the intrinsic value method instead of the fair value method, it would make computations suggested above on the basis of intrinsic value of options at the grant date (which would be the same for all groups) instead of the fair value. To illustrate, suppose the intrinsic value of the option at the grant date is Rs. 6 per

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option. In such a case, total compensation expense for the options expected to vest would be determined as follows:

<b>Vesting Date (End of year)</b>	<b>Expected Vesting (No. of Options)</b>	<b>Value per Option (Rs.)</b>	<b>Compensation Expense (Rs.)</b>
1	72,750	6	4,36,500
2	70,568	6	4,23,408
3	1,36,901	6	8,21,406
<i>Total</i>			16,81,314

Total compensation expense of Rs. 16,81,314, determined at the grant date, would be attributed to the years 1, 2 and 3 as below:

<b>Vesting Date (End of year)</b>	<b>Cost to be recognised</b>		
	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>
1	4,36,500		
2	2,11,704	2,11,704	
3	2,73,802	2,73,802	2,73,802
Cost for the year	9,22,006	4,85,506	2,73,802
Cumulative cost	9,22,006	14,07,512	16,81,314

*B. If accounting treatment specified in paragraph 42A is followed:*

The enterprise can elect to recognise compensation expense on a straight-line basis. In that case, the total compensation expense to be attributed on a straight-line basis over each year in the 3-year vesting period is approximately Rs. 12,32,780 (36,98,399/3) under the 'Fair Value Method' and Rs.5,60,438 (16,81,314/3) under the 'Intrinsic Value Method'. However, as per paragraph 42A, the compensation expense recognised at any date must be at least equal to the amount attributable to options that are vested at that date. For example, if 50 per cent of the options vested in the first year of the 3-year vesting period, approximately Rs. 18,49,200 (36,98,399/2) would be recognised in that year under the 'Fair Value Method' and Rs.8,40,657 (16,81,314/2) would be recognised in that year under the 'Intrinsic Value Method'.

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In the above illustration, under this alternative accounting treatment, the enterprise could use a single weighted-average expected life to value the entire award and arrive at a different amount of total compensation expense under the 'Fair Value Method', which could, then, be attributed on a straight-line basis over the three-year vesting period.

The choice of attribution method for awards under graded vesting plan (i.e. to follow paragraph 42 or paragraph 42A) is a policy decision that is not dependent on an enterprise's choice of valuation technique.

## **Appendix VII**

# **Accounting for Employee Share-based Payment Plans Administered Through a Trust**

### **Illustration 1: Enterprise Allots Shares to the ESOP Trust as and when the Employees Exercise Stock Options**

At the beginning of year 1, an enterprise grants 300 stock options to each of its 1,000 employees, conditional upon the employees remaining in the employment of the enterprise for one year. The fair value of the stock options, at the date of grant, is Rs. 15 per option and the exercise price is Rs. 50 per share. The options can be exercised in one year after the date of vesting. The other relevant terms of the grant and assumptions are as below:

- (a) The grant is administered by an ESOP trust appointed by the enterprise. According to the terms of appointment, the enterprise agrees to allot shares to the ESOP trust as and when the stock options are exercised by the employees.
- (b) The number of employees expected to complete one year vesting period, at the beginning of the plan, is 900, i.e., 100 employees are expected to leave during the vesting period and, consequently, the options granted to them are expected to be forfeited.
- (c) Actual forfeitures, during the vesting period, are equal to the expected forfeitures and 900 employees have actually completed one year vesting period.
- (d) All 900 employees exercised their right to obtain shares vested in them in pursuance of the ESOP at the end of year 2.

### *Accounting for Employee Share-based Payments*

- (e) Apart from the shares allotted to the trust, the enterprise has 10,00,000 shares of Rs. 10 each outstanding at the end of year 1. The said shares were issued at a premium of Rs. 15 per share. The full amount of premium received on issue of shares is still standing to the credit of the Securities Premium Account. The enterprise has not made any change in the share capital upto the end of year 2, except that arising from transactions with the employees pursuant to the Employee Stock Option Plan.

### **Suggested Accounting Treatment**

The accounting treatment, in this case, would be the same as explained in the case where the enterprise itself is administering the Employee Stock Option Plan (ESOP) although the enterprise issues shares to the ESOP Trust instead of issuing shares to the employees directly. The accounting treatment in this case is explained hereinbelow.

#### *Year 1*

1. At the grant date, the enterprise estimates the fair value of the options expected to vest at the end of the vesting period as below:

No. of options expected to vest  
(1,000 – 100) employees x 300 options = 2,70,000 options

Fair value of options expected to vest  
2,70,000 options x Rs. 15 = Rs. 40,50,000

2. At the end of the financial year, the enterprise examines its actual forfeitures and makes necessary adjustments, if any, to reflect expense for the number of options that actually vested. Considering that actual forfeitures, during the vesting period, are equal to the expected forfeitures and 900 employees have actually completed one year vesting period, the enterprise recognises the fair value of options expected to vest (estimated at 1 above) towards the employee services received by passing the following entry:

Employee compensation expense A/c Dr. Rs. 40,50,000

To Stock Options Outstanding A/c Rs. 40,50,000

(Being compensation expense recognised in respect of the ESOP)



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3. Credit balance in the 'Stock Options Outstanding Account' is disclosed in the balance sheet under a separate heading, between 'Share Capital' and 'Reserves and Surplus', as below:

**Extracts from the Balance Sheet**

<b>Liabilities</b>	<b>Amount (Rs.)</b>
<b>Share Capital</b>	
<i>Paid-up Capital:</i>	
10,00,000 equity shares of Rs. 10 each	1,00,00,000
<b>Stock Options Outstanding Account</b>	40,50,000
<b>Reserves and Surplus</b>	
Securities Premium A/c (10,00,000 shares x Rs. 15)	1,50,00,000

*Year 2*

1. On exercise of the right to obtain shares by the employees, the enterprise allots shares to the ESOP Trust for issuance to the employees. The shares so issued are considered to have been issued on a consideration comprising the exercise price and the fair value of the options. In the present case, the exercise price is Rs. 50 per share and the fair value of the options is Rs. 15 per option. The enterprise, therefore, considers the shares to be issued at a price of Rs. 65 per share.

2. The amount to be recorded in the 'Share Capital Account' and the 'Securities Premium Account', upon issuance of the shares, is calculated as below:

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Particulars	Computations
No. of employees exercising option	900
No. of shares issued on exercise @ 300 per employee	2,70,000
Exercise Price @ Rs. 50 per share	1,35,00,000
Fair value of options @ Rs. 15 per option	40,50,000
<i>Total Consideration</i>	1,75,50,000
Amount to be recorded in 'Share Capital A/c' @ Rs. 10 per share	27,00,000
Amount to be recorded in 'Securities Premium A/c' @ Rs. 55 per share	1,48,50,000
<i>Total</i>	1,75,50,000

3. The ESOP Trust receives exercise price from the employees exercising the options vested in them in pursuance of the Employee Stock Option Plan. The Trust passes on the exercise price so received to the enterprise for issuance of shares to the employees. The enterprise allots shares to the ESOP Trust for issuance to the employees exercising the options vested in them in pursuance of the Employee Stock Option Plan. To recognise the transaction, the following entry is passed:

Bank A/c	Dr. Rs.1,35,00,000
Stock Options Outstanding A/c	Dr. Rs. 40,50,000
To Share Capital A/c	Rs. 27,00,000
To Securities Premium A/c	Rs. 1,48,50,000

(Being shares allotted to the ESOP Trust for issuance to the employees against the options vested in them in pursuance of the Employee Stock Option Plan)

4. The Share Capital Account and the Securities Premium Account are disclosed in the balance sheet as below:

**Extracts from the Balance Sheet**

<b>Liabilities</b>	<b>Amount (Rs.)</b>
<b>Share Capital</b>	
<i>Paid-up Capital:</i>	
12,70,000 equity shares of Rs. 10 each fully paid	1,27,00,000
(Of the above, 2,70,000 shares of Rs. 10 each have been issued to the employees pursuant to an Employee Share-based Payment Plan. The issue price of the share was Rs. 65 per share out of which Rs. 15 per share were received in the form of employee services over a period of one year).	
<b>Reserves and Surplus</b>	
Securities Premium A/c	2,98,50,000

**Computation of Earnings Per Share**

For the purpose of calculating Basic EPS, stock options granted pursuant to the employee share-based payment plan would not be included in the shares outstanding till the employees have exercised their right to obtain shares, after fulfilling the requisite vesting conditions. Till such time, stock options so granted would be considered as dilutive potential equity shares for the purpose of calculating Diluted EPS.

**Illustration 2: Enterprise Provides Finance to the ESOP Trust for Subscription to Shares Issued by the Enterprise at the Beginning of the Plan**

Continuing Illustration 1 above, suppose the enterprise provides finance, at the grant date, to the ESOP trust for subscription to the shares of the enterprise equivalent to the number of shares expected to vest. With the help of finance provided by the enterprise, the trust subscribes to the shares offered by the enterprise at a cash price of Rs. 50 per share, at the beginning of the plan. The Trust would issue shares to the employees as and when they exercise the right vested in them in pursuance of the

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Employee Stock Option Plan (ESOP). The other facts of the case are the same as in Illustration 1.

## **Suggested Accounting Treatment**

The computations of employee compensation expense, amount to be recognised in the Share Capital Account and the Securities Premium Account, etc., would be the same as that in Illustration 1 above.

### *Year 1*

1. The enterprise passes the following entry to record provision of finance [Rs. 1,35,00,000 (i.e., 2,70,000 shares x Rs. 50)] to the ESOP trust:

Amount recoverable from ESOP Trust A/c	Dr. Rs. 1,35,00,000	
	To Bank A/c	Rs. 1,35,00,000

(Being finance provided to the ESOP trust for subscription of shares)

2. The enterprise passes the following entry to record the allotment of 2,70,000 shares to the ESOP Trust at Rs. 65 per share [comprising the exercise price (Rs. 50) and the fair value of options (Rs. 15)]:

Bank A/c	Dr. Rs. 1,35,00,000	
Amount recoverable from ESOP Trust A/c	Dr. Rs. 40,50,000	
	To Share Capital A/c	Rs. 27,00,000
	To Securities Premium A/c	Rs. 1,48,50,000

(Being shares allotted to the ESOP Trust in respect of the Employee Stock Option Plan)

3. The enterprise passes the following entry to recognise the employee services received during the year:

Employee compensation expense A/c	Dr. Rs. 40,50,000	
	To Stock Options Outstanding A/c	Rs. 40,50,000

(Being compensation expense recognised in respect of the ESOP)

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4. The Share Capital Account, the Securities Premium Account, credit balance in the 'Stock Options Outstanding Account' and debit balance in the 'Amount recoverable from ESOP Trust Account' are disclosed in the balance sheet as below:

**Extracts from the Balance Sheet**

<b>Liabilities</b>	<b>Amount (Rs.)</b>	
<b>Share Capital</b>		
<i>Paid-up Capital:</i>		
12,70,000 equity shares of Rs. 10 each	1,27,00,000	
Less: Amount recoverable from ESOP Trust (face value of 2,70,000 share allotted to the Trust)	<u>27,00,000</u>	1,00,00,000
<b>Stock Options Outstanding Account</b>		40,50,000
<b>Reserves and Surplus</b>		
Securities Premium Account	2,98,50,000	
Less: Amount recoverable from ESOP Trust (Premium on 2,70,000 share allotted to the Trust)	<u>1,48,50,000</u>	1,50,00,000

5. Apart from other required disclosures, the enterprise gives a suitable note in the Notes to Accounts to explain the transaction and the nature of deduction of the 'Amount recoverable from ESOP Trust' made from the 'Share Capital' and the 'Securities Premium Account'.

*Year 2*

1. On exercise of the right to obtain shares, the ESOP trust issues shares to the respective employees after receiving the exercise price of Rs. 50 per share. The ESOP Trust passes on the exercise price received on issue of shares to the enterprise. The enterprise passes the following entry to record the receipt of the exercise price:

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Bank A/c Dr. Rs. 1,35,00,000  
To Amount recoverable from  
ESOP Trust A/c Rs. 1,35,00,000

(Being amount received from the ESOP Trust against finance provided to it at the beginning of the Employee Stock Option Plan)

2. The enterprise transfers the balance standing to the credit of the 'Stock Options Outstanding Account' to the 'Amount recoverable from ESOP Trust Account' by passing the following entry:

Stock Options Outstanding A/c Dr. Rs. 40,50,000  
To Amount recoverable from ESOP  
Trust A/c Rs. 40,50,000

(Being consideration for shares issued to the employees received in the form of employee services adjusted against the relevant account)

3. The Share Capital Account and the Securities Premium Account are disclosed in the balance sheet as below:

**Extracts from the Balance Sheet**

<b>Liabilities</b>	<b>Amount (Rs.)</b>
<b>Share Capital</b>	
<i>Paid-up Capital:</i>	
12,70,000 equity shares of Rs. 10 each fully paid	1,27,00,000
(Of the above, 2,70,000 shares of Rs. 10 each have been issued to the employees (through ESOP Trust) pursuant to an Employee Share-based Payment Plan. The issue price of the share was Rs. 65 per share out of which Rs. 15 per share were received in the form of employee services over a period of one year).	
<b>Reserves and Surplus</b>	
Securities Premium Account	2,98,50,000

## **Computation of Earnings Per Share**

For the purpose of calculating Basic EPS, shares allotted to the ESOP Trust pursuant to the employee share-based payment plan would not be included in the shares outstanding till the employees have exercised their right to obtain shares, after fulfilling the requisite vesting conditions. Till such time, the shares so allotted would be considered as dilutive potential equity shares for the purpose of calculating Diluted EPS.

### **Illustration 3: Enterprise Provides Finance to the ESOP Trust to Purchase Shares from the Market at the Beginning of the Plan**

Continuing Illustration 2 above, suppose the enterprise does not issue fresh shares to the ESOP Trust. Instead, it provides finance, at the grant date, to the trust to purchase shares of the enterprise from the market, equivalent to the number of shares expected to vest. With the help of finance provided by the enterprise, the ESOP Trust purchases 2,70,000 shares from the market @ Rs. 52 per share at the beginning of the plan. The other facts remain the same as in Illustration 2 above.

### **Suggested Accounting Treatment**

*Year 1*

1. The enterprise passes the following entry to record provision of finance [Rs. 1,40,40,000 (i.e., 2,70,000 shares x Rs. 52)] to the ESOP trust:

Amount recoverable from

ESOP Trust A/c	Dr. Rs. 1,40,40,000	
To Bank A/c		Rs. 1,40,40,000

(Being finance provided to the ESOP trust for purchase of shares in respect of the ESOP)

2. The enterprise passes the following entry at the end of the year to recognise the employee services received during the year:

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Employee compensation expense A/c	Dr. Rs. 40,50,000	
To Stock Options Outstanding A/c		Rs. 40,50,000

(Being compensation expense recognised in respect of the ESOP)

3. Credit balance in the 'Stock Options Outstanding Account' is disclosed on the liability side of the balance sheet under a separate heading, between 'Share Capital' and 'Reserves and Surplus'. Debit balance in the 'Amount recoverable from ESOP Trust Account' is disclosed on the asset side under a separate heading, between the 'Investments' and the 'Current Assets, Loans and Advances'. On this basis, the relevant extracts of the balance sheet appear as below:

**Extracts from the Balance Sheet**

<b>Liabilities</b>	<b>Amount (Rs.)</b>
<b>Share Capital</b>	
<i>Paid-up Capital:</i>	
10,00,000 equity shares of Rs. 10 each	1,00,00,000
<b>Stock Options Outstanding Account</b>	40,50,000
<b>Reserves and Surplus</b>	
Securities Premium Account	1,50,00,000
<b>Assets</b>	
<b>Investments</b>	—
<b>Amount recoverable from ESOP Trust</b>	1,40,40,000
<b>Current Assets, Loans and Advances</b>	—

4. Apart from the other required disclosures, the enterprise gives a suitable note in the 'Notes to Accounts' to explain the transaction and the nature of the 'Amount recoverable from ESOP Trust'.



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*Year 2*

1. On exercise of the right to obtain shares by the employees, the ESOP trust issues shares to the respective employees after receiving the exercise price. The exercise price so received is passed on to the enterprise. The amount received, in this manner, is Rs. 1,35,00,000 (i.e., 900 employees x 300 options x Rs. 50). The enterprise passes the following entry to record the receipt of the exercise price:

Bank A/c	Dr. Rs. 1,35,00,000	
	To Amount recoverable from ESOP Trust A/c	Rs. 1,35,00,000

(Being amount received from the ESOP trust against the finance provided to it in respect of the Employee Stock Option Plan)

2. The enterprise transfers an amount equivalent to the difference between the cost of shares to the ESOP Trust and the exercise price from the 'Stock Options Outstanding Account' to the 'Amount recoverable from ESOP Trust Account'. In the present case, there is a difference of Rs. 2 per share (i.e., Rs. 52 – Rs. 50) between the cost of shares and the exercise price. The number of shares issued to the employees is 2,70,000. The enterprise, accordingly, transfers an amount of Rs. 5,40,000 from the 'Stock Options Outstanding Account' to the 'Amount recoverable from ESOP Trust Account' by passing the following entry:

Stock Options Outstanding A/c	Dr. Rs. 5,40,000	
	To Amount recoverable from ESOP Trust A/c	Rs. 5,40,000

(Being the difference between the cost of shares to the ESOP Trust and the exercise price adjusted)

3. The balance of Rs. 35,10,000 (i.e., Rs. 40,50,000 – Rs. 5,40,000) standing to the credit of the 'Stock Options Outstanding Account' is transferred to the 'General Reserve' by passing the following entry:

Stock Options Outstanding A/c	Dr. Rs. 35,10,000	
	To General Reserve	Rs. 35,10,000

(Being balance in the 'Stock Options Outstanding Account' transferred to the 'General Reserve', at the end of the Employee Stock Option Plan)

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4. The Share Capital Account, the Securities Premium Account and the General Reserve are disclosed in the balance sheet as below:

#### Extracts from the Balance Sheet

Liabilities	Amount (Rs.)
<b>Share Capital</b>	
<i>Paid-up Capital:</i>	
10,00,000 equity shares of Rs. 10 each fully paid	1,00,00,000
<b>Reserves and Surplus</b>	
Securities Premium Account	1,50,00,000
General Reserve	xx,xx,xxx
<i>Add: Amount transferred from the Stock</i>	
Options Outstanding Account	<u>35,10,000</u> yy,yy,yyy

5. The enterprise gives a suitable note in the 'Notes to Accounts' to explain the nature of the addition of Rs. 35,10,000 made in the 'General Reserve'.

### Computation of Earnings Per Share

In this case, the enterprise does not issue any new shares either at the beginning of the Employee Stock Option Plan or on exercise of stock options by the employees. Instead, the ESOP Trust purchases the shares from the market at the beginning of the plan and the employees exercising options vested in them are granted shares out of the shares so purchased. The shares purchased by the Trust represent the shares that have already been issued by the enterprise and the same should continue to be included in the shares outstanding for the purpose of calculating Basic EPS as would have been done prior to the purchase of the shares by the Trust. Since the exercise of stock options granted under the plan does not result into any fresh issue of shares, the stock options granted would not be considered as dilutive potential equity shares for the purpose of calculating Diluted EPS.

## Appendix VIII

### Computation of Earnings Per Share

Illustration : At the beginning of year 1, an enterprise grants 300 stock options to each of its 1,000 employees, conditional upon the employees remaining in the employment of the enterprise for two years. The fair value of the stock options, at the date of grant, is Rs. 10 per option and the exercise price is Rs. 50 per share. The other relevant terms of the grant and assumptions are as below:

- (a) The number of employees expected to complete two years vesting period, at the beginning of the plan, is 900. 50 employees are expected to leave during the each of the year 1 and year 2 and, consequently, the options granted to them are expected to be forfeited.
- (b) Actual forfeitures, during the vesting period, are equal to the expected forfeitures and 900 employees have actually completed two-years vesting period.
- (c) The profit of the enterprise for the year 1 and year 2, before amortisation of compensation cost on account of ESOPs, is Rs. 25,00,000 and Rs. 28,00,000 respectively.
- (d) The fair value of shares for these years was Rs. 57 and Rs. 60 respectively.
- (e) The enterprise has 5,00,000 shares of Rs. 10 each outstanding at the end of year 1 and year 2.

Compute the Basic and Diluted EPS, ignoring tax impacts, for the year 1 and year 2.

#### Suggested Computations

- (a) The stock options granted to employees are not included in the shares outstanding till the employees have exercised their right to obtain shares or stock options, after fulfilling the requisite vesting conditions. Till such time, the stock options so granted are considered as dilutive potential equity shares for the purpose of calculating Diluted EPS. At the end of each year,

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computations of diluted EPS are based on the actual number of options granted and not yet forfeited.

- (b) For calculating diluted EPS, no adjustment is made to the net profit attributable to equity shareholders as there are no expense or income that would result from conversion of ESOPs to the equity shares.
- (c) For calculating diluted EPS, the enterprise assumes the exercise of dilutive options. The assumed proceeds from these issues are considered to have been received from the issue of shares at fair value. The difference between the number of shares issuable and the number of shares that would have been issued at fair value are treated as an issue of equity shares for no consideration.
- (d) As per paragraph 47 of this Guidance Note, the assumed proceeds to be included for computation, mentioned at (c) above, include (i) the exercise price; and (ii) the unamortised compensation cost related to these ESOPs, attributable to future services.

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(e) The enterprise calculates the basic and diluted EPS as below:

<b>Particulars</b>	<b>Year 1</b>	<b>Year 2</b>
Net profit before amortisation of ESOP cost	Rs. 25,00,000	Rs. 28,00,000
Less: Amortisation of ESOP cost [(900 employees x 300 options x Rs. 10)/2]	(Rs. 13,50,000)	(Rs. 13,50,000)
Net profit attributable to equity shareholders	Rs. 11,50,000	Rs. 14,50,000
Number of shares outstanding	5,00,000	5,00,000
<b>Basic EPS</b>	<b>Rs. 2.30</b>	<b>Rs. 2.90</b>
Number of options outstanding (Options granted less actual forfeitures)	2,85,000 [1,000 employees x 300 options – (50 employees x 300 options)]	2,70,000 [2,85,000 options – (50 employees x 300 options)]
Unamortised compensation cost per option	Rs. 5 [Rs. 10 – Rs. 10/2]	Rs. 0
Number of dilutive potential equity shares	10,000 [2,85,000 – ((2,85,000 * 50) + (2,85,000 * 5))/57]	45,000 [2,70,000 – (2,70,000 * 50)/60]
No. of equity shares used to compute diluted earnings per share	5,10,000	5,45,000
<b>Diluted EPS</b>	<b>Rs. 2.255</b>	<b>Rs. 2.66</b>

## Appendix IX

### Illustrative Disclosures

The following example illustrates the disclosure requirements in paragraphs 49 to 52 of the text of the Guidance Note.<sup>3</sup>

**Extract from the Notes to the Financial Statements of Company Z  
(for the year ended 31 December, 2005)**

**Employee Share-based Payment Plans**

1. During the period ended 31 December, 2005, the Company had four share-based payment arrangements, which are described below:

<i>Type of arrangement</i>	<i>Senior management stock option plan</i>	<i>General employee stock option plan</i>	<i>Executive stock plan</i>	<i>Senior management stock appreciation cash plan</i>
Date of grant	January 1, 2004	January 1, 2005	January 1, 2005	July 1, 2005
Number granted	50,000	75,000	50,000	25,000
Contractual life	10 years	10 years	N/A	10 years
Vesting conditions	1.5 years service and achievement of a share price target, which was achieved.	Three years service.	Three years service and achievement of a target growth in earnings per share.	Three years service and achievement of a target increase in market share.

<sup>3</sup> **Note:** The illustrative example is not intended to be a template or model and is therefore not exhaustive. For example, it does not illustrate the disclosure requirements in paragraph 51(c) of the text of the Guidance Note.

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2. The estimated fair value of each stock option granted in the general employee stock option plan is Rs. 23.60. This was calculated by applying binomial option pricing model. The model inputs were the share price at grant date of Rs. 50, exercise price of Rs. 50, expected volatility of 30 per cent, no expected dividends, contractual life of ten years, and a risk-free interest rate of 5 per cent. To allow for the effects of early exercise, it was assumed that the employees would exercise the options after vesting date when the share price was twice the exercise price. Historical volatility was 40 per cent, which includes the early years of the Company's life; the Company expects the volatility of its share price to reduce as it matures.

3. The estimated fair value of each share granted in the executive stock plan is Rs. 50.00, which is equal to the share price at the date of grant.

4. Further details of the two stock option plans are as follows :

	2004		2005	
	<i>Number of options</i>	<i>Weighted average exercise price</i>	<i>Number of options</i>	<i>Weighted average exercise price</i>
Outstanding at start of year	0	-	45,000	Rs. 40
Granted	50,000	Rs. 40	75,000	Rs. 50
Forfeited	(5,000)	Rs. 40	(8,000)	Rs. 46
Exercised	0	-	(4,000)	Rs. 40
Outstanding at end of year	45,000	Rs. 40	1,08,000	Rs. 46
Exercisable at end of year	0	Rs. 40	38,000	Rs. 40

5. The weighted average share price at the date of exercise for stock options exercised during the period was Rs. 52. The options outstanding at December 31, 2005 had an exercise price of Rs. 40 or Rs. 50, and a weighted average remaining contractual life of 8.64 years.

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6. Other information regarding employee share-based payment plans is as below:

	<b>2004 (Rs.)</b>	<b>2005 (Rs.)</b>
Expense arising from employee share-based payment plans	4,95,000	11,05,867
Expense arising from share and stock option plans	4,95,000	10,07,000
Closing balance of liability for cash stock appreciation plan	—	98,867
Expense arising from increase in fair value of liability for cash stock appreciation plan	—	9,200