

ANSWER KEY

ALL ANSWERS ARE WRITTEN IN RED INK

Q1. Fill in the blanks

- 1) Standards set in terms of cost to be incurred, revenue to be earned, product units to be produced and sold, time to be spent in performing a task, all represents **quantitative** standards.
- 2) Standards may also be set in **qualitative** terms. Improving goodwill and motivation level of employees are examples of **qualitative** standards.
- 3) In small organizations, each piece produced may be checked but not possible in a large organization. Thus, in large organizations, certain pieces are checked at random for quality. This is known as **sample checking**.
- 4) **Critical Point Control**: It is neither economical nor easy to keep a check on each and every activity in an organization. Control should, therefore, focus on key result areas (KRAs) which are critical points to the success of an organization. If anything goes wrong at the critical points, the entire organization suffers.
- 5) **Management by Exception**: based on the belief that an attempt to control everything results in controlling nothing. Thus, only significant deviations which go beyond the permissible limit should be brought to the notice of management to receive immediate action of management on a priority basis.
- 6) **Management by Exception**, which is often referred to as control by exception, is an important principle of management control
- 7) The various techniques of managerial control may be classified into two broad categories: **traditional techniques, and modern techniques**.
- 8) **Traditional Techniques** are those which have been used by the companies for a long time now. These techniques have not become obsolete and are still being used by companies. These include:
 1. **Personal observation**
 2. **Statistical reports**
 3. **Breakeven analysis**
 4. **Budgetary control**
- 9) **Modern techniques** of controlling are those which are of recent origin and are comparatively new in management literature. These techniques provide a refreshingly new thinking on the ways in which various aspects of an organization can be controlled. These include:
 1. **Return on investment**
 2. **Ratio analysis**
 3. **Responsibility accounting**
 4. **Management audit**
 5. **PERT and CPM**
 6. **Management information system**
10. The sales volume at which there is no profit, no loss is known as **breakeven point**
11. **Types of Budgets: Sales Budget: Production Budget: Material Budget: Cash Budget: Capital Budget, Research and Development Budget**
12. **Sales Budget** :A statement of what an organization expects to sell in terms of quantity as well as value
13. **Production Budget**: A statement of what an organization plans to produce in the budgeted period

14. **Material Budget** :A statement of estimated quantity and cost of materials required for production
15. **Material Budget**: Anticipated cash inflows and outflows for the budgeted period
16. **Capital Budget**: Estimated spending on major long-term assets like new factory or major equipment
17. **Research and Development Budget** :Estimated spending for the development or refinement of products and processes
18. The most commonly used ratios used by organizations can be classified into the following categories: *Liquidity Ratios, Liquidity Ratios Profitability Ratios , Turnover Ratios*
19. *Liquidity Ratios* are calculated to determine short-term solvency of business.
20. *Liquidity Ratios analyses* the current position of liquid funds determines the ability of the business to pay the amount due to its stakeholders.
21. *Solvency Ratios*: Ratios which are calculated to determine the long-term solvency of business are known as solvency ratios.
22. *Solvency Ratios* determine the ability of a business to service its indebtedness.
23. *Profitability Ratios*: These ratios are calculated to analyze the profitability position of a business.
24. *Profitability Ratios involve* analysis of profits in relation to sales or funds or capital employed.
25. *Turnover Ratios are* calculated to determine the efficiency of operations based on effective utilization of resources. Higher turnover means better utilization of resources.
26. Responsibility center's may be of the following types: **Cost , Revenue, Profit , Investment**
27. A **Cost** Centre is a segment of an organization in which managers are held responsible for the cost incurred in the centre but not for the revenues. For example, in a manufacturing organization, production department is classified as **Cost** Centre.
28. **Revenue** Centre is a segment of an organization which is primarily responsible for generating revenue. For example, marketing department of an organization may be classified as a **Revenue** center.
29. **Profit** Centre is a segment of an organization whose manager is responsible for both revenues and costs. For example, repair and maintenance department of an organization may be treated as a profit center if it is allowed to bill other production departments for the services provided to them.
30. **Investment** Centre is responsible not only for profits but also for investments made in the centre in the form of assets. The investment made in each centre is separately ascertained and return on investment is used as a basis for judging the performance of the Centre.
31. **management audit** may be defined as evaluation of the functioning, performance and effectiveness of management of an organization

Q2. From the following statements related to Importance of Controlling. identify the point of Importance of Controlling

1. **Accomplishing organizational goals**: The controlling function measures progress towards the organizational goals and brings to light the deviations, if any, and indicates corrective action. It, thus, guides the organization and keeps it on the right track so that organizational goals might be achieved.

2. **Judging accuracy of standards:** A good control system enables management to verify whether the standards set are accurate and objective. An efficient control system keeps a careful check on the changes taking place in the organization and in the environment and helps to review and revise the standards in light of such changes.
3. **Making efficient use of resources:** By exercising control, a manager seeks to reduce wastage and spoilage of resources. Each activity is performed in accordance with predetermined standards and norms. This ensures that resources are used in the most effective and efficient manner.
4. **Improving employee motivation:** A good control system ensures that employees know well in advance what they are expected to do and what are the standards of performance on the basis of which they will be appraised. It thus, motivates them and helps them to give better performance.
5. **Ensuring order and discipline:** controlling creates an atmosphere of order and discipline in the organization. It helps to minimize dishonest behavior on the part of the employees by keeping a close check on their activities.
6. **Facilitating coordination in action:** Controlling provides direction to all activities and efforts for achieving organizational goals. Each department and employee is governed by predetermined standards which are well coordinated with one another. This ensures that overall organizational objectives are accomplished.

Q3. From the following statements related to Limitations of Controlling identify the point of Limitations of Controlling

1. **Difficulty in setting quantitative standards:** Control system loses some of its effectiveness when standards cannot be defined in quantitative terms. This makes measurement of performance and their comparison with standards a difficult task. Employee morale, job satisfaction and human behavior are such areas where this problem might arise.
2. **Little control on external factors:** Generally an enterprise cannot control external factors such as government policies, technological changes, competition etc.
3. **Resistance from employees:** Control is often resisted by employees. They see it as a restriction on their freedom. For instance, employees might object when they are kept under a strict watch with the help of Closed Circuit Televisions (CCTVs).
4. **Costly affair:** Control is a costly affair as it involves a lot of expenditure, time and effort. A small enterprise cannot afford to install an expensive control system. It cannot justify the expenses involved.
5. **Costly affair:** Managers must ensure that the costs of installing and operating a control system should not exceed the benefits derived from it. The box on Control System at FedEx gives an overview of the control system used by FedEx and how it helped FedEx to increase its profits.

Q4. From the following statements identify the point of Relationship between Planning and Controlling

1. Planning and controlling are inseparable twins of **management**
2. Planning without **controlling** is meaningless.
3. controlling is blind without **planning**
4. When there is no plan, there is **no** basis of controlling.
5. **Planning** is clearly a prerequisite for controlling.
6. **Planning** is basically an intellectual process Controlling, checks if decisions have been translated into desired action.
7. Planning is **prescriptive** whereas, controlling is **evaluative**

8. planning is looking **ahead** while controlling is looking **back**
9. Planning involves looking ahead and is called a **forward** looking function. controlling is a backward-looking function.
10. Planning and controlling are both **forward**-looking as well as a **backward**-looking function.
11. planning and controlling are **interrelated** and, in fact, reinforce each other in the sense that
12. Planning based on facts makes **controlling** easier and effective; and
13. Controlling improves future **Planning** by providing information derived from past experience.

Q5. Controlling Process has the following steps.

1. **Setting Performance Standards**
2. **Measurement of Actual Performance**
3. **Comparing Actual Performance with Standards**
4. **Analyzing Deviations**
5. **Taking Corrective Action**

Q6. From the following statements related to controlling process identify the point of Step of controlling process

1. **Setting Performance Standards:** standards serve as benchmarks towards which an organisation strives to work. Standards can be set in both quantitative as well as qualitative terms.
2. **Setting Performance Standards:** At the time of setting standards, a manager should try to set standards in precise quantitative terms as this would make their comparison with actual performance much easier. However, whenever qualitative standards are set, an effort must be made to define them in a manner that would make their measurement easier.
3. **Setting Performance Standards:** For instance, for improving customer satisfaction in a fast food chain having self-service, standards can be set in terms of time taken by a customer to wait for a table, time taken by him to place the order and time taken to collect the order
4. **Measurement of Actual Performance:** Performance should be measured in an objective and reliable manner. performance should be measured in the same units in which standards are set as this would make their comparison easier
5. **Measurement of Actual Performance:** There are several techniques for measurement of performance. These include personal observation, sample checking, performance reports, etc.
6. **Measurement of Actual Performance:** in case of assembling task, each part produced should be checked before assembling. Similarly, in a manufacturing plant, levels of gas particles in the air could be continuously monitored for safety.
7. **Measurement of Actual Performance:** Progress of work in marketing may be measured by considering the number of units sold, increase in market share
8. **Comparing Actual Performance with Standards:** This step involves comparison of actual performance with the standard to reveal the deviation between actual and desired results.
9. **Comparing Actual Performance with Standards:** For instance, performance of a worker in terms of units produced in a week can be easily measured against the standard output for the week.
10. **Analyzing Deviations:** Some deviation in performance can be expected in all activities. It is, therefore, important to determine the acceptable range of deviations. Also, deviations in key areas of business need to be attended more urgently as compared to deviations in certain insignificant areas. Critical point control and management by exception should be used by a manager in this regard.

11. **Analyzing Deviations:** Deviations may have multiple causes for their origin. These include unrealistic standards, defective process, and inadequacy of resources, structural drawbacks, organizational constraints and environmental factors beyond the control of the organisation. The deviations and their causes are then reported and corrective action taken at appropriate level.
12. **Taking Corrective Action:** No corrective action is required when the deviations are within acceptable limits. However, when the deviations go beyond the acceptable range, especially in the important areas, it demands immediate managerial attention so that deviations do not occur again and standards are accomplished.
13. **Taking Corrective Action:** Corrective action might involve training of employees if the production target could not be met.
14. **Taking Corrective Action:** if an important project is running behind schedule, corrective action might involve assigning of additional workers and equipment to the project and permission for overtime work

Q7. From the following identify if the statement is related to management by exception & critical point control
When a manager sets critical points and focuses attention on significant deviations which cross the permissible limit, the following advantages accrue:

1. **Management by exception:** It saves the time and efforts of managers as they deal with only significant deviations.
2. **Critical point control:** It focuses managerial attention on important areas. Thus, there is better utilization of managerial talent.
3. **Management by exception:** The routine problems are left to the subordinates. Management by exception, thus, facilitates delegation of authority and increases morale of the employees.
4. **Critical point control:** It identifies critical problems which need timely action to keep the organization in right track.

Q8. Some Causes of deviation and Corrective action to be taken

1. Defective material **change the quality specification for material used**
2. Defective machinery **repair or replace**
3. Obsolete machinery **technological upgradation**
4. Defective process **modify the existing process**
5. Defective physical conditions of work **improve the physical conditions of work**

Q9. Identify the Techniques of Control (Traditional Techniques/Modern Techniques)

Traditional Technique (a) Statistical reports

Modern Techniques: (b) Return on investment

Modern Techniques: (c) Ratio analysis

Modern Techniques: (d) Responsibility accounting

Modern Techniques: (e) Management audit

Traditional Technique: (f) Personal observation

Modern Techniques: (g) PERT and CPM

Traditional Technique: (h) Breakeven analysis

Modern Techniques: (i) Management information system

Traditional Technique: (j) Budgetary control

Q10. From the following statements identify the type of Traditional Techniques of control

1. **Personal Observation:** This is the most traditional method of control. However, it is a very time-consuming exercise and cannot effectively be used in all kinds of jobs.
2. **Personal Observation:** It enables the manager to collect first-hand information. It also creates a psychological pressure on the employees to perform well as they are aware that they are being observed personally on their job.

3. **Statistical Reports:** Statistical analysis in the form of averages, percentages, ratios, correlation, etc., present useful information to the managers regarding performance of the organisation in various areas.
4. **Statistical Reports:** Such information when presented in the form of charts, graphs, tables, etc., enables the managers to read them more easily and allow a comparison to be made with performance in previous periods and also with the benchmarks.
5. **Breakeven Analysis:** a technique used by managers to study the relationship between costs, volume and profits. It determines the probable profit and losses at different levels of activity
6. **Breakeven Analysis:** helps a firm in keeping a close check over its variable costs and determines the level of activity at which the firm can earn its target profit.
7. **Budgetary Control:** all operations are planned in advance in the form of budgets and actual results are compared with budgetary standards. This comparison reveals the necessary actions to be taken so that organisational objectives are accomplished.
8. **Budgetary Control:** budget is a quantitative statement for a definite future period of time for the purpose of obtaining a given objective. It is also a statement which reflects the policy of that particular period. It will contain figures of forecasts both in terms of time and quantities.

Q11. From the following statements identify the type of Modern Techniques

1. **Return on Investment:** a useful technique which provides the basic yardstick for measuring whether or not invested capital has been used effectively for generating reasonable amount of return. can be used to measure overall performance of an organization or of its individual departments or divisions.
2. **Ratio Analysis** refers to analysis of financial statements through computation of ratios.
3. **Responsibility Accounting:** is a system of accounting in which different sections, divisions and departments of an organization are set up as 'Responsibility Centre's'. The head of the centre is responsible for achieving the target set for his Centre.
4. **Management Audit:** refers to systematic appraisal of the overall performance of the management of an organization. The purpose is to review the efficiency and effectiveness of management and to improve its performance in future periods. It is helpful in identifying the deficiencies in the performance of management functions.
5. **Management Audit:** conducting management audit may sometimes pose a problem as there are no standard technique of management audit is not compulsory under any law. Enlightened managers, however, understand its usefulness in improving overall performance of the organization.
6. **PERT and CPM :** These techniques are especially useful for planning; scheduling and implementing time bound projects involving performance of a variety of complex, diverse and interrelated activities.
7. **PERT and CPM:** These techniques deals with time scheduling and resource allocation for these activities and aims at effective execution of projects within given time schedule and structure of costs.
8. **Management Information System:** It is a computer-based information system that provides information and support for effective managerial decision-making with up-to-date, accurate and timely information.

9. **Management Information System:** It provides data and information to the managers at the right time so that appropriate corrective action may be taken in case of deviations from standards.

Q12. MIS offers the following advantages to the managers:

1. It facilitates collection, management and dissemination of **information** at different levels of management and across different departments of the organization.
2. It supports planning, decision making and **controlling** at all levels.
3. It improves the quality of information with which a manager works.
4. It ensures cost **effectiveness** in managing information.
5. It reduces information overload on the managers as only relevant **information** is provided to them.

Q13. Budgeting offers the following advantages:

1. Budgeting focuses on specific and time-bound targets and thus, helps in attainment of organisational **objectives**
2. Budgeting is a source of **motivation** to the employees who know the standards against which their performance will be appraised and thus, enables them to perform better.
3. Budgeting helps in **optimum** utilization of resources by allocating them according to the requirements of different departments.
4. Budgeting is also used for achieving **coordination** among different departments of an organization and highlights the interdependence between them. For instance, sales budget cannot be prepared without knowing production programmes and schedules.
5. It facilitates management **by exception** by stressing on those operations which deviate from budgeted standards in a significant way. However, the effectiveness of budgeting depends on how accurately estimates have been made about future.
6. Flexible budgets should be prepared which can be adopted if forecasts about future turn out to be different. Managers must remember that budgeting should not be viewed as an end but a means to achieve **organizational** objectives.

Q14. The steps involved in using PERT/CPM are as follows. Arrange them in a sequence:

1. **Step 1:** The project is divided into a number of clearly identifiable activities which are then arranged in a logical sequence.
2. **Step 2:** A network diagram is prepared to show the sequence of activities, the starting point and the termination point of the project.
3. **Step 3:** Time estimates are prepared for each activity. PERT requires the preparation of three time estimates – optimistic (or shortest time), pessimistic (or longest time) and most likely time. In CPM only one time estimate is prepared. In addition, CPM also requires making cost estimates for completion of project.
4. **Step 4:** The longest path in the network is identified as the critical path. It represents the sequence of those activities which are important for timely completion of the project and where no delays can be allowed without delaying the entire project.
5. **Step 5:** If required, the plan is modified so that execution and timely completion of project is under control. PERT and CPM are used extensively in areas like ship-building, construction projects, aircraft manufacture, etc.