The Chartered Accountant Student
Your monthly guide to CA news, information and events

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Foundation
Logical Reasoning

Intermediate
Company Law

Final
Strategic Cost Management and Performance Evaluation
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**SWACHH BHARAT - A STEP TOWARDS CLEANLINESS**
My Dear Students,

As you read this communication, I hope that you would be fully prepared for the examinations. I would like to extend my best wishes to all of you appearing for the same. Right now, you must single-mindedly focus on your preparation, and strive to utilize every minute of your time productively. It is of utmost importance that you organize yourself and your study space well so that you are able to locate important books, notes for final revision. At the same time, you must take due care of your health, and take reasonable sleep for good concentration and retention.

Points to Remember

Conceptual clarity, sound practice and thorough revision are the guiding pointers that will always lead you to success. You must enhance your understanding and significance of not just the topic at hand, but its inter-linkages with other topics and capture broad overview. This will help you to understand questions better and answer them with precision. You have to strengthen your commitment, do your best and give your 100% each day to elevate your performance. Self-awareness is crucial to your success. Allocate your time wisely, devoting more time on topics that require multiple revisions for retention.

During the examination, it is important that you maintain your composure to utilize every minute of the allocated time. Time management is very crucial to your success. How effectively you utilize your time during examination affects your performance. Hard work delivered within a given period transforms into desired results. I urge you to keep a track on time during examinations and smartly manage the time allocation vis-à-vis questions attempted. Carefully utilise the initial time to read the question paper as well as instructions thoroughly and strategise the sequence of the questions you wish to attempt, from the solution you know the best to the solution you know the least, commensurate with the time assigned to the questions respectively. Also make sure to reserve some time for revision.

Once a paper gets over, relax for some time then only start preparing for the next exam. Do not worry about the paper(s) which have gotten over but just look forward to the next paper and try to do your best.

ICAI: Your Mentor

We at ICAI, have always stood by you, have always taken proactive and exemplary initiatives to facilitate best resources. We have constantly strived to address your concerns from time to time. As a premier accounting body, it is our responsibility to ensure that the institute is renowned for imparting world class accounting education and its professionals having intellect are devoted towards common good.

ICAI has a robust examination system in place and you are advised to repose your faith in your institute. We will do everything to ensure that you get your rightful place in our fraternity at the earliest.


My sincere advice is to concentrate on your studies, remember: Persistence and perseverance are the keys that will unlock the doors to success.

I am confident that most of you would have taken/attended the Virtual Revision Classes organised for CA Intermediate and Final for the upcoming examinations. I am hopeful that you would have benefitted from these.

Update/Enhance your Knowledge

After exams, you must update your knowledge to stay ahead of the learning curve. Read at least one national and business newspaper on regular basis to stay abreast about the current political and business environment. The current world order defining the world economy is rapidly changing, exhorting big industrial conglomerates and multi-national companies to re-examine their strategies giving rise to several mergers and acquisitions. Studying and analyzing such events is important to determine thrust areas where you can enhance your knowledge, particularly from the career/placement perspective. You must also supplement your knowledge about contemporary issues like Insolvency & Bankruptcy Code, IFRS, Valuation and Goods and Services Tax (GST) etc. Remember - An investment in Knowledge pays the best interest. So become a true knowledge seeker.

You should never hesitate to ask questions or seek advice from your seniors, teachers and most importantly your Principal. Stay focused and do your best with utmost dedication and commitment towards your goal. I am sure you shall soon join the CA fraternity and make your family proud. Remember: Success comes to those who deserve it. So, work hard to deserve the success you aspire.

Wishing you all the success,

CA. PRAFULLA P. CHHAJED
PRESIDENT, ICAI

A leader is one who knows the way, goes the way, and shows the way. – John C. Maxwell
Dear Students,

At the outset, we would like to convey our best wishes to all of those who are appearing for the November 2019 examinations, which would have been started while you receive this Journal. We are fully aware and acknowledge the seriousness and the hard work that are required for achieving success in the professional examination. Your sincere efforts and dedication in dealing with the examinations will bring to you the desired results. As you are aware that CA examination aims not only to test the theoretical knowledge but application skills also. We are sure and very much confident that you will outshine in both these areas and remain excited on your success.

It is always our endeavour to provide contemporary education and training to the students. We are happy to announce that the Study Materials for May, 2020 examination for Foundation, Intermediate and Final Group I, based on the revised/trimmed syllabi, have been published. Study Materials for Final Group II are being finalised and would be made available soon. These Study Materials are based on the updated provisions of law/standards applicable for May, 2020 examination. In these Study Materials, as in the past, the maker checker approach has been extensively followed to reduce the possibility of errors. Learning aids in the form of tabular presentations and diagrams have been included to make the Study Materials more student friendly. Students may note that these study materials have also been web-hosted at the BoS Knowledge Portal. I am sure you would benefit immensely by reading these value-added Study Materials.

**Student Activity Portal**

Student Activity Portal help students to get themselves registered from anywhere anytime for various students’ programmes being organised by Regional Councils and Branches.

The students can login from time to time to register for events like, Student Seminars and Conferences, Mock Tests, Workshop, Special Counselling Programme, Talent Search, CA Students festival, Sports Competition etc. To register, the students can login using their credentials and pay the required registration fees online (through Debit Card/Credit Card/ Net Banking) on student’s activity portal itself. After successful registration, the student will be eligible to attend the event.

The students are advised to visit: [https://bosactivities.icai.org/](https://bosactivities.icai.org/) and login with their details in order to activate their account and register for the events from time to time.

**Articleship & Industrial Training Placement Portal**

Articleship and Industrial Training Placement Portal is a common platform for Members, Organisations and Students to interact with one another facilitates Members & Organisations to search, shortlist and schedule interviews with the interested students. Students can also apply/search vacancies indicating their preferences of place and areas. The Portal is user friendly and help in bridging the requirement gaps between members/industries and students seeking articleship/industrial training. Facility is being provided Free of Cost to Members, Organisations & Students.

Towards the end, I extend my best wishes on the festive occasion of Deepawali. Remember not to get carried away with fervour of festival season as it is also high time for you to speed up your examination preparation.

“To succeed in your mission, you must have single-minded devotion to your goal.”

A.P.J. Abdul Kalam

Wishing you all the best for a wonderful time ahead.

Yours sincerely

CA. ATUL K. GUPTA
VICE PRESIDENT, ICAI, NEW DELHI
Dear Students,

By the time you will receive this journal, you would be neck deep into studies. We at BoS, convey our best wishes to all of you who are appearing for the November 2019 examinations. We are fully aware and duly acknowledge the seriousness and the hard work put in by you, our students to achieve success. Sincere efforts coupled with absolute dedication and unfeigned spirit will definitely yield desired results. We are confident that you shall perform well and come out with flying colours. As students of this coveted professional course, you must know that there are no short-cuts/secrets to success. As General Colin Powell puts it, Success is the result of preparation, hard work and learning from failure. Preparation not just means studying for the exam, it means holistic preparation i.e. preparing your mind to retain and retrieve information, training to contain your anxiety and remain composed during the exam. Above all, your confidence is the best possible preparation. Remember: Dreaming for success without required efforts is like trying to harvest where you have not planted.

Opportunities Galore

As you would know, we are currently passing through an era of economic upheavals throughout the world, larger market interests are blurring boundaries and the global world order has tilted in India's favor. In the current scenario, the Chartered Accountancy Profession continues to be more relevant than ever before. Experienced CAs facilitate the much-needed advice to many an industrial conglomerates to strengthen their presence and diversify through mergers and acquisition. Competent young CAs can help young start-up companies to self-sustain financially as well as advise them how to expand their businesses for wealth creation and maintenance. There is no dearth of opportunities for competent and discerning accounting professionals yearning to make a difference in the corporate world globally.

Multi-Dimensional Skills: Key for Professional Growth

In order to leverage opportunities world-wide as well as widen your professional growth, you are required to develop multi-dimensional skills to realize your career aspirations. Articleship training provides the learning turf and exposure to face practical situations while developing the vital multi-dimensional skills such as communication, negotiation, articulation, professional conduct, team harmony, camaraderie and leadership. A well-disciplined, well-balanced and structured articleship will go a long way in laying a strong foundation to an illustrious career ahead. As you know, you can gauge your practical and technical skills by taking the Practical Training Assessment Test after completion of first and second year practical training respectively. I urge you to take this test to assess your knowledge vis-a-vis your peers. Inclusion of MCQs in select few papers at the Intermediate and Final level has introduced much-needed objectivity, emphasizing thorough learning as against rote learning. This would certainly help to enhance your analytical skills by inculcating logical, sequential and quick thinking. ICITSS and AICTSS inculcate the necessary software and interpersonal skills These skills will go a long way in carving a niche and establishing a formidable reputation for yourself as a member. So do not take these trainings lightly as these are stepping stones to holistic skill development.

Identify as a True Professional

Being prospective Chartered Accountants, you all should uphold the ethics of the profession. You must continuously strive to outdo yourself. Remember always that success is not just an event, it is a journey from one goal to another, however, big or small these might be, calling on us to persistently and positively change and grow. Our profession is helmed upon the firm foundations of Independence, Integrity and Excellence. While qualification gives you recognition and power, your character only will command respect. As Martin Luther King, Jr. said, “The function of education is to teach one to think intensively and to think critically. Intelligence plus character - that is the goal of true education.”

Change yourself to Change your circumstances

Accounting profession is challenging, with expectations running high from all quarters, be it industry, government or public at large. As students of this profession, you must consistently improve for the better, exploring new avenues that challenge your knowledge and exhort you to stretch out of your comfort zones. If you intend to improve your circumstances, you must willfully change yourself. You should always remember the fact that it is your skill, attitude and behaviour that help you to shape your circumstances. Never be afraid of change. In fact, change is the only constant. Change yourself to be in harmony with the change!

Seek Guidance

To embark successfully on your chosen path, you need proper guidance and consultation. Never hesitate to seek guidance from your principal, teachers and seniors. Translate your ideas into actions to achieve success and fulfillment.

As a regular feature, the current issue includes aptly summarized, comprehensible study capsules on Cost Management and Performance Evaluation for CA Intermediate and Strategic Cost Management and Performance Evaluation for CA Final. These capsules serve as nuggets of knowledge for swift revision.

I conclude with what Jimmy Dean once said, “I can't change the direction of the wind, but I can adjust my sails to always reach my destination”.

Wish you all the best,

CA. KEMISHA SONI
CHAIRPERSON, BOARD OF STUDIES, ICAI
### Strategic Cost Management and Performance Evaluation

#### SKILL ASSESSMENT

The questions/cases are based on Skill Assessment. An illustrative list of the verbs that appear in the requirements for each question/case is given below. It is important that students answer according to the definition of the verb:

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<th>Level</th>
<th>Learning Objective</th>
<th>Illustrative Verbs</th>
<th>Definition/Explanations</th>
</tr>
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</table>
| III   | EVALUATION         | Recommend          | • To recommend you must:  
  • Identify and explain any reasonable options → evaluate each → conclude → recommend. |
|       |                    | Evaluate           | • 'Evaluate' means balanced assessment including both the positive and negative aspects of an issue.  
  • It might mean computations, but it might not.  
  • It is important to emphasise something is in qualitative terms, as well as monetary. |
|       |                    | Advise             | • 'Advise' requires to build up a good, comprehensive, argument that leads to one or more choices for the owners or managers to consider. |
| II    | ANALYSIS           | Produce            | • To decide which of a group of things are the most important so that you can deal with them first. Here, you’ll also have to elucidate/clarify for each item, why you put it, where you did in the list of ‘priorities’. |
|       |                    | Prioritise         | • Generally, ‘Prioritise’ is translation of one form of words to another, where the latter is more clear in its exact sense than the former.  
  • This is often the second stage of ‘analyse’. |
|       |                    | Interpret          | • There needs to be an ‘argument’.  
  • You need two or more differing or conflicting viewpoints. Also, any discussion should, if possible, end in an outcome.  
  • For example; advantages vs. disadvantages → outcome; Or reasons why vs. why not → outcome; Or maybe this vs. maybe that → outcome. |
|       |                    | Discuss            | • As ‘prepare’, but maybe with an elucidation as to why you put things. |
|       |                    | Categorise         | • Generally, ‘Explain’ is how to do something.  
  • ‘Solve’ leave you to select the most suitable technique or process.  
  • ‘Reconcile’ is about a series of detailed explanations. |
|       |                    | Analyse            | • ‘Discuss’ is consistent with situations where there is an elucidation of the similarities and differences between two or more things.  
  • ‘Compare and contrast’ is about a series of detailed explanations. |
|       | APPLICATION         | Tabulate           | • ‘Prepare’ is used where there is a fair amount of numerical data given in the question.  
  • ‘Solve’ leave you to select the most suitable technique or process.  
  • ‘Reconcile’ is about a series of detailed explanations. |
|       |                    | Solve              | • ‘Explain’ is translation of one form of words to another, where the latter is more clear in its exact sense than the former.  
  • This is often the second stage of ‘analyse’. |
|       |                    | Reconcile          | • ‘Evaluate’ means balanced assessment including both the positive and negative aspects of an issue.  
  • It might mean computations, but it might not.  
  • It is important to emphasise something is in qualitative terms, as well as monetary. |
|       |                    | Prepare            | • ‘Categorise’ is about a series of detailed explanations.  
  • ‘Compare and contrast’ is about a series of detailed explanations. |
|       |                    | Demonstrate        | • ‘Explain’ is how to do something.  
  • ‘Solve’ leave you to select the most suitable technique or process.  
  • ‘Reconcile’ is about a series of detailed explanations. |
|       |                    | Calculate          | • ‘Discuss’ is consistent with situations where there is only one correct answer.  
  • ‘Explain’ is translation of one form of words to another, where the latter is more clear in its exact sense than the former.  
  • This is often the second stage of ‘analyse’. |
|       |                    | Apply              | • ‘Discuss’ is consistent with situations where there is only one correct answer.  
  • ‘Explain’ is translation of one form of words to another, where the latter is more clear in its exact sense than the former.  
  • This is often the second stage of ‘analyse’. |
| I     | COMPREHENSION      | Illustrate         | • ‘Illustrate’ is how to do something.  
  • ‘Solve’ leave you to select the most suitable technique or process.  
  • ‘Reconcile’ is about a series of detailed explanations. |
|       |                      | Identify           | • ‘Identify’ is how to do something.  
  • ‘Solve’ leave you to select the most suitable technique or process.  
  • ‘Reconcile’ is about a series of detailed explanations. |
|       |                      | Explain            | • ‘Explain’ is translation of one form of words to another, where the latter is more clear in its exact sense than the former.  
  • This is often the second stage of ‘analyse’. |
|       |                      | Distinguish        | • ‘Explain’ is translation of one form of words to another, where the latter is more clear in its exact sense than the former.  
  • This is often the second stage of ‘analyse’. |
|       |                      | Describe           | • ‘Explain’ is translation of one form of words to another, where the latter is more clear in its exact sense than the former.  
  • This is often the second stage of ‘analyse’. |
|       |                      | Define             | • ‘Explain’ is translation of one form of words to another, where the latter is more clear in its exact sense than the former.  
  • This is often the second stage of ‘analyse’. |
|       |                      | State              | • ‘Explain’ is translation of one form of words to another, where the latter is more clear in its exact sense than the former.  
  • This is often the second stage of ‘analyse’. |
|       |                      | List               | • ‘Explain’ is translation of one form of words to another, where the latter is more clear in its exact sense than the former.  
  • This is often the second stage of ‘analyse’. |

It may be presumed that the skills specified in Level I are inherent in Level II i.e., only when the student possesses Level I skills, he/she would be able to achieve Level II skills. Likewise, the skills specified in Levels I and II are inherent in Level III i.e., only when a student possesses Level I and II skills, he/she would be able to achieve Level III skills.
“Competition on dimensions other than price—on product features, support services, delivery time, or brand image, for instance—is less likely to erode profitability because it improves customer value and can support higher prices.”

– Michael Porter

Strategic issues are increasingly becoming important, cost management has transformed from a traditional role of product costing and operational control to a broader, strategic focus. Strategic Cost Management (SCM) requires that professional accountants hold new skills that extend beyond their traditional practices. They must collaborate with corporate strategists in creating, managing, and protecting value. SCM emphasises on developing, implementing and monitoring strategies in order to enhance value for the organization. Such a focus would not be possible without understanding the key role that Performance Management plays in strategy and value creation. Syllabus links strategy, management control systems and performance management. The various models of performance management, the strategy mapping process, as well as flowing performance measures in performance management, are part of the curriculum.

**STANDARD COSTING**

**CHAPTER OVERVIEW**

**Behavioural Issues** → **Standard Costing** → **Contemporary Business Environment**

**Analysis of Advanced Variances**
- Planning and Operational variances
- Variance Analysis in Activity Based Environment
- Relevant Cost Approach to Variance Analysis
- Variance Analysis and Throughput Accounting
- Learning Curve-Impact on Variances
- Variance Analysis in Advanced Manufacturing Environment
- Service Industry
- Public Sector

**Reconciliation of Profit**
- Budgeted Profit to Actual Profit (Absorption Costing)
- Budgeted Profit to Actual Profit (Marginal Costing)
- Standard Profit to Actual Profit

**Reporting of Variances**
- Variance Investigation Techniques
- Possible Interdependence between Variances
- Interpretation of Variances

**Integration of Standard Costing with Marginal Costing**

**ANALYSIS OF ADVANCED VARIANCES**

Variance analysis is examinable both at Intermediate Level (Cost and Management Accounting) and at Final Level (Strategic Cost Management and Performance Evaluation). One main difference in syllabus between the two papers is that the Final Level syllabus includes analysis of advanced variances, as follows:

**Planning & Operational Variances**

When the current environmental conditions are different from the anticipated environmental conditions (prevailing at the time of setting standard or plans) the use of routine analysis of variance for measuring managerial performance is not desirable / suitable. The variance analysis can be useful for measuring managerial performance if the variances computed are determined on the basis of revised targets / standards based on current actual environmental conditions. In order to deal with the above situation i.e. to measure managerial performance with reference to material, labour and sales variances, it is necessary to compute the Planning and Operational Variances.

**A Planning Variance simply compares a revised standard to the original standard.**

Classification of variances caused by ex-ante budget allowances being changed to an ex post basis. Also, known as a revision variance.

**An Operational Variance simply compares the actual results against the revised amount.**

Operating Variances would be calculated after the planning variances have been established and are thus a realistic way of assessing performance.

Classification of variances in which non-standard performance is defined as being that which differs from an ex post standard. Operational variances can relate to any element of the standard product specification.

**Standard ex ante**

Before the event. An ex ante budget or standard is set before a period of activity commences.

**Standard, ex post**

After the event. An ex post budget, or standard, is set after the end of a period of activity, when it can represent the optimum achievable level of performance in the conditions which were experienced. Thus, the budget can be flexed, and standards can reflect factors such as unanticipated changes in technology and in price levels. This approach may be used in conjunction with sophisticated cost and revenue modelling to determine how far both the plan and the achieved results differed from the performance that would have been expected in the circumstances which were experienced.

<table>
<thead>
<tr>
<th>Actual Results</th>
<th>Ex-post Standard</th>
</tr>
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<tbody>
<tr>
<td>compared with</td>
<td>= Total Variance</td>
</tr>
<tr>
<td>= Operational Variances (valued in Opportunity Cost terms)</td>
<td></td>
</tr>
</tbody>
</table>

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SCMPE
Variance Analysis in Activity-Based Costing

Variance analysis can be applied to activity costs (such as setup costs, product testing, quality testing etc.) to gain understanding into why actual activity costs vary from activity costs in the static budget or in the flexible budget.

Interpreting cost variances for different activities requires understanding whether the costs are output unit-level, batch level, product sustaining, or facility sustaining costs.

We use the similar track to variance analysis for activity-based costing as for traditional costing. The price variance is the difference between standard price and actual price for the actual quantity of input used for each cost driver. The efficiency variance measures the difference between the actual amount of cost driver units used, and the standard allowed to make the output. We multiply the difference in quantities by the standard price per cost driver to get the rupee value of the variance.

Planning variances are generally not controllable. Where a revision of standards is required due to environmental/technological changes that were not anticipated at the time the budget was prepared, the planning variances are truly uncontrollable. However, standards that failed to anticipate known market trends when they were set will reflect faulty standard-setting: it could be argued that these variances were controllable at the planning stage.

Variance Analysis in Activity-Based Costing

The conventional Sales Volume Variance reports the difference between actual and budgeted sales valued at the standard price per unit. The variance just indicates whether sales volume is greater or less than expected. It does not indicate how will sales management has performed.

In order to assess the performance of sales management, market conditions prevailing during the period should be taken into consideration.

Accordingly, the sales volume variance can be sub-divided into a planning variance (market size variance) and operational variance (market share variance).

A Planning Variance simply compares a revised standard to the original standard. An Operational Variance simply compares the actual results against the revised amount. Controllable Variances are those variances which arise due to inefficiency of a cost centre/department. Uncontrollable Variances are those variances which arise due to factors beyond the control of the management or concerned department of the organization.

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ABC approach is based on the assumption that the overheads are basically variable (but variable with the delivery numbers and not the units output). The efficiency variance reports the cost impact of undertaking more or less activities than standard, and the expenditure variance reports cost impact of paying more or less than standard for the actual activities undertaken.

Learning Curve - Impact on Variances
Learning curve is a geometrical progression, which reveals that there is steadily decreasing cost for the accomplishment of a given repetitive operation, as the identical operation is increasingly repeated. The amount of decrease will be less and less with each successive unit produced. As more units are produced, people involved in production become more efficient than before. Each additional unit takes less time to produce. The amount of improvement or experience gained is reflected in a decrease in man-hours or cost. Where learning takes place with a regular pattern it is important to take account of reduction in labour hours and cost per unit.

Relevant Cost Approach to Variance Analysis
Traditional approach to variance analysis is to compute variances based on total actual cost for production inputs and total standard cost applied to the production output. This is ambiguous, when inputs are limited. Failure to use limited inputs properly leads not only to increased acquisition cost but also to a lost contribution. Therefore, it is necessary to consider the lost contribution in variance analysis. When this approach is used, price or expenditure variances are not affected.

Variance Analysis and Throughput Accounting
Variance analysis has no emphasis on the constrained resources. Instead, it is based on the efficiency and cost of operation of each part of the manufacturing system, rather than the ability of the entire system to generate a profit. Thus, a firm may find that it attains excellent efficiency and price variances by having long manufacturing leads and buying in large quantities. A system based on constraint management will likely show very odd results under a variance reporting system.

For example, when a terminal upstream from the constrained resource runs out of work, a manager functioning under throughput accounting system will shut it down in order to avoid the formation of an unnecessary level of work-in-process inventory. However, this will result into a negative labor efficiency variance, since the terminal’s staff is not actively producing anything.

Throughput accounting does use variance analysis, but not the ones used by a traditional system. Instead, its main emphasis is on tracking variations in the size of the inventory buffer placed before the constrained resource, to confirm that the constraint is never halted due to an inventory shortage.

Variance Analysis in Advanced Manufacturing Environment/High-Technology Firms
The variance analysis generally applies to all types of organizations; however, high-technology firms like Audio Technology, Automotive, Computer Engineering, Electrical and Electronic Engineering, Information Technology, Medical devices, Nanotechnology, Semiconductors, Telecommunication apply the model somewhat differently. Now much of electronic industry is highly automated. A large part of manufacturing process is computerized.

In the high-technology environment that is emerging, many costs that once were largely variable have become fixed, most becoming committed fixed cost. Some high technology manufacturing organizations have found that the two largest variable costs involve materials and power to operate machines. In these companies, the emphasis of variance analysis is placed on direct materials and variable manufacturing overhead.

Much of the manufacturing labour consists of highly skilled experts/ operators/ programmers are largely committed cost. Firms don’t want to take risk losing such highly trained personnel even during an economic downturn. The result is less direct labour and more overhead. For these firms labour variances may no longer be meaningful because direct labour is a committed cost, not a cost expected to vary with output.

Standard Costing in Service Sector
Standard Costing can be equally applicable for various types of industries for example accountants, solicitors, dentists, hairdressers, transport companies and hotels. Service industries comprise a wide range of different businesses that differ in size and types of service provided. Standard costing and variance analysis is more tough to apply to service sector organizations as major portion of their cost is comprised of overhead expenses rather than production expenses. While traditional variance analysis of overheads does not deliver very useful information for overheads control purposes, application of activity based costing can provide an effective basis for variance analysis of overheads in service sector organizations although this may need significant time and effort in the implementation of a MIS.

McDonaldization
McDonaldization is a process of rationalisation, which takes a task and breaks it down into smaller tasks. This is repeated until all tasks have been broken down to the smallest possible level. The resulting tasks are then rationalised to find the single most efficient method for completing each task. All other methods are then deemed inefficient and discarded.

The impact of McDonaldization is that standards can be more accurately set and assessed. It can be easily ascertained that how much time and cost should go into each activity. The principles can be applied to many other services, such as hairdressing, dentistry, or opticians’ services.

Standard Costing in Public Sector
In order to cost control in public sector (e.g. street cleaning refuse disposal and so on), regular variance analysis is required. Actual unit costs should be calculated on a monthly basis and compared with estimated unit cost. To achieve this comparison, information needs to be maintained about the unit of service provided. The number of visits made and the number of hours worked. In this example, time recording may be beneficial in providing the detailed information necessary for variance analysis. Actual monthly costs should be taken from the organisation’s financial management system and each month financial reports should be produced which offer an accurate image of budgeted vs actual expenditure. These reports are must for budgetary control. Actual expenditure reported on financial systems may require some modification to take account of:
- Trade Payables (services used but bills yet to be received)
- Accruals (services used but bills not yet to be received)
- Timing Differences (some costs are not incurred evenly over the year)
### STANDARD MARGINAL COSTING

Standards and Variances can be calculated on the basis of marginal costing. A standard marginal costing system incorporates only costs which are variable to the product. Accordingly, the absorption of fixed costs, and the variances derived therefrom, do not feature in a standard marginal costing system. **When Marginal Costing is in use there is no Overhead Volume Variance, because Marginal Costing does not absorb Fixed Overhead.** Fixed Overhead Expenditure Variance is the only variance for Fixed Overhead in a Marginal Costing system. It is calculated as in an Absorption Costing system.

### RECONCILIATION OF PROFIT

Generally, under variance analysis we compute various variances from the actual and the standard/budgeted data. Sometimes all or a few variances and actual data are made available and from that we are required to prepare standard product cost sheet, original budget and to reconcile the budgeted profit with the actual profit. Some important concepts are given below:

**Reconciliation Statement-I**  
**Budgeted Profit to Actual Profit (Absorption Costing)**

| **Budgeted Profit** |  
|---------------------|---|
| (Budgeted Quantity × Standard Margin) |  |

**Effect of Variances**

| **Material Cost Variance** |  
|---------------------------|---|
| Material Price Variance |  |
| Material Usage Variance |  |
| Material Mix Variance |  |
| Material Yield Variance |  |

| **Labour Cost Variance** |  
|-------------------------|---|
| Labour Rate Variance |  |
| Labour Idle Time Variance |  |
| Labour Efficiency Variance |  |
| Labour Mix Variance |  |
| Labour Sub-Efficiency Variance |  |

| **Variable Overhead Cost Variances** |  
|-----------------------------------|---|
| Variable Overhead Expenditure Variance |  |
| Variable Overhead Efficiency Variance |  |

| **Fixed Overhead Cost Variances** |  
|---------------------------------|---|
| Fixed Overhead Expenditure Variance |  |
| Fixed Overhead Volume Variance |  |
| Fixed Overhead Capacity Variance |  |
| Fixed Overhead Efficiency Variance |  |

| **Sales Margin Variances (in terms of Profit)** |  
|-----------------------------------------------|---|
| Sales Margin Price Variance |  |
| Sales Margin Volume Variance |  |
| Sales Margin Mix Variance |  |
| Sales Margin Quantity Variance |  |

| **Actual Profit** |  
|-----------------|---|
Reconciliation Statement-III
Standard Profit to Actual Profit (Absorption Costing)

**Standard Profit**

(Actual Quantity × Standard Margin)

**Effect of Variances**

**Material Cost Variance**
- Material Price Variance
- Material Usage Variance
- Material Mix Variance
- Material Yield Variance

**Labour Cost Variance**
- Labour Rate Variance
- Labour Idle Time Variance
- Labour Efficiency Variance
  - Labour Mix Variance
  - Labour Sub-Efficiency Variance

**Variable Overhead Cost Variances**
- Variable Overhead Expenditure
- Variable Overhead Efficiency Variance

**Fixed Overhead Cost Variances**
- Fixed Overhead Expenditure Variance
- Fixed Overhead Volume Variance
  - Fixed Overhead Capacity Variance
  - Fixed Overhead Efficiency Variance

**Sales Margin Variance (in terms of Profit)**
- Sales Margin Price Variance
- Sales Margin Volume Variance
  - Sales Margin Mix Variance
  - Sales Margin Quantity Variance

**Actual Profit**

**INVESTIGATION OF VARIANCES**

Variance investigation is a key step in using variance analysis as part of performance management. "Interpretation may suggest possible cause of variances but investigation must arrive at definite conclusions about the cause of the variance so that action to correct the variance can be effective." There are behavioural as well as technical consequences to the decision to investigate variances. If no variances are investigated, it may cease to be motivated by the system which produce variances. Investigating favourable and adverse variances may create positive behavioural reinforcements, with implications for motivation, aspiration levels and inter-departmental relationships.

**Factors to be Considered When Investigating Variance**

Certain set of factors should be considered before undertaking the variance investigation of the actual performance against the estimates set.

**Size:** A standard is seen as an average of the estimates and therefore small variations seen from the standard should be ignored and not investigated further. In addition, organizations can establish limits and the variances seen beyond those limits should be undertaken for further investigation.

**Type of Variance:** Adverse variance is given more importance by the organization over favourable variances seen with regards to the estimates.

**Cost:** The costs associated with the undertaking of the investigation should be lower than the benefits associated with the investigation of variances for the organization to undertake the said investigation.

**Pattern in Variance:** The variances need to be monitored over a period of time and if the variance of a particular cost is seen to be worsening over time then in that case the investigation in relation to the variance needs to be undertaken.

**Budgetary Process:** In case the budgetary process is uncontrollable and unrealistic then in that case the investigation should be re-evaluating the budgetary process rather than undertaking investigation of the variances.
Method Used for Investigating Variance

Simple Rule of Thumb Model

It is based on arbitrary criteria such as investigating if the absolute size of a variance is greater than a certain amount or if the ratio of the variance to the total cost exceeds some predetermined percentage. They are based on managerial judgement and do not consider statistical significance.

Statistical Decision Model

For the statistical models, two mutually exclusive states are possible. First assumes that the system is ‘In Control’ and a variance is simply due to random fluctuations around the expected outcome. The second possible state is that the system is in some way ‘Out of Control’ and corrective action can be taken to remedy the situation.

An investigation is undertaken when the probability that an observation comes from an ‘In-Control’ distribution falls below some arbitrarily determined probability level.

A number of cost variance investigation models have been proposed that determine the statistical probability that a variance comes from an ‘In Control’ distribution.

Determining Probabilities

‘In Control’ state can be stated in the form of a known probability distribution such as a normal one.

Let’s take example, consider a situation where the standard time required for a particular project has been derived from the average of a series of past experience made under ‘close’ supervision. The average time is 2.5 hrs. per unit of output. We shall consider that the actual observations were normally distributed with a standard deviation of 15 minutes. Suppose that the actual time taken for a week was 3,000 hrs. for output of 1,000 units. Thus, average time taken was 3 hrs. per unit of output. We can determine the probability of perceiving an average time of 3 hrs. or more when the process is under control through application of normal distribution theory. An observation of an average time taken of 3 hrs. per unit of output is 2 standard deviations from the expected value, where, for a normal distribution,

Probability of Completing the Project in 3 hrs.

\[ Z = \frac{x-\mu}{\sigma} \]

\[ Z = \frac{3.00 - 2.50}{0.25} \]

\[ Z = 2.0 \]

\[ P (Z = 2.0) = 0.9772 \]

Probability of Completing the Project in more than 3 hrs.

\[ P = 1 - 0.9772 \]

\[ = 0.0228 \]

The shaded area illustrates that 0.0228 of the area under the curve falls to the right of \( \mu + 2\sigma \). Thus, the probability of actual time taken per unit of output being 3 hrs. or more when the operation is under control is 2.28%.

Statistical Control Charts

Statistical quality control is used mainly for monitoring and maintaining of the quality of products and services, but within a standard costing framework, statistical control charts can be used to monitor accounting variances. For example, labour usage could be plotted on a control chart on an hourly basis for each project. This process would consist of sampling the output from a project and plotting on the chart the mean usage of resources per unit for the sample output.

A control chart is a graphic presentation of a series of past observations in which each observation is plotted relative to pre-set points on the expected distribution. Only observations beyond specified pre-set control / tolerance limits are considered for investigation. The control limits are set based on a series of
past observations of a process when it is under control, and thus working efficiently. It is assumed that the past observations can be represented by a normal distribution.

The past observations are used to estimate the population mean and the population standard deviation \( \sigma \). Assuming that the distribution of possible outcomes is normal, then, when the process is under control, we should expect

- 68.27% of the observations to fall within the range \( \mu + \sigma \) from the mean;
- 95.45% of the observations to fall within the range \( \mu + 2\sigma \) from the mean;
- 99.8% of the observations to fall within the range \( \mu + 3\sigma \) from the mean.

For example, if control limits are set based on \( 2\sigma \) from the mean then this would show 4.55% (100% - 95.45%) of future observations would result from pure chance when the process is under control. Therefore, there is a high probability that an observation outside the \( 2\sigma \) control limits is out of control.

Above Figure shows three control charts, with the outer horizontal lines representing a possible control limit of \( 2\sigma \), so that all observations outside this range are investigated.

For Project A the process is deemed to be in control because all observations fall within the control limits.

For Project B the last two observations suggest that the project is out of control. Therefore, both observations should be investigated.

With Project C, the observations would not prompt an investigation because all the observations are within the control limits. However, the last six observations show a gradually increasing usage in excess of the mean, and the process may be out of control. Statistical procedures that consider the trend in recent usage as well as daily usage can also be used.

Statistical decision models have been extended to incorporate the costs and benefits of investigation.

Decision rule to investigate if

\[ PB > C \]

Where,

- \( P \) is the probability that the process is ‘Out of Control’
- \( B \) is the benefit associated with returning the process to its ‘In-Control’ state if the process is ‘Out of Control’. Benefit represents the cost saving that will arise through bringing the system back under control and thereby avoiding variances in future periods.
- \( C \) is the cost will be incurred when an investigation is undertaken and includes the manager’s time spent on investigation, the cost of interrupting the production process, and the cost of correcting the process. \( C \) is known with certainty.

The model requires an estimate of \( P \), the probability that the process is ‘Out of Control’. Bierman et al. (1961) have suggested that the probabilities could be determined by computing the probability that a particular observation, such as a variance, comes from an ‘In Control’ distribution. It also considers that the ‘In-Control’ state can be expressed in the form of a known probability distribution such as a normal distribution.

Let us assume that the incremental cost of investigating the labour efficiency variance in our example is \( \text{₹} \)25. Assume also that the estimated benefit \( B \) from investigating a variance and taking corrective action is \( \text{₹} \)100.

Investigate if

\[ P > 25/100 \text{ or } 0.25 \]

Consider our example, the probability of an observation of 3 hrs (or larger) was 0.0228. The probability of the process being ‘Out of Control’ is one minus the probability of being ‘In Control’. Thus, \( P = 0.9772 \) (1 - 0.0228). We ascertained that the variance of 3 hrs (or larger) was 0.0228. The probability of the process being ‘Out of Control’ should be investigated if the probability that the process is ‘Out of Control’ is > 0.25.

The process should therefore be investigated.

**POSSIBLE INTERDEPENDENCE BETWEEN VARIANCES**

It is a term used to express the way in which the cause of one variance may be wholly or partially explained by the cause of another variance. For control purposes, it might therefore be essential to look at several variances together and not in isolation. Some examples of interdependence between variances are listed below:

- Use of cheaper material which is poorer quality, the material price variance will be favourable, but this can cause more wastage of materials leading to adverse usage variance.
- Using more skilled labour to do the work will result in an adverse labour rate variance, but productivity might be higher as a result due to experienced labour.
- Changing the composition of a team might result in a cheaper labour mix (favourable mix variance) but lower productivity (adverse yield variance).
- Workers trying to improve productivity (favourable efficiency variance) in order to get bonus (adverse rate variance) might use materials wastefully in order to save time (adverse materials usage).
- Cutting sales prices (adverse sales price variance) might result in higher sales demand from customers (favourable sales volume variance).
- Similarly, favourable sales price variance may result in adverse sales volume variance.
There can be a number of potential causes leading to variances in the operational costs.

### Interpretation of Variance

- **Material Variances**
  - Might be caused due to the use of a different supplier.
  - Order size can result in variance.
  - Any form of unexpected increase in buying costs such as higher delivery charges.
  - Efficiency or inefficiency associated with the buying procedure adopted.
  - Lack of appropriate inventory control can result in emergency purchase of material resulting in adverse variance.

- **Labour Variances**
  - Unexpected increase in the pay rate of labour.
  - Level of experience of the labour can impact the direct cost of labour.
  - Payment of bonuses added to the direct labour costs.

- **Overhead Variances**
  - Change in the composition of the workforce can impact direct labour costs.

### Computation of Variance

- **Sales Price Variance**
  - Higher discounts given to customers in order to encourage bulk purchases.
  - The effect of low price offers during a marketing campaign.
  - Poor performance by sales personnel.
  - Market conditions or economic conditions forcing changes in prices across the industry.

- **Labour Rate Variance**
  - Learning curve effect upon the labour efficiency levels.
  - Resource shortages causing an unexpected delay and lowering of labour efficiency levels.
  - Using inferior quality of material.
  - Introduction of new machinery resulting in improvement of labour productivity levels.

- **Fixed Overhead Variance**
  - Fixed Overhead Expenditure Variance (adverse) are caused by spending in excess of the budget.
  - Fixed Overhead Volume Variance is caused by changes in production volume.

- **Variable Overhead Variance**
  - Variable Overhead Expenditure Variance are often caused by changes in machine running costs.
  - Variable Overhead Efficiency Variances—Causes are similar to those for a direct labour efficiency variance.

- **Labour Efficiency Variance**
  - Improvement in work or productivity efficiency.
  - Workforce mix can have an impact upon labour efficiency levels.
  - Industrial action in relation to workforce.
  - Poor supervision of the workforce.

### Reporting of Variance

Computation of variances and their reporting is not the final step towards the control of various elements of cost. It in fact demands an analysis of variances from the side of the executives, to ascertain the correct reasons for their occurrence. After knowing the exact reasons, it becomes their responsibility to take necessary steps so as to stop the re-occurrence of adverse variances in future. To enhance the utility of such a reporting system it is necessary that such a system of reporting should not only be prompt but should also facilitate the concerned
Variance analysis may encourage short-termism due to their inherent tendency towards short-term, quantified objectives and results.

A negative perception of an organization's variance analysis process can also encourage other sub-optimal behaviour among employees such as attempts to include budget slacks.

The behavioural issues connected with variance analysis could be managed by participating employees during budget setting so that they do not assess the procedure as biased. It is also vital for an organization's performance measurement system to be based on an extensive range of quantitative and qualitative measures so as to encourage management to adopt a long-term view that is aligned with an organization's strategic direction.

Variance analysis for evaluating performance can have strong ethical consequences. For example, standard costing methods have been proposed for medicine as a means for improving performance. Interpretation of a favourable variance may be difficult because it either reflects insufficient treatment or compliance to guidelines. Most hospitals in various countries are reimbursed as specified by the diagnostic related groups (DRG). Each DRG has specified standard “length of stay.” If a patient leaves the hospital early, the hospital is financial impacted favourably but a patient staying longer than the specified time costs the hospital money.

Variance reports should be prepared after keeping in view its ultimate use and its periodicity. Such reports should highlight the essential cost deviations and possibilities for their improvements. In fact the variance reports should give due regard to the following points:

- **The concerned executives should be informed** about what the cost performance should have been.
- **How close** the actual cost performance is with reference to standard cost performance.
- **The analysis and causes of variances.**
- **Reporting should be based on the principle of management by exception.**
- **The magnitude of variances** should also be stated.

**BEHAVIOURAL ISSUES**

**Variance analysis may encourage short-termism** due to their inherent tendency towards short-term, quantified objectives and results.

A negative perception of an organization’s variance analysis process can also encourage other sub-optimal behaviour among employees such as attempts to include budget slacks.

The behavioural issues connected with variance analysis could be managed by participating employees during budget setting so that they do not assess the procedure as biased. It is also vital for

**STANDARD COSTING IN CONTEMPORARY BUSINESS ENVIRONMENT**

- **Products not to be standardised**
- **Standard costs become outdated quickly**
- **Production is highly automated**
- **Often use ideal standards**
- **The emphasis is on continuous improvement**
- **Analysis may not give enough detail**
- **Reports may arrive too late to solve problems**

**FORMULAE**

Operating Profit Variance

- Cost Variance
- Sales Margin Variance

- Direct Material Variance
- Direct Labour Variance
- Fixed Overhead Variance
- Variable Overhead Variance
- Sales Margin Price Variance
- Sales Margin Volume Variance

- Price Variance
- Usage Variance
- Rate Variance
- Efficiency Variance
- Expenditure Variance
- Volume Variance
- Expenditure Variance
- Efficiency Variance
- Sales Margin Mix Variance
- Sales Margin Quantity Variance

- Mix Variance
- Yield Variance
- Gang Variance
- Sub-efficiency Variance
- Capacity Variance
- Efficiency Variance
- Market Size Variance
- Market Share Variance
Sales Variances (Absorption Costing)

**Sales Margin Variance***

(Actual Margin) Less (Budgeted Margin)

\[
\text{[(AQ \times AM) – (BQ \times SM)]}
\]

**Sales Margin Price Variance**

(Actual Margin) Less (Standard Margin)

\[
\text{[(AM \times AQ) – (SM \times AQ)]}
\]

**Sales Margin Volume Variance**

(Standard Margin) Less (Budgeted Margin)

\[
\text{[(SM \times AQ) – (SM \times BQ)]}
\]

**Sales Margin Mix Variance**

(Standard Margin) Less (Revised Standard Margin)

\[
\text{[(AQ \times SM) – (RAQ \times SM)]}
\]

Note:

- BQ = Budgeted Sales Quantity
- AQ = Actual Sales Quantity
- RAQ = Revised Actual Sales Quantity
- SM = Standard Margin
- AM = Actual Market Share
- SC = Standard Cost per unit
- AC = Actual Contribution
- RAQ = Revised Actual Sales Quantity
- BQ = Budgeted Sales Quantity
- AQ = Actual Sales Quantity
- RAQ = Revised Actual Sales Quantity
- SC = Standard Cost per unit
- AC = Actual Contribution

**Market Size Variance**

Budgeted Market Share % \times (Actual Industry Sales Quantity \text{in units} – Budgeted Industry Sales Quantity \text{in units}) \times (Average Budgeted Margin \text{per unit})

**Market Share Variance**

(Actual Market Share % – Budgeted Market Share %) \times (Actual Industry Sales Quantity \text{in units}) \times (Average Budgeted Margin \text{per unit})

**Market Size Variance + Market Share Variance**

(Required Sales Quantity \text{in units} – Total Budgeted Quantity \text{in units}) \times (Average Budgeted Margin \text{per unit}) \text{Add}

\[
\text{(Total Actual Quantity \text{in units} – Required Sales Quantity \text{in units})} \times \text{(Average Budgeted Margin \text{per unit})}
\]

**Sales Margin Quantity Variance**

(Required Sales Quantity \text{in units} – Total Budgeted Quantity \text{in units}) \times (Average Budgeted Margin \text{per unit}) \text{Add}

\[
\text{(Total Actual Quantity \text{in units} – Required Sales Quantity \text{in units})} \times \text{(Average Budgeted Margin \text{per unit})}
\]

Note:

- BQ = Budgeted Sales Quantity
- AQ = Actual Sales Quantity
- RAQ = Revised Actual Sales Quantity
- AM = Actual Market Share
- SM = Standard Margin
- AC = Actual Contribution

Sales Variances (Marginal Costing)

**Sales Contribution Variance**

(Actual Contribution) Less (Budgeted Contribution)

\[
\text{[(AQ \times AC) – (BQ \times SC)]}
\]

**Sales Contribution Price Variance**

(Actual Contribution) Less (Standard Contribution)

\[
\text{[(AC \times AQ) – (SC \times AQ)]}
\]

**Sales Contribution Volume Variance**

(Standard Contribution) Less (Budgeted Contribution)

\[
\text{[(SC \times AQ) – (SC \times BQ)]}
\]

**Sales Contribution Mix Variance**

(Standard Contribution) Less (Revised Standard Contribution)

\[
\text{[(AQ \times SC) – (RAQ \times SC)]}
\]

**Market Size Variance**

Budgeted Market Share % \times (Actual Industry Sales Quantity \text{in units} – Budgeted Industry Sales Quantity \text{in units}) \times (Average Budgeted Contribution \text{per unit})

**Market Share Variance**

(Actual Market Share % – Budgeted Market Share %) \times (Actual Industry Sales Quantity \text{in units}) \times (Average Budgeted Contribution \text{per unit})

**Market Size Variance + Market Share Variance**

(Required Sales Quantity \text{in units} – Total Budgeted Quantity \text{in units}) \times (Average Budgeted Contribution \text{per unit}) \text{Add}

\[
\text{(Total Actual Quantity \text{in units} – Required Sales Quantity \text{in units})} \times \text{(Average Budgeted Contribution \text{per unit})}
\]

Note:

- BQ = Budgeted Sales Quantity
- AQ = Actual Sales Quantity
- RAQ = Revised Actual Sales Quantity
- AM = Actual Market Share
- SM = Standard Margin
- AC = Actual Contribution
- SC = Standard Cost per unit

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In terms of profit

- Sales Margin Variance
- Sales Margin Price Variance
- Sales Margin Volume Variance
- Sales Margin Mix Variance
- Market Size Variance
- Market Share Variance
- Market Size Variance + Market Share Variance

**Note:**

- AM = Actual Margin
- AC = Actual Contribution
- BQ = Budgeted Sales Quantity
- AQ = Actual Sales Quantity
- RAQ = Revised Actual Sales Quantity
- SM = Standard Margin
- AM = Actual Market Share
- SC = Standard Cost per unit
- AC = Actual Contribution

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Sales Margin Volume Variance is equal to Sales Volume Variance \times Budgeted PV Ratio
Sales Margin Volume Variance is equal to Sales Volume Variance \times Budgeted Net Profit Ratio
Sales Contribution Volume Variance is equal to Sales Volume Variance \times Budgeted Net Profit Ratio

A Relation

Sales Margin Volume Variance in terms of Profit & Contribution

<table>
<thead>
<tr>
<th>Sales Margin Volume Variance</th>
<th>Standard Margin Per Unit \times (Actual Quantity – Budgeted Quantity) Or</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales Margin Volume Variance</td>
<td>{Standard Contribution Per Unit – Standard Fixed Overheads Per Unit} \times (Actual Quantity – Budgeted Quantity) Or</td>
</tr>
<tr>
<td>Sales Margin Volume Variance</td>
<td>{Standard Contribution Per Unit – Standard Fixed Overheads Per Unit} \times (Actual Quantity – Budgeted Quantity) Or</td>
</tr>
<tr>
<td>Sales Margin Volume Variance</td>
<td>Sales Contribution Volume Variance – Fixed Overhead Volume Variance Or</td>
</tr>
<tr>
<td>Sales Contribution Volume Variance</td>
<td>Sales Margin Volume Variance + Fixed Overhead Volume Variance</td>
</tr>
</tbody>
</table>

Note: Production units equals to Sales units for both actual & budget.

Sales Variances (Turnover or Value)

Sales Variance

(Actual Sales ) Less (Budgeted Sales)

\[ (AQ \times AP) – (BQ \times SP) \]

Sales Price Variance

(Standard Sales) Less

\[ (AP \times AQ) – (SP \times AQ) \]
Or \[ AQ \times (AP – SP) \]

Sales Volume Variance

(Standard Sales) Less

\[ (SP \times AQ) – (BQ \times SP) \]
Or \[ SP \times (AQ – BQ) \]

Sales Mix Variance

(Revised Standard Sales) Less

\[ (RAQ \times SP) – (BQ \times SP) \]
Or \[ SP \times (RAQ – BQ) \]

Sales Quantity Variance

(Revised Standard Sales) Less

\[ (RAQ \times AQ) – (BQ \times AQ) \]
Or \[ AQ \times (RAQ – AQ) \]

Sales Price Variance

Standard Price

\[ (SQ \times SP) – (AQ \times AP) \]

Sales Volume Variance

Standard Price

\[ (SQ \times SP) – (AQ \times AP) \]

Alternative Formula

Budgeted Price

\[ [(AQ \times AP) – (BQ \times SP)] \]

Direct Material Total Variance

[Standard Cost* Less Actual Cost]

The difference between the Standard Direct Material Cost of the actual production volume and the Actual Cost of Direct Material

\[ (SQ \times SP) – (AQ \times AP) \]

Direct Material Price Variance

[Standard Cost of Actual Quantity Less Actual Cost]

The difference between the Standard Price and Actual Price for the Actual Quantity

\[ (SP – AP) \times AQ \]
Or \[ (SP \times (AQ – AP)) \]

Direct Material Usage Variance

[Standard Cost of Standard Quantity for Actual Production Less Standard Cost of Actual Quantity]

The difference between the Standard Quantity specified for actual production and the Actual Quantity used, at Standard Purchase Price

\[ (SQ – RAQ) \times SP \]
Or \[ (SQ \times (AP – AQ)) \]

Direct Material Yield Variance

[Standard Cost of Standard Quantity for Actual Production Less Standard Cost of Actual Quantity in Standard Proportion]

The difference between the Standard Quantity specified for actual production and Actual Quantity in standard proportion, at Standard Purchase Price

\[ (RAQ – AQ) \times SP \]
Or \[ (RAQ \times (AP – AQ)) \]

Direct Material Mix Variance


The difference between the Actual Quantity in standard proportion and Actual Quantity in actual proportion, at Standard Purchase Price

\[ (RAQ \times SP) – (AQ \times SP) \]
Or \[ (RAQ \times (SP – AQ)) \]

Alternative Formula

Budgeted Price

\[ [(AQ \times AP) – (BQ \times SP)] \]

Market Size Variance

(Budgeted Market Share % \times (Actual Industry Sales Quantity in units – Budgeted Industry Sales Quantity in units)) \times (Average Budgeted Price per unit) Or

(Budgeted Market Share % \times (Actual Industry Sales Quantity in units – Budgeted Industry Sales Quantity in units)) \times (Average Budgeted Price per unit) Or

(Rquired Sales Quantity in units – Total Budgeted Quantity in units) \times (Average Budgeted Price per unit)

Market Share Variance

(Budgeted Market Share % \times (Actual Industry Sales Quantity in units – Budgeted Industry Sales Quantity in units)) \times (Average Budgeted Price per unit) Or

(Budgeted Market Share % \times (Actual Industry Sales Quantity in units – Budgeted Industry Sales Quantity in units)) \times (Average Budgeted Price per unit) Or

(Total Actual Quantity in units – Required Sales Quantity in units) \times (Average Budgeted Price per unit)

Note:

BQ = Budgeted Sales Quantity
AQ = Actual Sales Quantity
RAQ = Revised Actual Sales Quantity
SP = Standard Selling Price per Unit
AP = Actual Selling Price per Unit
**Direct Labour Idle Time Variance**

The difference between the Actual Hours paid and the Actual Hours worked at Standard Rate

\[
[AH^* - AH^#] \times SR \quad \text{Or} \quad [(AH^* \times SR) - (AH^# \times SR)]
\]

**Fixed Production Overhead Variances**

- **Fixed Overhead Total Variance**
  
  (Absorbed Fixed Overheads) Less (Actual Fixed Overheads)

- **Fixed Overhead Expenditure Variance**
  
  (Budgeted Fixed Overheads) Less (Actual Fixed Overheads)

- **Fixed Overhead Volume Variance**
  
  (Absorbed Fixed Overheads) Less (Budgeted Fixed Overheads)

- **Fixed Overhead Efficiency Variance**
  
  (Absorbed Fixed Overheads) Less (Budgeted Fixed Overheads for Actual Hours')

- **Fixed Overhead Capacity Variance**
  
  (Budgeted Fixed Overheads for Actual Hours') Less (Budgeted Fixed Overheads)

Idle Time is a period for which a workstation is available for production but is not used due to e.g. shortage of tooling, material, or operators. During Idle Time, Direct Labour Wages are being paid but no output is being produced. The cost of this can be identified separately in an Idle Time Variance, so that it is not ‘hidden’ in an adverse Labour Efficiency Variance.

Some organizations face Idle Time on regular basis. In this situation, the Standard Labour Rate may include an allowance for the cost of the expected idle time. Only the impact of any unexpected or abnormal Idle Time would be included in the Idle Time Variance.

---

**Material Purchase Price Variance**

\[
\text{[Standard Cost of Actual Quantity – Actual Price]}
\]

The difference between the Standard Price and Actual Price for the actual quantity of material purchased:

\[
= [(SP – AP) \times PQ] - [(SP \times PQ) – (AP \times PQ)]
\]

**Direct Labour Variances**

- **Direct Labour Idle Time Variance**

  (The difference between the Standard Direct Labour Cost and the Actual Direct Labour Cost incurred for the production achieved)

  \[
  [(SH \times SR) - (AH^* \times AR)]
  \]

- **Direct Labour Rate Variance**

  (The difference between the Standard Rate per hour and the Actual Rate paid for the Actual Hours worked)

  \[
  = [(SR - AR) \times AH^*] \quad \text{Or} \quad [(SR \times AH^*) - (AR \times AH^*)]
  \]

- **Direct Labour Efficiency Variance**

  (The difference between the Standard Direct Labour Cost and the Actual Direct Labour Cost incurred for the production achieved)

  \[
  = [(SH \times SR) - (AH^* \times AR)]
  \]

- **Direct Labour Mix Variance Or Gang Variance**

  (The difference between the Actual Hours worked in standard proportion and Actual Hours worked in actual proportion, at Standard Rate)

  \[
  = [(RAH \times SR) - (AH^* \times SR)] \quad \text{Or} \quad [(RAH \times SR) - (AH^* \times SR)]
  \]

  **Alternative Formula**

  Total Actual Time Worked (hours) \times \{Average Standard Rate per hour of Standard Gang - Average Standard Rate per hour of Actual Gang\]

- **Direct Labour Yield Variance Or Sub-Efficiency Variance**

  (The difference between the Standard Hours specified for actual production and Actual Hours worked in standard proportion, at Standard Rate)

  \[
  = [(SH \times RAH) - (SH \times SR)] \quad \text{Or} \quad [(SH \times RAH) - (SH \times SR)]
  \]

  **Alternative Formula**

  Average Standard Rate per hour of Standard Gang \times \{Total Standard Time (hours) - Less Total Actual Time Worked (hours)\]
Overhead Variances can also be affected by idle time. It is usually assumed that Overheads are incurred when labour is working, not when it is idle. Accordingly, $\text{hours worked}$ has been considered for the calculation of Variable and Fixed Overheads Variances.

**Variable Overhead Total Variance**

$$\text{(Budgeted Variable Overheads for Actual Hours)} - \text{(Actual Variable Overheads)}$$

**Fixed Overhead Total Variance**

$$\text{(Absorbed Fixed Overheads)} \text{ Less } \text{(Actual Fixed Overheads)}$$

**Fixed Overhead Expenditure Variance**

$$\text{(Budgeted Fixed Overheads)} \text{ Less } \text{(Actual Fixed Overheads)}$$

**Fixed Overhead Volume Variance**

$$\text{(Absorbed Fixed Overheads)} \text{ Less } \text{(Budgeted Fixed Overheads)}$$

**Fixed Overhead Capacity Variance**

$$\text{(Budgeted Fixed Overheads for Actual Hours*)} \text{ Less } \text{(Possible Fixed Overheads)}$$

**Fixed Overhead Efficiency Variance**

$$\text{(Absorbed Fixed Overhead)} \text{ Less } \text{(Budgeted Fixed Overheads for Actual Hours*)}$$

**Variable Overhead Expenditure (Spending) Variance**

$$\text{(Budgeted Variable Overheads for Actual Hours*)} \text{ Less } \text{(Actual Variable Overheads)}$$

**Fixed Overhead Calendar Variance**

$$\text{(Possible Fixed Overheads)} \text{ Less } \text{(Budgeted Fixed Overheads)}$$

**Fixed Overhead Volume Variance-I**

$$\text{(Absorbed Fixed Overheads)} \text{ Less } \text{(Budgeted Fixed Overheads)}$$

**Fixed Overhead Volume Variance-II**

$$\text{(Absorbed Fixed Overheads)} \text{ Less } \text{(Budgeted Fixed Overheads)}$$

**Variable Production Overhead Variances**

**Variable Overhead Total Variance**

$$\text{(Standard Variable Overheads for Production – Actual Variable Overheads)}$$

**Fixed Overhead Efficiency Variance**

$$\text{(Absorbed Fixed Overheads)} \text{ Less } \text{(Budgeted Fixed Overheads for Actual Hours*)}$$

**Fixed Overhead Capacity Variance**

$$\text{(Budgeted Fixed Overheads for Actual Hours)} \text{ Less } \text{(Budgeted Fixed Overheads)}$$

$$\text{Or}$$

$$\text{(Standard Fixed Overhead Rate per Hour × Standard Hours for Actual Output) – (Standard Fixed Overhead Rate per Hour × Budgeted Output)}$$

$$\text{Or}$$

$$\text{(Budgeted Fixed Overhead Rate per Unit × Actual Output – (Budgeted Fixed Overhead Rate per Unit × Budgeted Output))}$$

**Variable Overhead Expenditure (Spending) Variance**

$$\text{(Budgeted Variable Overheads for Actual Hours*)} \text{ Less } \text{(Actual Variable Overheads)}$$

**Variable Overhead Efficiency Variance**

$$\text{(Standard Variable Overheads for Production)} \text{ Less } \text{(Budgeted Variable Overheads for Actual Hours*)}$$

**Fixed Overhead Calendar Variance**

$$\text{(Possible Fixed Overheads)} \text{ Less } \text{(Budgeted Fixed Overheads)}$$

**Fixed Overhead Volume Variance-I**

$$\text{(Absorbed Fixed Overheads)} \text{ Less } \text{(Budgeted Fixed Overheads)}$$

**Fixed Overhead Volume Variance-II**

$$\text{(Absorbed Fixed Overheads)} \text{ Less } \text{(Budgeted Fixed Overheads)}$$

Note:

- **Standard Fixed Overheads for Production (Absorbed)**
  - Standard Fixed Overhead Rate per Unit × Actual Production in Units
  - Standard Fixed Overhead Rate per Hour × Standard Hours for Actual Production
- **Budgeted Fixed Overheads**
  - It represents the amount of fixed overhead which should be spent according to the budget or standard during the period
  - Standard Fixed Overhead Rate per Unit × Budgeted Production in Units
  - Standard Fixed Overhead Rate per Hour × Budgeted Hours
- **Actual Fixed Overheads Incurred**
  - Standard Fixed Overhead Rate per Hour × Actual Hours
- **Possible Fixed Overheads**
  - Expected Fixed Overhead for Actual Days Worked
  - **Budgeted Fixed Overhead × Actual Days**
  - **(*)**
  - Fixed Overhead Total Variance also known as ‘Fixed Overhead Cost Variance’

Note:

- **Standard Variable Overheads for Production/Charged to Production**
  - Standard/Budgeted Variable Overhead Rate per Unit × Actual Production (Units)
  - Standard Variable Overhead Rate per Hour × Standard Hours for Actual Production
- **Actual Overheads Incurred**
  - **Budgeted Variable Overheads for Actual Hours**
  - Standard Variable Overhead Rate per Hour × Actual Hours
  - **(*)**
  - Variable Overhead Total Variance also known as ‘Variable Overhead Cost Variance’
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UNIT III

DETERMINATION OF PROFIT

activity-based costing

Activity-based costing provides a more accurate determination of non-unit-based costs vary with respect to other cost drivers. In contrast, the volume based approach combines the cost of these activities and treat them as fixed costs since they do not vary with output volume. Activity based costing provides a more accurate determination of costs because it separately identifies and traces non-unit based costs to products rather than combining them in a pool of fixed costs as volume based approach does.

The Break-even can then be expressed as follows:

\[ \text{Break-even units} = \frac{[\text{Fixed costs} + (\text{Setup cost} \times \text{Number of Setups}) + (\text{Engineering Cost} \times \text{Number of Engineering Hours})]}{\text{(Price - Unit Variable Cost)}} \]

A comparison of the ABC break-even point with the conventional break-even point reveals two important differences.

First, the fixed costs differ. Some costs previously identified as being fixed may actually vary with non-unit cost drivers, in this case setups and engineering hours.

Second, the numerator of the ABC break-even equation has two non-unit-variable cost terms: one for batch-related activities and one for product-sustaining activities.

“The use of activity-based costing does not mean that CVP analysis is less valuable. In fact, it becomes more valuable, since it delivers more precise understandings concerning cost behaviour. These understandings produce better decisions. CVP analysis within an activity-based framework, however, must be improved”.

CVP Analysis - Conditions of Uncertainty

Cost-Volume-Profit analysis suffers from a limitation that it does not consider adjustments for risk and uncertainty. A possible approach by which uncertainty can be incorporated into the analysis is to apply normal distribution theory.

If the manager is comparing this product with other products then this approach will enable him or her to assess the risk involved for each product, as well as to compare the relative break-even points and expected profits. The analysis can be changed to include fixed cost, variable cost and selling price as uncertain variables. The effect of treating these variables as uncertain will lead to an increase in the standard deviation because the variability of the variable cost, fixed cost and selling price will add to the variability of profits.

Probability distributions play important role in providing decision-making information. It provides information that helps the decision maker better understand the risks and uncertainties associated with the problem. Ultimately, this information may assist the decision maker in reaching a good decision.
Example
The selling price of a product for the next accounting period is ₹110, and the variable cost is estimated to be ₹70 per unit. The budgeted fixed costs for the period are ₹1,63,500. Estimated sales for the period are 5,000 units. It is assumed that the probability distribution for the estimated sales quantity is normal with a standard deviation of 125 units. The selling price, variable cost and total fixed cost are assumed to be certain. What is the probability of profits being greater than ₹40,000?

The calculations are as follows:
Expected Profit \(= 5,000 \times (₹110 – ₹70) – ₹1,63,500\) = ₹36,500
Standard Deviation \(= 125\)
Probability for profit (₹40,000): \[Z = \frac{x - \mu}{\sigma} = \frac{₹40,000 - ₹36,500}{₹5,000}\]
\[Z = +0.70\]
Probability (\(Z = +0.70\)) = 0.7580

We see that a value of 40,000 corresponds to a value of \(Z = 0.70\) on the standard normal distribution. Using the standard normal probability table, we see that the area under the standard normal curve to the left of \(Z = 0.70\) is 0.7580. Thus, 1.000 − 0.7580 = 0.2420 is the probability that profit will exceed 40,000.

Therefore, the cost equation for Just in Time can be expressed as follows:
\[
\text{Total Cost} = \text{Fixed Cost} + (\text{Unit variable Cost} \times \text{Number of Units}) + (\text{Engineering Cost} \times \text{Number of Engineering hours})
\]

“Managers often use CVP analysis to guide other decisions, many of them are of strategic nature due to tremendous potential of increase in the profitability and organisational effectiveness”

CVP Analysis in Service and Non-Profit Organisations
CVP analysis can also be applied to decisions by service and non-profit organisations. To apply CVP analysis in service and non-profit organisations, we need to focus on measuring their output, which is different from tangible units sold by manufacturing and merchandising companies.

CVP Analysis in Just in Time Environment
In a firm that has implemented Just in Time, the variable cost per unit sold is reduced, and fixed costs are increased. Direct labor is considered as fixed instead of variable. On the other hand, direct material vary with production volume (unit- based variable cost) due to emphasis on total quality and long-term purchasing. Waste, scrap, and quantity discounts are removed. Other unit-based variable costs, such as power and sales commissions, also exist. Further, the batch - level variable is absent as in Just in Time, the batch is equal to one unit.
For a cost to be relevant to a decision it must be

A future cost, i.e. related to the future.

A differential Cost, i.e. its level must be different for each of the alternatives under consideration.

Accordingly, only future costs can be relevant to decisions. However, to be relevant, a cost must not only be a future cost but must also differ from one alternative to another. If a future cost is the same for more than one alternative, it has no effect on the decision. Such a cost is irrelevant cost. The ability to identify relevant and irrelevant costs is a vital decision making skill.

Non-Financial Considerations

With increase in competition, dynamic market changes and changing needs of customers, non-financial information have gained relevance in the decision-making process. Information to which monetary value can be attached is in the nature of financial information. Information of an organization like number of employees, employee morale, customer satisfaction that cannot be expressed in monetary terms is termed non-financial in nature. Non-financial information is long term focused and ensures profitability and sustainability in long term for an organization thereby evaluating the internal performance of the company. Non-financial information which a company should focus that would turn out to be advantageous while making decisions for a company are:

- Ethics
  - Ethics are moral principles that guide the conduct of individuals. By their behaviour and attitude, managers set the company culture.
  - Identify an ethical decision by using personal ethical standards of honesty and fairness.
  - Consider obligations and responsibilities to those that will be affected by decision.

- Decision Making Model
  - Ethics
  - Decision Making Model
  - Identify the consequences of the decision and its effect on others.
  - Make a decision that is ethical and fair to those affected by it.

- Quality
  - Define The Problem
    - Due to economic downturn, it is not feasible to operate the plant at the normal capacity, at least during the quarter.
  - Identify Alternatives
    - Shut down the plant
    - Operate the plant

- Employee Satisfaction
  - Total Relevant Costs & Benefits
    - Alt 1: Relevant <Costs> + Benefits
    - Alt 2: Relevant <Costs> + Benefits
    - Differential Cost
  - Identify Costs, Benefits
    - Alt 1: <Costs> + Benefits
    - Alt 2: <Costs> + Benefits

- Customer Satisfaction
  - Assess Non-Financial Factors
    - Interest of workers.
    - Re-establishment of the market for the product.
    - Plant may get rusted.
  - Make Decision
    - Operate the plant

Decisions made in a business rest on the balance between the perceived effects of financial and non-financial information. Following are Limitations of Non-Financial Information:

- Time and Cost of the company involved.
- Subjective measurement – No proper of common denominator to measure performance.
- Improper measures will lead the companies to draw attention on wrong objectives.
- Lack of Statistical Reliability – Possible chances of error.
- Management Disintegration when excess of measures and indications used by the company.
Short run decisions are many and varied but some of the more important ones, we shall look in this chapter include:

### Outsourcing Decision
Outsourcing decision is often called a ‘make or buy’ decision. It involves a decision of whether to continue ‘making’ a product versus ‘buying’ it from an external firm. Outsourcing enables a firm to:

- reduce costs or
- benefit from supplier efficiencies

Outsourcing decision requires **incremental analysis.** The incremental amounts are based on the difference in the cost of buying a product or service compared to the cost of producing the item or providing the service in house.

#### Incremental Costs

Incremental Costs are the additional costs incurred from outsourcing. The main cost is the purchase price of the products or the cost of the services that are being provided by external firms.

#### Incremental Cost Savings

Incremental Cost Savings are reductions of costs that will no longer be incurred as a result of outsourcing. They are often called avoidable costs because if a company outsources, it can ‘avoid’ certain costs. Variable product cost savings are always incremental. Because they reduce total costs, they cause profits to increase. In some circumstances, a portion of fixed costs can be saved such as equipment rental costs or supervisor salaries that can be avoided.

#### Opportunity Costs

Opportunity Costs are the costs forgone as a result of selecting a different alternative. They are always incremental. For example, if a company decides to outsource, it is able to lease its factory space that the product being outsourced no longer will occupy.

### Sell or Further Process

Sell or process further refers to a decision-making situation where an executive has to decide either to sell a component/ product/raw material as it is or alternatively process it further by incurring additional expenses. For instance, sometime, a redundant material lying in stores for a long time may be sold as scrap at a small value or may be thrown away as waste. This material may, however, be converted into a product of higher saleable value by carrying out some further operations or processes. On further processing the component/product/raw material may not only be improved or reconditioned but will mostly fetch a higher sale value as well. Here if the differential sales value is more than the further processing cost, then it is beneficial to process the product further otherwise sell it without further processing. Such type of decision making problems usually arise in the case of joint products.

### Outsourcing Decisions - Accept or Reject?

- If incremental cost savings + opportunity costs < incremental costs
  - reject the outsourcing, unless qualitative factors fiercely impact the decision.
- If incremental cost savings + opportunity costs > incremental costs
  - accept the outsourcing unless qualitative factors fiercely impact the decision.
- If incremental cost savings + opportunity costs are = incremental costs
  - focus primarily on qualitative factors to evaluate the decision.

### Qualitative Factors

While considering the decision to Outsourcing the management should consider qualitative aspects like quality of goods, reliability of suppliers, impact on the customers and suppliers etc.

### A firm generally decides to outsource:

- If it costs less rather than to manufacture it internally;
- If the return on the necessary investment to be made to manufacture is not attractive enough;
- If the company does not have the requisite skilled manpower to make;
- If the concern feels that manufacturing internally will mean additional labour problem;
- If adequate managerial manpower is not available to take charge of the extra work of manufacturing;
- If the component shows much seasonal demand resulting in a considerable risk of maintaining inventories;
- If transport and other infrastructure facilities are adequately available;
- If the process of making is confidential or patented;
- If there is risk of technological obsolescence for the component such that it does not encourage capital investment in the component.

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There are two rules to follow when ascertaining whether the further processing is worthwhile:

Only the incremental costs and revenues of the further process are relevant
The joint process costs are irrelevant - they are already ‘sunk’ at the point of separation

Qualitative Factors
Qualitative factors related to processing further decisions include resource availability such as the readiness of employees to work extra hours to further process the products and availability of materials required for the processing. In addition, the influence on customers that prefer the original product should also be considered, as sales to these customers may be lost to competitors.

Minimum Pricing Decisions
The minimum pricing approach is a useful method in situations where there is a lot of intense competition, surplus production capacity, clearance of old inventories, getting special orders and/or improving market share of the product.

The minimum price should be set at the incremental costs of manufacturing, plus opportunity costs (if any).

For this type of pricing, the selling price is the lowest price that a company may sell its product at usually the price will be the total relevant costs of manufacturing.

Keep or Drop Decisions
Another type of operating decision that management must make is whether to keep or drop unprofitable segments, such as product lines, services, divisions, departments, stores, or outlets.

The decision is based on whether or not the segment’s revenue exceeds the costs directly traceable to the segment, including any direct fixed costs.

- **Incremental Revenue** is the difference in revenue between the original sales revenue and the new revenue that is expected to result due to dropping a segment.
- If dropping a product will cause an increase in demand for another product, the additional revenue for the other product should be taken into consideration.
- Variable costs associated with a segment to be dropped are Incremental Cost Savings that cause profit to increase.
- Direct fixed costs related to a segment being dropped are avoidable if that segment is dropped because they can be eliminated if the segment is dropped.
- **Opportunity Costs** are common in keep or drop decisions. They often arise due to rental of production space that will become vacant if the decision is made to drop a product. Opportunity costs are always incremental.

**Decision - Keep or Drop?**

- If incremental cost savings > incremental revenue lost
- If incremental revenue lost = incremental cost savings
- If incremental cost savings < incremental revenue lost

- the segment should be dropped, unless qualitative effects must be used to make the decision.
- the segment should not be dropped, unless qualitative characteristics fiercely impact the decision.

Qualitative Factors
Qualitative factors related to keep or drop decisions often include considerations of employees that will be terminated if the product is dropped, the effect a lay off might have on employees that are not terminated, effects of suppliers from which the materials needed for the product will no longer be purchased, and the effect of customers who previously purchased the product being dropped.

Special Order Decisions
Special order decisions focus on whether a special priced order should be accepted or rejected. These orders often can be attractive, especially when the firm is operating below its maximum productive capacity.

Price discrimination laws require that firms sell identical products at the same price to competing customers in the same market. This law does not apply to:
- Noncompeting customers from the same market.
- Potential customers in markets not ordinarily served.

Special order decisions are based on incremental analysis. Incremental analysis enables managers to emphasis on the relevant areas of a decision.

- **Incremental Revenues** are the additional revenues generated from accepting the special order. The revenue can result from additional sales of products or from providing services.
- If the company is operating at less than capacity, revenue of regular customers will not be affected.
- If the company is operating at capacity, it will have to give up some regular sales in order to provide the special order.

- **Incremental Costs** are the additional costs incurred from accepting a special order. Variable operating costs include special packing, commissions, and shipping costs.
- Most often, a firm’s recurring fixed costs will remain the same in total if a special order is accepted.
- Occasionally the acceptance of a special order may cause additional fixed costs such as special purpose tool, Inspection Cost. In these cases, these additional fixed costs are relevant and should be considered in an incremental analysis.
Product Mix Decision

Many times, the management has to take a decision whether to produce one product or another instead. Generally, decision is made on the basis of contribution of each product. Other things being the same the product which yields the highest contribution is best one to produce. But, if there is shortage or limited supply of certain other resources which may act as a key factor like for example, the machine hours, then the contribution is linked with such a key factor for taking a decision.

For example, in an undertaking the availability of machine capacity is limited and the machine hours required for one unit of the two products are different. In such cases the contribution is to be linked with the machine hour and the product which yields the highest contribution per machine hour is to be preferred for taking decision.

Dangers of Concentrating Excessively on a Short-Run Time Horizon

♦ It is vital that the information presented for decision-making relates to the appropriate time horizon.
♦ If inappropriate time horizons are selected there is a risk that misleading information will be presented.
♦ Long-term considerations should always be taken into account when special pricing decisions are being evaluated.
♦ The effect of accepting a series of successive special orders over several periods constitutes a long-term decision.
♦ If demand from normal business is considered to be permanently insufficient to utilize existing capacity, then a long-term capacity decision is required.
♦ This decision should be based on a comparison of the relevant revenues and costs arising from using the excess capacity for special orders with the capacity costs that can be eliminated if the capacity is reduced.

Sources / References:

1. CIMA Article (Feb 2010) by David Harris;
2. Accounting: An Introduction, 6/E by Peter Atrill, Eddie McLaney, David Harvey;
3. Accounting: Concepts and Applications by W. Albrecht, James Stice, Earl Stice, Monte Swain;
4. Cost Management: A Strategic Emphasis by Blocher;
5. Managerial Accounting, Hansen Mowen; Cost Accounting: A Managerial Emphasis, 13/e by Charles T. Horngren;
7. Managerial Accounting: The Cornerstone of Business Decision-Making by Maryanne M. Mowen, Don R. Hansen, Dan L. Heitger;
8. Financial & Managerial Accounting by Carl S. Warren, James M. Reeve, Jonathan Duchac;
9. Cost Management: Accounting and Control by Don Hansen, Maryanne Mowen, Liming Guan;
11. Management Accounting for Business by Colin Drury
The ‘List of Penalties under the Companies Act, 2013’ in the November 2019 issue of Students’ Journal is in continuation of the Capsule on ‘Company Law’ in the September 2019 and October 2019 issue. It covers a compilation of penalties of significant provisions from section 1 to section 148. You are advised to read the three issues together. Further, students are also advised to read the July, 2017 edition of the Study Material and relevant RTP for a thorough understanding of the relevant provisions of Companies Act, 2013, to hone your application skills. The capsules on Intermediate Paper 2: Corporate and Other Laws are intended to assist you in the process of revision of concepts discussed in the relevant publications.

### List of Penalties under the Companies Act, 2013

<table>
<thead>
<tr>
<th>Section</th>
<th>Particular</th>
<th>Penalty</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Section 4 - Memorandum</strong></td>
<td>If Co. name is reserved by giving incorrect information:</td>
<td>C, OID</td>
</tr>
<tr>
<td></td>
<td>If the Co. has not been incorporated</td>
<td></td>
</tr>
<tr>
<td></td>
<td>If Co. has been incorporated</td>
<td></td>
</tr>
<tr>
<td><strong>Section 10 A - Commencement of business etc.</strong></td>
<td>Co. commenced business or exercised any borrowing powers, without filing required declaration within 180 days or failed to file with the Registrar a verification of its registered office</td>
<td>C, OID</td>
</tr>
<tr>
<td><strong>Section 15 - Alteration of MOA and AOA to be noted in every copy</strong></td>
<td>If alteration made in the MOA or AOA of a company is not noted in every copy of the MOA or AOA.</td>
<td>C, OID</td>
</tr>
<tr>
<td><strong>Section 16 - Rectification of name of company</strong></td>
<td>Company makes default in rectification of name (which in the opinion of CG is identical to the name of company already registered.)</td>
<td>C, OID</td>
</tr>
<tr>
<td><strong>Section 17 - Copies of memorandum, articles, etc., to be given to members</strong></td>
<td>If on request of member, Co. has not provided them a copy (within 7 days) of</td>
<td>C, OID</td>
</tr>
<tr>
<td></td>
<td>• MOA</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• AOA</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Every agreement and resolution referred in Sec 117(1)</td>
<td></td>
</tr>
<tr>
<td><strong>Section 26 - Matters to be stated in prospectus</strong></td>
<td>If a prospectus is issued in contravention of provisions of Sec 26</td>
<td>C, Every other person who is knowingly a party to default</td>
</tr>
<tr>
<td><strong>Section 39 - Allotment of securities by company</strong></td>
<td>If the Co. has not returned the application money received (when minimum subscription is not received)</td>
<td>C, OID</td>
</tr>
<tr>
<td></td>
<td>If a company having a share capital has not filed return of allotment with Registrar.</td>
<td></td>
</tr>
<tr>
<td><strong>Section 40 - Securities to be dealt with in stock exchanges</strong></td>
<td>If a company is making public offer and it fails to inform to one or more stock exchange and/ or fails to follow other related provisions of Sec 40</td>
<td>C, OID</td>
</tr>
<tr>
<td><strong>Section 42 - Offer or invitation for subscription of securities on private placement</strong></td>
<td>If a company makes an offer or accepts monies in contravention of Sec 42</td>
<td>C, promoters and directors</td>
</tr>
<tr>
<td><strong>Section 53 - Prohibition on issue of shares at discount</strong></td>
<td>If a Co. does not comply with Sec 53 i.e. issues shares at discount [except as provided in Sec 54 or Sec 53 (2A)]</td>
<td>C, OID</td>
</tr>
<tr>
<td><strong>Section 56 - Transfer and transmission of securities</strong></td>
<td>If a Company make any default in the provisions of transfer of securities</td>
<td>C, OID</td>
</tr>
<tr>
<td></td>
<td>Default is made by depository or depository participant with an intention to defraud</td>
<td></td>
</tr>
<tr>
<td><strong>Section 57 - Punishment for personation of shareholder</strong></td>
<td>If a person deceitfully personates as owner of any security or interest etc. in a Company.</td>
<td>Such Person</td>
</tr>
<tr>
<td>Section</td>
<td>Particular</td>
<td>Penalty</td>
</tr>
<tr>
<td>---------</td>
<td>------------</td>
<td>---------</td>
</tr>
<tr>
<td><strong>Section 58 - Refusal of Registration and Appeal Against Refusal</strong></td>
<td>Contravention of the order of the Tribunal for registration or refusal of registration of shares</td>
<td>Any Person&lt;br&gt;Imprisonment: 1 Year to 3 Years and&lt;br&gt;Fine: ₹ 1 Lac to 5 Lac</td>
</tr>
<tr>
<td><strong>Section 59 - Rectification of register of members</strong></td>
<td>If a Company fails to comply with the orders of tribunal regarding rectification of registers of members.</td>
<td>C, OID&lt;br&gt;Ci: ₹ 1 Lac to 5 Lac&lt;br&gt;OID: ₹ 1 Lac to 3 Lac&lt;br&gt;Imprisonment: May extend to 1 Year, Or Both</td>
</tr>
<tr>
<td><strong>Section 64 - Notice to be given to Registrar for alteration of share capital</strong></td>
<td>If a Company fails to file notice to Registrar after alteration of Share Capital.</td>
<td>C, OID&lt;br&gt;Fine which may extend to ₹ 1,000 / day during which such default continues, or ₹ 5 Lac whichever is less.</td>
</tr>
<tr>
<td><strong>Section 67 - Restrictions on Purchase by Company or Giving of Loans by it for Purchase of its Shares</strong></td>
<td>Contravention of the provisions of sec 67</td>
<td>C, OID&lt;br&gt;Ci: ₹ 1 Lac to 3 Lac&lt;br&gt;OID: Fine: ₹ 1 Lac to 25 Lac&lt;br&gt;Imprisonment: May extend to 3 years</td>
</tr>
<tr>
<td><strong>Section 68 - Power of company to purchase its own securities</strong></td>
<td>If a Co. does not follow the provisions of buy back of Securities as provided in Sec 68 or any regulation made by SEBI</td>
<td>C, OID&lt;br&gt;Ci: ₹ 1 Lac to 3 Lac&lt;br&gt;OID: Fine: ₹ 1 Lac to 3 Lac&lt;br&gt;Imprisonment: May extend to 3 years Or both</td>
</tr>
<tr>
<td><strong>Section 71 - Debentures</strong></td>
<td>If default is committed in complying with the order of the Tribunal under section 71</td>
<td>OID&lt;br&gt;Fine: ₹ 2 Lac to 5 Lac&lt;br&gt;Imprisonment: May extend to 3 years Or both</td>
</tr>
<tr>
<td><strong>Section 74 - Repayment of deposits, etc., accepted before commencement of this Act</strong></td>
<td>If Company fails to repay deposit or interest thereof, within the time specified or such further time as allowed by Tribunal</td>
<td>C, OID&lt;br&gt;Ci: ₹ 1 Crore to 10 crores&lt;br&gt;OID: Fine: ₹ 25 Lac to 2 Crores&lt;br&gt;Imprisonment: May extend to 7 years Or both&lt;br&gt;The Co. is also liable to pay the amount of deposit or part thereof and the interest due</td>
</tr>
<tr>
<td><strong>Section 76 A - Punishment for Contravention of Section 73 or Section 76</strong></td>
<td>Punishment for Contravention of Sec 73 or Sec 76</td>
<td>C: In addition to payment of the amount of deposit or part thereof and the interest due, be punishable with fine ranging from ₹ 1 crore rupees or twice the amount of deposit accepted by the company, whichever is lower but which may extend to ₹ 10 crore&lt;br&gt;OID: Imprisonment which may extend to 7 years and with fine which shall not be less than ₹ 25 Lac but which may extend to ₹ 2 crore&lt;br&gt;Also, if it is proved that the OID, has contravened such provisions knowingly or wilfully with the intention to deceive Co. or its shareholders or depositors or creditors or tax authorities, he shall be liable for action under section 447</td>
</tr>
<tr>
<td><strong>Section 86 - Punishment for contravention</strong></td>
<td>If a Company contravenes the provisions of registration of Charge</td>
<td>C, OID&lt;br&gt;Ci: ₹ 1 Lac to 10 Lac&lt;br&gt;OID: Fine: ₹ 25,000 to 1 Lac&lt;br&gt;Imprisonment: May extend to 6 months Or both</td>
</tr>
<tr>
<td><strong>Section 87 - Register of members, etc</strong></td>
<td>If any person wilfully furnishes any false or incorrect information or knowingly suppresses any material information, required for registration u/s 77</td>
<td>He shall be liable for action under Sec 447</td>
</tr>
<tr>
<td><strong>Section 91 - Power to close register of members or debenture-holders or other security-holders</strong></td>
<td>If the register of members/ debenture-holders/ other security holders is closed without giving notice as provided in sec 91(1), or after giving shorter notice, or for a continuous or an aggregate period in excess of the limits specified in sec 91(1)</td>
<td>C, OID&lt;br&gt;Fine: ₹ 5,000 for every day subject to a maximum of ₹ 1 Lac</td>
</tr>
<tr>
<td>Section</td>
<td>Particular</td>
<td>Penalty</td>
</tr>
<tr>
<td>----------</td>
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</tr>
</tbody>
</table>
| **Section 92- Annual Return** | If a Company fails to file copy of Annual Return within prescribed time. | C, OID  
Fine: ₹ 50,000 and in case of continuing failure, with further penalty of ₹ 100/ day during which such failure continues, subject to a maximum of ₹ 5 Lac  
If a CS in practice certifies the AR otherwise than in conformity with the requirements of Sec 92 | CS  
Fine: ₹ 50,000 to ₹ 5 Lac |
| **Section 94- Place of keeping and inspection of Registers, Returns, etc** | Refusal for inspection or making of any extract or copy | C, OID (for each default)  
₹ 1,000/ day during which the default/ refusal continues, subject to maximum of ₹ 1 Lac  
If Company defaults in holding meeting in accordance with Sections 96, 97 and 98 or the directions of Tribunal | |
| **Section 99- Punishment for default in complying with provisions of sections 96 to 98** | If default is made in complying with the provision of Sec 102 | Every promoter, director, manager or other KMP of the company who is in default: Penalty- ₹ 50,000 to ₹ 5 Lac |
| **Section 102- Statement to be annexed to notice** | When an officer (Co. having Share capital or where Articles allow voting by proxy) fails to mention in the notice regarding the facility of proxy | OID  
₹ 5,000 |
| **Section 105- Proxies** | Violation of provisions in regard to circulation of members’ resolution. | C, OID  
₹ 25,000 |
| **Section 111- Circulation of members’ resolution** | Co. fails to file the resolution or the agreement in prescribed time | C, OID  
C: ₹ 25,000  
OID: ₹ 5,000 |
| **Section 117- Resolutions and agreements to be filed** | Co. is not complying with the provisions of Sec 118.  
If a person tempers with the minutes of proceedings of meeting  
Co. refuses for inspection or to take copy of minutes of general meeting | C, OID  
C: ₹ 25,000  
OID: ₹ 5,000  
OID including liquidator of the company, if any: ₹ 50,000 and in case of continuing failure, with further penalty of ₹ 500/ day after the first during which such failure continues, subject to a maximum of ₹ 25 Lac |
| **Section 118- Minutes of proceedings of general meeting of Board of Directors and other meeting and resolutions passed by postal ballot** | Co. fails to file the report on AGM with ROC within 30 days of conclusion of AGM | C, OID  
C: ₹ 1 Lac and in case of continuing failure, with further penalty of ₹ 500/ day after the first during which such failure continues, subject to a maximum of ₹ 5 Lac  
OID: ₹ 25,000 and in case of continuing failure, with further penalty of ₹ 500/ day after the first during which such failure continues, subject to a maximum of ₹ 5 Lac |
| **Section 124- Unpaid Dividend Account** | Co. fails to comply with requirement of Sec 124 | C, OID  
C: ₹ 5 Lac to 25 Lac  
OID: ₹ 1 Lac to 5 Lac |
| **Section 127- Punishment for failure to distribute dividends** | If the persons charged by BOD (MD, WTD in charge of finance, CFO or any other person of a company charged by the Board with the duty of complying with the provisions of this section) with the duty of maintaining accounts of the Co. contravenes the relevant provisions | See Chart in October 2019 issue of The Chartered Accountant Student journal |
| **Section 128- Books of account, etc., to be kept by company** | If persons charged with the duty of maintaining accounts of the Co. contravenes the relevant provisions | Such designated persons  
Fine: ₹ 50,000 to 5 Lac  
Imprisonment: May extend to 1 year Or both |
<table>
<thead>
<tr>
<th>Section</th>
<th>Particular</th>
<th>Penalty</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Section 129- Financial statements</strong></td>
<td>Co. contravenes the provisions of Sec 129</td>
<td>MD, WTD in charge of finance, the CFO or any other person charged by the Board with the duty of complying with the requirements of this section and in the absence of any of the officers mentioned above, all the directors shall be punishable. Fine: ₹ 50,000 to 5 Lac Imprisonment: May extend to 1 year Or both</td>
</tr>
<tr>
<td><strong>Section 134- Financial Statement, Board's report, etc</strong></td>
<td>If Company violates the provisions of Sec 134</td>
<td>C, OID C: ₹ 50,000 to 25 Lac OID: Fine: ₹ 50,000 to 5 Lac Imprisonment: Upto 3 Years Or Both</td>
</tr>
<tr>
<td><strong>Section 136- Right of member to copies of audited financial statement</strong></td>
<td>Co. fails to send copy of FS, including CFS, if any, auditor’s report and every other document required to be attached to FS, which are to be laid before at GM, to member/ trustee/ other entitled person, within the prescribed time or other provisions of Sec 136</td>
<td>C, OID C: ₹ 25,000 OID: ₹ 5,000</td>
</tr>
<tr>
<td><strong>Section 137- Copy of financial statement to be filed with Registrar</strong></td>
<td>Co. fails to file the copy of the FS with the Registrar</td>
<td>C, Other designated Officers C: ₹ 1,000/ day during which the failure continues but which shall not be more than ₹ 10 Lac. MD and CFO, if any, and, in the absence of the MD and the CFO, any other director who is charged by the Board with the responsibility of complying with the provisions of this section, and, in the absence of any such director, all the directors of the company, shall be liable to a penalty of ₹ 1 Lac and in case of continuing failure, with further penalty of ₹ 100/ day after the first during which such failure continues, subject to a max of ₹ 5 Lac.</td>
</tr>
<tr>
<td><strong>Section 140- Removal, Resignation of Auditor and Giving of Special Notice</strong></td>
<td>Auditor does not file with ROC or C&amp;AG (as the case may be), a statement indicating the reasons and other facts as may be relevant with regard to his resignation</td>
<td>Auditor Fine: ₹ 50,000 or an amt equal to remuneration of auditor, whichever is less. In case of continuing failure, further penalty of ₹ 500/ day after the first during which such default continues, subject to max of ₹ 5 Lac</td>
</tr>
<tr>
<td><strong>Section 143- Powers and Duties of Auditors and Auditing Standards</strong></td>
<td>Auditor, fails to report the matter to CG, Audit Committee or BOD (depending on the amount involved) regarding a fraud which is being or has been committed in the company by its officers or employees (for which he has reason to believe)</td>
<td>Auditor, cost accountant or company secretary in practice Fine: ₹ 1 Lac to 25 Lac</td>
</tr>
<tr>
<td><strong>Section 147- Punishment for Contravention</strong></td>
<td>See Chart in October 2019 issue of The Chartered Accountant Student journal</td>
<td></td>
</tr>
<tr>
<td><strong>Section 148- Central Government to Specify Audit of Items of Cost in Respect of Certain Companies</strong></td>
<td>Default in complying with the provisions of Sec 148</td>
<td>C, OID, Cost Auditor C &amp; OID: As per Sec 147 Cost Auditor in default: in the manner as provided in sub-sections (2) to (4) of Sec 147</td>
</tr>
<tr>
<td><strong>Section 447- Punishment for Fraud</strong></td>
<td>Fraud/ wrongful gain/ wrongful loss</td>
<td>Any person who is found to be guilty of fraud (i) Involving an amount of at least ₹ 10 Lac or 1% of the turnover of the company, whichever is lower Fine: At least amount involved in the fraud, which may extend to 3 times the amount involved in the fraud, and Imprisonment: 6 months to 10 years Also, if fraud in question involves public interest, the term of imprisonment shall not be less than 3 years. (ii) Where fraud involves an amount less than ₹ 10 Lac or 1% of the turnover of the company, whichever is lower, and does not involve public interest, Fine: May extend to ₹ 50 Lac Imprisonment: May extend to 5 years, or both</td>
</tr>
</tbody>
</table>

Here in the table:
C stands for Company
OID stands for Officer in Default
At the Foundation level, students are expected to inculcate/evolve logical thinking and reasoning skills to further develop their analytical skills. This section attempts to capture basic techniques underlying concept of direction-related problems. Here are a few Logical Reasoning Questions with explanations to get you psyched!

### CHAPTER 10: DIRECTION SENSE TESTS

1. Gopal goes 15 m south from his house, turns left and walks 30 m, again turns left and walks 45 m, then turns right and walks 7 m to reach the college. In which direction is the college from his house?
   - (a) North-East
   - (b) West
   - (c) East
   - (d) North
   **Explanation:** Answer (a)
   According to the information stated in the question, direction diagram can be drawn as follows.
   
   ![Diagram](image1)
   
   So it’s clear from the diagram that college is North-East direction from Gopal’s house.

2. Ram starts moving from a point, facing in East direction. After walking 15 m, he turned to his left and walked 25 m, before turning to his right. Then, he walked a distance of 35 m, then turned to his right and stop after walking further a distance of 25 m. Find how far Ram is from his starting point.
   - (a) 20 m
   - (b) 50 m
   - (c) 15 m
   - (d) 25 m
   **Explanation:** Answer (b), the direction map of Ram’s walk can be drawn as,
   
   ![Diagram](image2)
   
   From the figure it is clear that, Ravi is 55 m away in West direction from his original position.

3. Facing towards North, Ravi walks 35 m. He then turns left and walks 55 m. He again turns left and walks 35 m. How far is from original position and towards which direction.
   - (a) 30 m, North
   - (b) 20 m, East
   - (c) 15 m, West
   - (d) 20 m, South
   **Explanation:** Answer (c)

4. A man is facing towards East and turns through 45° clockwise again 180° clock wise and then turns through 270° anti-clock wise. In which direction is he facing now?
   - (a) West
   - (b) North-East
   - (c) South
   - (d) South-West
   **Explanation:** Answer (b)
   As shown in figure, the man initially faces in the direction of OA. On moving 45° clockwise, the man faces the direction OB. On further moving 180° clockwise, he faces in the direction of OC. Finally on moving 270° anti-clock wise, he faces the direction OD, which is North-East.

5. Kamal wants to go to university which is situated in a direction opposite to that of a temple. He starts from his house, which is in the East and comes at a four-ways place. His left side road goes to the temple and straight in front is the Bus Station. In which direction is university located?
   - (a) North
   - (b) North-East
   - (c) South
   - (d) East
   **Explanation:** Answer (c)
   Kamal comes from East towards West. He reached O (four-way place). Now university will not in front or left. It will be towards the right, so it will be north direction.
The SEBI issued a notification for easing the process for on-boarding changes in the valuation matrix of money-market debt securities. The notification states that foreign portfolio investors (FPIs) are no longer required to meet the 'broad-basing' criteria, under which at least 20 investors were required to establish a fund.

However, in order to ensure the money coming in is clean, the FPI or underlying investors — contributing a minimum of 25 per cent or identified on the basis of control — should not be part of the Sanctions List notified by the UN Security Council, and also should reside in the country identified in the public statement of the Financial Action Task Force (FATF) as delinquent countries. The erstwhile three categories of FPIs have been merged into two. Category I will include central banks, sovereign wealth funds, pension funds, banks, asset management companies, portfolio managers, and entities from FATF member countries. Category III has now been converted into category II, comprising corporate bodies, charitable organisations, family offices, individuals and unregulated funds in the form of limited partnerships and trusts.

Offshore funds floated by Indian fund houses will be permitted to invest in the domestic markets under the FPI route, and be required to obtain registration as an FPI within 180 days from the date of notification of the regulations. Transactions between multi-manager investment structures with the same beneficial owner and a common PAN have been allowed.


SEBI asks MFs to adopt waterfall approach for money market, debt securities valuation

In order to bring uniformity and consistency in valuation, market regulator SEBI has asked mutual fund houses to follow "waterfall" approach for the valuation of money market and debt securities. Under this approach, all traded securities would be valued on the basis of traded yields, subject to identification of outlier trades by the valuation agencies.

Besides, the regulator has come out with a framework relating to valuation of inter-scheme transfers and barred the use of own trades for valuation.

Further, the regulator said a money market or debt security will be classified as "below investment grade" if the long-term rating of the security issued by a Credit Rating Agency (CRA) is below BBB- or if the short-term rating of the security is below A3.


PSBs start giving loans based on customers' risk profile

Three public-sector lenders — Bank of Baroda, Union Bank of India and Syndicate Bank have taken the first steps in transparently segregating retail loans into their own versions of prime and subprime risk exposure, using third-party credit scores of potential borrowers to offer them different home-financing rates.

Under the new external benchmarking regime, Bank of Baroda, for instance, will be using three credit score slabs from the Credit Information Bureau (India) Ltd (CIBIL) to price new home loans. Customers with high credit score, defined in excess of 760 out of a maximum 900, will pay 1% lower interest compared with those reporting scores in 675-724 range — the lowest score slab at which loans will be offered.


Banks can quote forex rates round the clock

Taking cues from its taskforce's report on offshore rupee, the RBI allowed domestic banks to freely offer foreign exchange prices to non-residents at all times, out of their Indian books, either by a domestic sales team or through their overseas branches. The apex bank has also allowed rupee derivatives (with settlement in foreign currency) to be traded in International Financial Services Centres (IFSCs).
**RBI cuts key lending rate by 25 basis points to 5.15%, loans to get cheaper**

RBI's six-member Monetary Policy Committee (MPC) has announced the fourth bi-monthly policy for 2019-20 in October, 2019. The Reserve Bank of India cut its benchmark interest rates for the fifth time this year. The RBI monetary policy committee announced a 25 basis points cut in its policy rates in an effort to boost a sluggish economy as inflation remains in a comfortable zone.


**Abhijit Banerjee, Esther Duflo, Michael Kremer win Nobel Prize for Economics**

Nobel Economics Prize for 2019 has been awarded to Abhijit Banerjee, Esther Duflo and Michael Kremer “for their experimental approach to alleviating global poverty”.


**India slips 10 places to 68th on global competitiveness index: Singapore is on top**

India has moved down 10 places to rank 68th on an annual global competitiveness index, largely due to improvements witnessed by several other economies, while Singapore has replaced the US as the world's most competitive economy.


**INDIRECT TAX UPDATES**

**Key Highlights of the 37th GST Council Meeting**

The key highlights of the decisions taken in the 37th GST Council meeting held on 20th September, 2019 at Goa are as under:

(A) GST rate reduction sector wise:

- Hospitality and tourism:
  - To reduce the rate of GST on hotel accommodation service as below:

<table>
<thead>
<tr>
<th>Transaction Value per Unit (Rs) per day</th>
<th>GST</th>
</tr>
</thead>
<tbody>
<tr>
<td>₹ 1000 and less</td>
<td>Nil</td>
</tr>
<tr>
<td>₹ 1001 to ₹ 7500</td>
<td>12%</td>
</tr>
<tr>
<td>₹ 7501 and more</td>
<td>18%</td>
</tr>
</tbody>
</table>

- To reduce rate of GST on outdoor catering services other than in premises having daily tariff of a unit of accommodation of ₹ 7501 and above shall remain at 18% with ITC.

- Job work service:
  - To reduce rate of GST from 5% to 1.5% on supply of job work services in relation to bus body building which would remain at 18% with ITC.

(B) Law and procedure related changes

- Relaxation in filing of annual returns for MSMEs for FY 2017-18 and FY 2018-19 as under:
  a. waiver of the requirement of filing FORM GSTR-9A for composition taxpayers for the said tax periods;
  b. filing of FORM GSTR-9 for those taxpayers who (are required to file the said return but) have aggregate turnover up to ₹ 2 crores made optional for the said tax periods.

- Extension of last date for filing of appeals against orders of Appellate Authority before the GST Appellate Tribunal as the Appellate Tribunals are yet not functional.

- New return system now to be introduced from April, 2020 (earlier proposed from October, 2019), in order to give ample opportunity to taxpayers as well as the system to adapt.

- Suitable amendments to be made in the CGST Act, the UTGST Act, and the corresponding SGST Acts in view of creation of UTs of Jammu & Kashmir and Ladakh.

[Source: http://www.gstcouncil.gov.in/press-cbic. The complete press release can be accessed from this website.]

**CROSSWORD SOLUTION – OCTOBER 2019**

In the October 2019 issue, photographs of the toppers in CA Intermediate (New Course) for May 2019 exams, AIR 1 Akshat Goyal and AIR 2 Meet Anil Shah were inadvertently interchanged. The correct photographs are reprinted here under:

**Corrigendum**

The mistake was unintentional and regretted.
The Board of Studies has planned the following Conferences for CA Students as on date from November - January, 2019-2020

<table>
<thead>
<tr>
<th>Regional Office/Branch Conference</th>
<th>Approved Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trivandrum CA Students Conference</td>
<td>22-23 Nov, 2019</td>
</tr>
<tr>
<td>Ahmednagar CA Students Conference</td>
<td>23-24 Nov, 2019</td>
</tr>
<tr>
<td>Ludhiana CA Students Conference</td>
<td>29-30 Nov, 2019</td>
</tr>
<tr>
<td>Ahmedabad CA Students Conference</td>
<td>30 Nov-1 Dec, 2019</td>
</tr>
<tr>
<td>Lucknow CA Students Conference</td>
<td>30th Nov-1st Dec, 2019</td>
</tr>
<tr>
<td>Salem CA Students Conference</td>
<td>30th Nov-1st Dec, 2019</td>
</tr>
<tr>
<td>Hubli &amp; Belgaum CA Students Conference (Conf at Hubli)</td>
<td>1-2 Dec, 2019</td>
</tr>
<tr>
<td>Chennai National Conference</td>
<td>10-11 Dec, 2019</td>
</tr>
<tr>
<td>Ranchi CA Student Conference</td>
<td>10-11 Dec, 2019</td>
</tr>
<tr>
<td>Coimbatore CA Students Conference</td>
<td>13-14 Dec, 2019</td>
</tr>
<tr>
<td>Tirupur CA Students Conference</td>
<td>13-14 Dec, 2019</td>
</tr>
<tr>
<td>Thane CA Students Conference</td>
<td>15-16 Dec, 2019</td>
</tr>
<tr>
<td>Rajkot CA Students Conference</td>
<td>19-20 Dec, 2019</td>
</tr>
<tr>
<td>Mumbai National Conference</td>
<td>19-20 Dec, 2019</td>
</tr>
<tr>
<td>Akola + Amravati CA Students Conference (Conf at Akola)</td>
<td>20-21 Dec, 2019</td>
</tr>
<tr>
<td>Bangalore CA Students Conference</td>
<td>20-21 Dec, 2019</td>
</tr>
<tr>
<td>Kolhapur CA Students Conference</td>
<td>21-22 Dec, 2019</td>
</tr>
<tr>
<td>Agra CA Students Conference</td>
<td>21-22 Dec, 2019</td>
</tr>
<tr>
<td>Madurai CA Students Conference</td>
<td>21-22 Dec, 2019</td>
</tr>
<tr>
<td>Visakhapatnam CA Students Conference</td>
<td>21-22 Dec, 2019</td>
</tr>
<tr>
<td>Nashik CA Students Conference</td>
<td>22-23 Dec, 2019</td>
</tr>
<tr>
<td>Kalyan Dombivli CA Students Conference</td>
<td>23-24 Dec, 2019</td>
</tr>
<tr>
<td>Mangalore CA Student Conference</td>
<td>23-24 Dec, 2019</td>
</tr>
<tr>
<td>Indore National Conference</td>
<td>24-25 Dec, 2019</td>
</tr>
<tr>
<td>Raipur, Bilaspur CA Students Conference (Conf at Raipur)</td>
<td>25-26 Dec, 2019</td>
</tr>
<tr>
<td>Trichur CA Students Conference</td>
<td>27-28 Dec, 2019</td>
</tr>
<tr>
<td>Kohzkode CA Students Conference</td>
<td>3-4 Jan, 2020</td>
</tr>
<tr>
<td>Prayagraj CA Students Conference</td>
<td>4-5 Jan, 2020</td>
</tr>
<tr>
<td>Bhopal CA Students Conference</td>
<td>18-19 Jan, 2020</td>
</tr>
</tbody>
</table>

For detailed program structure please visit-https://www.icai.org/new_category.html?c_id=348

Students Eligible to attend the Students Conference: Students who have registered as IPCC/Intermediate Students/ Students who are pursuing their Article ship training/ Students who have completed their Practical Training but could not qualify their final examinations may attend the conference till next one year from the date of completion of Practical Training. (CPT Students and Students who have completed one year beyond their Articleship training will not be eligible to register for these Conferences.)

It may however be noted that during April, 2019 – March, 2020, the students can be Paper Presenters for maximum 2 Students Conferences only. Best paper presenters (overall all category) of National Conference can be permitted to present technical papers in International Students Conference where the limit of two programmes per year will not be applicable.

Director, Board of Studies

The Institute of Chartered Accountants of India (ICAI)
(Set up by an Act of Parliament)
ICAI Commerce Wizard
A Talent Search Test
Organised By: Career Counselling Group (CCG), ICAI

For Details and Registration please visit the Exclusive Website for ICAI Commerce Wizard: icaicommercewizard.org

The Commerce Talent Search Test titled “Commerce Wizard” is a diagnostic test that measures the ability of a student to understand the concepts. This is not a test which tries to find out the knowledge of the student. Rather it measures how well he has understood the concept.

It may however be noted that during April, 2019 – March, 2020, the students can be Paper Presenters for maximum 2 Students Conferences only. Best paper presenters (overall all category) of National Conference can be permitted to present technical papers in International Students Conference where the limit of two programmes per year will not be applicable.

Director, Board of Studies

The Chartered Accountant Student | November 2019 33
INTERNATIONAL CONFERENCE FOR CA STUDENTS - PUNE

14TH & 15TH DECEMBER, 2019
The Mahalakshmi Lawns, Pune, Maharashtra

Organised by: Board of Studies, ICAI
Hosted by: Pune Branch of WIRC & WICASA of ICAI

THEME: "PATH FOR SUCCESS - LEARN, ADAPT AND ACCELERATE"

DAY-1

Technical Session: I
Topic: Auditing & Corporate Laws
- New meaning assigned to CSR under the Companies Act, 2013 - Voluntary to Mandatory.
- Is Google abusing its Android Dominance - Insight in terms of the International Laws.
- Auditor's Duty regarding detection, documentation and reporting of Fraud.

Technical Session: II
Topic: Information Technology & Finance
- Crowd Funding - An option for Start-ups.
- Use of Cellphones in CA Practice.
- ABCD… Artificial Intelligence, Block Chain Cyber Security and Data Analytics.

DAY-2

Technical Session: III
Topic: Taxation & Economics
- Global Slowdown - Is it Real or an Illusion?
- Does high Income Tax Rate Counter Productive.
- Interest Rates – Impact on Economy and Individuals.

Technical Session: IV
Topic: Accountancy & Strategic Cost Management
- Upliftment of Financial Statements on Adoption of IFRS - A Worldwide Study.
- Non-Financial consideration - Relevance in Decision Making.

Technical Session: V
Topic: Ethics
- Level of fees for Professional Assignments - Whether quality is compromised?
- Advertisements by CAs - should it be allowed?

Students Eligible to attend the Students Conference: Students who have registered as IPCC/Intermediate Students – either after passing CPT or through Direct Entry route; Students who are pursuing their Article ship Training; Students who have completed their Practical Training but could not qualify their final examinations may attend the conference till next one year from the date of completion of Practical Training. (Students who have merely registered as CPT Students and Students who have completed one year beyond their Article ship training will not be eligible to register for these Conferences)

Registration fees
- Rs. 500/- till 30th Nov, 2019
- Rs. 600/- from 1st-13th Dec, 2019
- Rs. 700/- spot registration on 14th Dec, 2019

Accommodation (if required), please contact the branch.

Payment Mode
- The student has to register & make the payment online on the Portal itself, the link will be http://bosactivities.icai.org/
- The payment can be made by
  - Challan or Demand Draft payable to “Board of Studies, ICAI”
  - Electronic Mode

For registration
- Email: admin@puneicai.org, cpe@puneicai.org, pune@icai.org
- Phone: 0120-3045935, Mobile No. 9868879548

Residential Programme on Professional Skills Development at Centre of Excellence, Jaipur and Hyderabad

The Board of Studies is pleased to announce the next batch of ICAI’s ‘Four Weeks Residential Programme’ on Professional Skills Development as below:

<table>
<thead>
<tr>
<th>Venue</th>
<th>Participant</th>
<th>Fees</th>
<th>Date</th>
<th>Online Registration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Centre of Excellence (CoE), Jaipur</td>
<td>Men</td>
<td>Rs. 48,000/-</td>
<td>16th December, 2019 to 12th January, 2020</td>
<td><a href="https://resource.cdn.icai.org/57282bos46390main.pdf">https://resource.cdn.icai.org/57282bos46390main.pdf</a></td>
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</tbody>
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This programme aims to help the Chartered Accountancy students and newly qualified Chartered Accountants in imbibing the professional skills required for effective functioning in business organisations and the profession. The Programme environment focuses on development of communication skills, personal qualities, interpersonal and teamwork skills, problem solving skills, leadership skills etc.

Salient Features of the Programme:
- Emphasis on Soft Skills, Communication Skills and Personality Development.
- Exemption from payment of Fees to Top 10 Rank holders.
- Part of Practical Training.
- No need for Separate Management and Communication Skills(MCS) forming part of Advanced Integrated Course on Information Technology and Soft Skills(AICTSS).
- Special Session on Group Discussion & Interview.
- Preparation of Project and Presentation Skills.
- Building Team Spirit.

Students who have passed Chartered Accountancy Intermediate/IPCC/ PCC/ PE- II examination and pursuing last two year of Practical training or completed Practical training are invited to join the course for this batch. Recently qualified Chartered Accountants are also welcome to join the course.

For online registration, you can proceed with ‘Board of Studies Announcements’ https://www.icai.org/new_category.html?c_id=345 under the 'Students' tab on the Home Page of the ICAI's website www.icai.org. For any query, you can write us at ashokdua@icai.in or may also contact us on 0120-3045935 and Mobile No. 9868879548.

Director, Board of Studies

November 2019 | The Chartered Accountant Student
Interactive Meet with students: ICAI President CA. Prafulla P. Chhajed, Past President CA. Jaydeep N. Shah, Chairman Nagpur Branch of WIRC of ICAI CA. Suren Duragkar, Chairman WICASA CA. Sanjay M. Agrawal.

Inauguration of Renovated ITT Lab: ICAI President CA. Prafulla P. Chhajed addressing the dignitaries. Past President CA. Jaydeep N. Shah, Chairman Nagpur Branch of WIRC of ICAI CA. Suren Duragkar, Chairman WICASA CA. Sanjay M. Agrawal, ICAI Regional Council Member CA. Abhijit Kelkar, Vice Chairman Nagpur Branch of WIRC of ICAI CA. Kirit Kalyani

Live Virtual Classes

Watch live or recorded

Golden opportunity to enrol for Smart Live Virtual Classes under the New Scheme of Education and Training.

- Classes at convenient timings - Balance theoretical education with articleship training.
- Attend live lectures
- Facility of recorded lectures for missed live lectures.
- Expert faculty with rich experience
- Interactive classes with facility to raise questions during live classes
- Facility to resolve queries over email
- Exam focussed approach
- Separate question answer sessions
- Review your performance through integrated tests
- Delivered on your computers and mobiles

Quality classes with economical fees

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<tr>
<th>Course Type</th>
<th>Single Group</th>
<th>Both Groups</th>
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<tbody>
<tr>
<td>Intermediate</td>
<td>Rs. 3,750</td>
<td>Rs. 6,250</td>
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<tr>
<td>Course – Regular</td>
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<td>Concessional fees</td>
<td>Rs. 2,250</td>
<td>Rs. 4,000</td>
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<tr>
<td>Final</td>
<td>Rs. 4,500</td>
<td>Rs. 7,500</td>
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<td>Course – Regular</td>
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Concessional fees is applicable to students who register for Live Virtual Classes simultaneously with their registration for Intermediate and Final Courses.

Register now - www.icai.org/boslvc Queries - virtualclasses@icai.in

Classes for Intermediate and Final Courses running successfully. Register to watch recorded lectures that have been already held.

The Institute of Chartered Accountants of India
(Set up by an Act of Parliament)

Uniformity - Continuity - Consistency
**CROSSWORD - NOVEMBER 2019**

**ACROSS**

1. The first high level programming language………………
2. Fastest Supercomputer in India.
3. Under Schedule II of the CGST Act, 2017, any transfer of ……… in goods is treated as supply of goods.
4. A representative elected by the voters of an electoral district to the legislature of state government.
5. Capital of the Tibet Autonomous Region.
6. Inlets
7. ………………. is the standard markup language for web pages.
8. External
9. Personality
10. Average
11. 47. All communication relating to assessment, appeals, orders, exemptions etc. issued by income-tax authorities on or after 01 October 2019 shall carry a computer generated …….. duly quoted in the body of such communication.
12. 48. Used after the name of a company in the US.
13. 49. Latin term for ‘Statute’.
14. 50. An emerging technology that provides an infrastructure for building solutions.
15. 51. A number which cannot be divided by two and is called an ……… number.
16. 52. A financial instrument provided by banks.
17. 53. A number which cannot be divided by two and is called an ……… number.
18. 54. A system for communicating by computer within large group of buildings.
19. 55. An agreement with minor cannot be given to the ------------- of an insolvent member.
20. 56. A number which cannot be divided by two and is called an ……… number.
22. 58. A sudden strong feeling of physical or emotional pain.
23. 59. An enterprise resource planning software.
24. 60. A number which cannot be divided by two and is called an ……… number.
25. 61. The first computer virus.
27. 63. A programming language used for data analysis.
28. 64. A prolonge contact as a part of a signal interface in a computer.
29. 65. A person who has the legal right to receive somebody’s property when that person dies.
30. 66. A folder in windows computer can’t be made with the name ……………
31. 67. A number which cannot be divided by two and is called an ……… number.
32. 68. A search engine.
33. 69. A sudden strong feeling of physical or emotional pain.
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**DOWNS**

1. The flow of foreign contribution to India is regulated under………. ……….
2. …………… now defunct, was founded in 1947 in Singapore by Lien Ying Chow.
3. An Act to promote transparency and accountability in the working of every public authority.
4. A ………………… number is a value of a continuous quantity that can represent a distance along a line.
5. 01 October 2019 shall carry a computer generated …….. duly quoted in the body of such communication.
6. A sudden strong feeling of physical or emotional pain.
7. ………………. is a set of functions and procedures allowing the creation of applications that access the features or data of an operating system, application, or other services.
8. External
9. Middle east’s homegrown online marketplace.
10. Personality
11. Average
12. All communication relating to assessment, appeals, orders, exemptions etc. issued by income-tax authorities on or after 01 October 2019 shall carry a computer generated …….. duly quoted in the body of such communication.
13. Used after the name of a company in the US.
15. An emerging technology that provides an infrastructure for building solutions.
16. A system for communicating by computer within large group of buildings.
17. Font file format used by Microsoft Windows.
18. Minimum partners required to form an LLP-
19. Consume
20. A number which cannot be divided by two and is called an ……… number.
21. The first computer virus.
22. A trigonometric function of an angle.
23. A number which cannot be divided by two and is called an ……… number.
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**Posting Date:** Last three days of advance month & first 04 days of current month, Date of publication: 26th of previous month