

OBJECTIVES (2019-2020)

COST ACCOUNTING (SEM VI)

1 – COST CONTROL ACCOUNTS

Q1) MULTIPLE CHOICE QUESTIONS

1. Materials Requisition Note
 - a) authorizes and records the issue of materials for use
 - b) records the return of unused materials
 - c) records the transfer of materials from one store to another
 - d) a classified record of materials, issues, returns and transfers
2. Materials Transfer Note
 - a) authorizes and records the issue of materials for use
 - b) records the return of unused materials
 - c) records the shifting of materials from one store to another
 - d) a classified record of materials, issues, returns and transfers
3. A document which is a classified record of material issues, returns and transfers
 - a) Materials Requisition Note
 - b) Materials Return Note
 - c) Materials Transfer Note
 - d) Materials Issue Analysis Sheet
4. This is essential to make the cost ledger 'self-balancing'.
 - a) General Ledger Adjustment Account
 - b) Stores Ledger Control Account
 - c) Work-in-Progress Ledger
 - d) Finished Goods Control Account
5. This is debited with all purchases of materials for the stores and credited with all issues of materials
 - a) General Ledger Adjustment Account
 - b) Stores Ledger Control Account
 - c) Work-in-Progress Ledger
 - d) Finished Goods Control Account
6. In this, cost of materials, wages and overheads of each job undertaken is posted.
 - a) General Ledger Adjustment Account
 - b) Stores Ledger Control Account
 - c) Work-in-Progress Ledger
 - d) Finished Goods Control Account
7. This represents the total value of finished goods in stock
 - a) General ledger Adjustment Account
 - b) Stores Ledger control Account
 - c) Work-in-progress Ledger
 - d) Finished goods Control Account
8. Material amounting to ₹ 58,300 is purchased on credit. The entry in Cost Ledger under non-integrated System is

| | | | |
|----------------------------------|-----|--------|--------|
| a) Purchases A/c | Dr. | 58,300 | |
| To Sundry Creditors A/c | | | 58,300 |
| b) Stores Ledger Control A/c | Dr. | 58,300 | |
| To General Ledger Adjustment | | | 58,300 |
| c) Purchases A/c | Dr. | 58,300 | |
| To Cost Ledger control A/c | | | 58,300 |
| d) Work-in-progress Control A/c | Dr. | 58,300 | |
| To General Ledger Adjustment A/c | | | 58,300 |

9. Salaries and wages amounting to ₹ 62,100 gross and earned by the employees, and deductions of ₹ 5,400 as provident fund. ₹ 2,400 as ESIC and ₹ 4,300 as Income Tax are made from the gross amount. The entry in Cost Ledger under non-integrated System is

| | | | |
|-----------------------------------|-----|--------|--------|
| a) Salaries and Wages Control A/c | Dr. | 62,100 | |
| To General Ledger Adjustment A/c | | | 62,100 |
| b) Salaries and Wages Control A/c | Dr. | 50,000 | |
| To General Ledger Adjustment A/c | | | 50,000 |
| c) Salaries and Wages Control A/c | Dr. | 62,100 | |
| To Cost Ledger Adjustment A/c | | | 62,100 |
| d) Salaries and Wages Control A/c | Dr. | 62,100 | |
| To Provident Fund A/c | | | 5,400 |
| To E.S.I.C. A/c | | | 2,400 |
| To Income-tax A/c | | | 4,300 |
| To General Ledger Adjustment A/c | | | 50,000 |

10. A concern has a non-integrated costing system. Salaries and wages analysis book indicates the following breakup :

| | |
|-----------------------------------|----------|
| Direct wages | ₹ 38,600 |
| Indirect factory wages | ₹ 9,500 |
| Administrative salaries | ₹ 9,700 |
| Selling and distribution salaries | ₹ 4,300 |

Which of the following statements is false-

- (i) No additional entry is passed in financial books for break-up
- (ii) Work-in-progress Ledger Control A/c will be debited with ₹ 38,600.
- (iii) Salaries and Wages Control A/c will be debited with ₹ 62,100.

- a) only (i)
- b) All
- c) only (iii)
- d) None

11. In a non-integrated system of accounting, the emphasis is on,

- a) Personal accounts
- b) Real accounts
- c) Nominal accounts
- d) All of these

12. Cost and financial accounts are required to be reconciled under

- a) Integral system
- b) Cost control accounts system
- c) Under both (a) and (b)
- d) None of these

13. Which of the following accounts makes the cost ledger 'self-balancing'?
- Overhead adjustment account
 - Costing P & L account
 - Cost ledger control account
 - None of the above
14. *Purchases for special jobs* is debited under non-integrated system to
- Work-in-progress ledger control account
 - Cost ledger control account
 - Stores ledger control account
 - Purchases account
15. Journal entry for *absorption of production overheads* in non-integrated accounts is
- Production Overhead A/c Dr.
 To Cost Ledger Control A/c
 - Work-in-Progress A/c Dr.
 To Production Overhead Control A/c
 - Overhead Adjustment A/c Dr.
 To Production Overhead A/c
16. Journal entry for the *absorption of Selling and Distribution overhead* account in non-integrated accounts is
- Cost of Sales A/c Dr.
 To Selling and Distribution Overhead Control A/c
 - Finished Goods Ledger Control A/c Dr.
 To Selling and Distribution Overhead A/c
 - Cost Ledger Control A/c Dr.
 To Selling and Distribution Overhead A/c
 - None of these
17. Journal entry for *over-absorbed administrative overhead* amount in non-integrated accounts is
- Costing Profit and Loss A/c Dr.
 To Cost Ledger Control A/c
 - Overhead Adjustment or Suspense A/c Dr.
 To Administration Overhead Control A/c
 - Administration Overhead A/c Dr.
 To Overhead Adjustment or Suspense A/c
 - No entry is required
18. Journal entry for *issuing materials to production* in non-integrated accounts is
- Stores Ledger Control A/c Dr.
 To Cost Ledger Control A/c
 - Cost Ledger Control A/c Dr.
 To Stores Ledger Control A/c
 - Work-in-Progress Control A/c Dr.
 To Stores Ledger Control A/c
 - No entry is required
19. Journal entry for *payment of wages* in non-integrated accounts is
- Wages Control A/c Dr.
 To Cash A/c
 - Wages Control A/c Dr.

To Cost Ledger Control A/c

c) Wages A/c Dr.
To Cash A/c

20. *Payment to creditors* for supplies made. Journal entry in non-integrated accounts will be

a) Sundry Creditors A/c Dr.
To Cash A/c

b) Sundry Creditors A/c Dr.
To Cost Ledger Control A/c

c) Sundry Creditors A/c Dr.
To Costing Profit and Loss A/c

d) No entry is required

21. In a period ₹ 50,000 was incurred on *indirect labour* In a Cost Ledger, the double entry will be:

a) Wages Control A/c Dr.
To Overhead Control A/c

b) WIP Control A/c Dr.
To Wages Control A/c

c) Overhead Control A/c Dr.
To Wages Control A/c

d) Wages Control A/c Dr.
To WIP Control A/c

22. At the end of a financial period, accounting entries for *under absorbed overheads* would be

a) WIP Control A/c Dr.
To Overhead Control A/c

b) Profit and Loss A/c Dr.
To WIP Control A/c

c) Profit and Loss A/c Dr.
To Overhead Control A/c

d) Overhead Control A/c Dr.
To Profit and Loss A/c

23. The double entry for *factory cost of production* in a cost ledger is

a) Cost of Sales A/c Dr.
To Finished Goods Control A/c

b) Finished Goods Control A/c Dr.
To WIP Control A/c

c) Costing Profit and Loss A/c Dr.
To Finished Goods Control A/c

d) WIP Control A/c Dr.
To Finished Goods Control A/c

24. What is an interlocking bookkeeping system?

a) A single, combined system containing both cost accounting and financial accounting records

b) A system combining cost accounting and management accounting

c) A system with high secured access

d) A system where separate accounts are kept for cost accounting and for financial accounting

25. The following documents are used in accounting for raw materials:

- (i) Goods received note
- (ii) Materials returned note
- (iii) Materials requisition note
- (iv) Delivery note

Which of the documents may be used to record raw materials sent back to stores from production?

- a) (i) and (ii)
- b) (i) and (iv)
- c) (ii) only
- d) (ii) and (iii)

26. When *production has been completed* what double-entry would be made in a cost accounting system?

- | Debit | Credit |
|---------------------|------------------|
| a) Cost of Sales | Finished Goods |
| b) Finished Goods | Work-in-Progress |
| c) Finished Goods | Cost of Sales |
| d) Work-in-Progress | Finished Goods |

27. The raw materials issued to a job were overestimated and the excess is being sent back to the materials store. What document is required?

- a) Stores credit note
- b) Stores debit note
- c) Materials returned note
- d) Materials transfer note

28. When goods are sold, what double-entry would be made to record the transfer of costs?

- | Debit | Credit |
|---------------------------|------------------------|
| a) Finished Goods Account | Cost of Sales Account |
| b) Sales Account | Cost of Sales Account |
| c) Cost of Sales Account | Sales Account |
| d) Cost of Sales Account | Finished Goods Account |

29. The stores ledger control account for a period contained the following summary information :

| | ₹'000 |
|---------------------------------------|--------------|
| Supplier deliveries into stores | 321 |
| Indirect materials issued from stores | 13 |
| Returns to suppliers | 8 |
| Opening inventory in stores | 46 |
| Closing inventory in stores | 59 |

There were no inventory discrepancies in the period.

What accounting entry correctly records the issue of direct materials from stores?

- | Debit | ₹ | Credit | ₹ |
|-----------------------------|----------|--------------------------|----------|
| a) Stores Ledger Account | 2,87,000 | Work-in-Progress Account | 2,87,000 |
| b) Work-in-Progress Account | 2,87,000 | Stores Ledger Account | 2,87,000 |
| c) Stores Ledger Account | 3,13,000 | Work-in-Progress Account | 3,13,000 |

d) Work-in-Progress Account 3,13,000 Stores Ledger Account 3,13,000

30. What is a cost ledger control account?

- a) An account in the cost ledger to record financial accounting items
- b) An account in the financial ledger to record cost accounting items
- c) An account that summarizes outstanding payables balances
- d) An account that summarizes outstanding receivables balances

31. The advantages of maintaining cost control accounts include the following:

- a) facilitate prompt preparation of costing profit and loss account
- b) help management in policy formulation
- c) facilitate internal check
- d) all of the above

32. The Work-in-Progress Control Account is not debited with :

- a) direct materials and direct labour
- b) direct expenses
- c) production overheads (recovered)
- d) selling and distribution overheads

33. The application of Factory O/h usually would be recorded as an increase in

- a) Cost of goods sold
- b) Work-in-progress control
- c) Factory overheads control
- d) Finished goods control

34. Production overheads incurred ₹ 10,000

Production overheads recovered ₹ 12,000

The entry for over-recovery of overheads is

- a) Production Overheads Control A/c Dr.
To Overheads Adjustment A/c
- b) Overheads Adjustment A/c Dr.
To Production Overheads A/c
- c) Work-in-Progress A/c Dr.
To Overheads Adjustment A/c
- d) Overheads Adjustment A/c Dr.
To Work-in-Progress A/c

35. Loss of stores (normal) is recorded in cost accounts as

| Stores Ledger | Production Overheads | Costing PIL A/c |
|---------------|----------------------|-----------------|
| a) Debit | Credit | Nothing |
| b) Credit | Debit | Nothing |
| c) Nothing | Debit | Credit |
| d) Credit | Nothing | Debit |

36. In a typical cost ledger, the double entry for indirect labour charges incurred during a period is

| Debit | Credit |
|------------------------------|---------------------------|
| a) Wages control account | Overheads control account |
| b) WIP control account | Wages control account |
| c) Overheads control account | Wages control account |
| d) Wages control account | WIP control account |

37. In the cost ledger, the double entry for factory cost of finished production for a period is

Debit

Credit

- | | |
|-------------------------------------|----------------------------------|
| a) Cost of sales account | Finished goods control account |
| b) Finished goods control account | Work-in-progress control account |
| c) Costing profit and loss account | Finished goods control account |
| d) Work-in-progress control account | Finished goods control account |

38. Stores issued to factory repair order is recorded as

- | | |
|---|-----|
| a) Stores Ledger A/c To Production Overheads A/c | Dr. |
| b) Profit and Loss A/c To Stores Ledger A/c | Dr. |
| c) Production Overheads Control A/c To Stores Ledger A/c | Dr. |
| d) Stores Ledger A/c To Profit and Loss A/c | Dr. |

39. The debit balance of the overheads adjustment account may be transferred to

- a) Cost of sales account
- b) Profit and loss account
- c) Finished goods account
- d) Work-in-progress account

40. Materials lost in stores due to fire is

- a) a part of normal loss and hence part of cost
- b) capitalized
- c) a part of abnormal loss and hence excluded from cost
- d) transferred to the next period

41. A credit to Work in Process Inventory represents

- a) work still in process
- b) raw material put into production
- c) the application of overhead to production
- d) the transfer of completed items to Finished Goods Inventory

42. A journal entry includes a debit to Work in Process Inventory and a credit to Raw Material Inventory. The explanation for this would be that

- a) indirect material was placed into production
- b) raw material was purchased on account
- c) direct material was placed into production
- d) direct labour was used for production

43. The journal entry to apply overhead to production includes a credit to Manufacturing Overhead control and a debit to

- a) Finished Goods Inventory
- b) Work in Process Inventory
- c) Cost of Goods Sold
- d) Raw Material Inventory

44. The use of indirect material would usually be reflected as an increase in

- a) Stores control
- b) Work in process control
- c) Manufacturing overhead applied

- d) Manufacturing overhead control
45. A credit to the Manufacturing overhead control account represents the
- a) actual cost of overhead incurred
 - b) actual cost of overhead paid this period
 - c) amount of overhead applied to production
 - d) amount of indirect material and labour used during the period
46. When employees assemble products
- a) Cost of goods manufactured decreases
 - b) Work in process inventory increases
 - c) Work in process inventory decreases
 - d) Manufacturing overhead decreases
47. W Corporation's production department used ₹ 64,000 of materials to manufacture products during May. Which one of the following is one effect of recording this transaction?
- a) Raw materials increases by ₹ 64,000
 - b) Manufacturing overhead increases by ₹ 64,000
 - c) Cost of goods sold increases by ₹ 64,000
 - d) Work in process increases by ₹ 64,000
48. The Finished Goods account contains the cost of all units
- a) Unfinished at a given point in time
 - b) Completed at a given point in time
 - c) Produced during a particular period
 - d) Produced and sold during a particular period
49. The work in process account is credited when
- a) Production of product is completed
 - b) Products are sold to customers
 - c) Completed goods are shipped to buyers
 - d) Costs of production are incurred
50. Which account balances will decrease as a result of completing products during the month?
- a) Only work-in-process inventory
 - b) Only finished goods inventory
 - c) Both work-in-process and finished goods ending balances will decrease
 - d) Neither account ending balance would increase; both would increase
51. T Company completed two jobs whose costs total to ₹1,20,000. Which one of the following is one effect of this transaction?
- a) Manufacturing Overhead increases by ₹ 1,20,000
 - b) Cost of Goods Sold increases by ₹ 1,20,000
 - c) Work in Process decreases by ₹ 1,20,000
 - d) Finished Goods decreases by ₹ 1,20,000
52. N Corporation incurred ₹ 8,000 indirect labour and ₹ 42,000 direct labour. Which one of the following is one effect of recording this transaction?
- a) Indirect labour increases by ₹ 8,000
 - b) Work in process increases by ₹ 50,000
 - c) Manufacturing costs increase by ₹ 42,000

- d) Manufacturing overhead increases by ₹ 8,000
53. The balance of the Work in Process account is equal to
- The total costs of the jobs completed
 - The total costs of the jobs completed and sold
 - The total manufacturing costs incurred during the period
 - The total costs of the incomplete jobs
54. What entry should be made when a job is completed?
- A debit to Finished Goods Inventory, and a credit to Work in Process Inventory
 - A debit to Work in Process Inventory, and a credit to Direct Materials, Direct Labour and Manufacturing Overhead
 - A debit to Finished Goods Inventory and a credit to Direct Materials, Direct Labour, and Manufacturing Overhead
 - A debit to Cost of Goods Sold Inventory, and a credit to Work in Process Inventory
55. When indirect materials are requisitioned the _____ account is increased.
- Manufacturing Overhead Control
 - Work-in-Process Control
 - Materials Control
 - Accounts Payable Control
56. The Manufacturing Overhead Control account
- is increased by allocated manufacturing overhead
 - is credited with amounts transferred to Work-in-Process
 - is decreased by allocated manufacturing overhead
 - is debited with actual overhead costs
57. A company's accounting system operates so that the cost accounts are independent of the financial accounts. The two sets of accounts are reconciled on a regular basis to keep them continuously in agreement. This type of accounting system is known as
- Independent accounts
 - Interlocking accounts
 - Reconciled accounts
 - Integrated accounts
58. In May, material requisitions were ₹ 44,000 (₹ 39,000 of these were direct materials), and raw material purchases were ₹ 57,700. The end of month balance in raw materials inventory a/c was ₹ 24,300. What was the beginning raw materials inventory a/c balance?
- ₹ 10,600
 - ₹ 43,000
 - ₹ 72,400
 - ₹ 25,300
59. Over allocated manufacturing overhead results when
- production is less than last year
 - estimated overhead is less than actual overhead
 - actual overhead is less than allocated overhead
 - actual overhead is less than expected
60. Determining how much manufacturing overhead is over allocated or under allocated

- a) is done before the period starts
- b) is done during the period
- c) can be done at any time
- d) is done at the end of the period

61. The journal entry to record the use of direct materials on jobs is to debit work in process inventory and credit
- a) raw materials inventory
 - b) finished goods inventory
 - c) manufacturing overhead
 - d) wages payable
62. Cost of goods sold is debited and finished goods inventory is credited for
- a) purchase of goods on account
 - b) transfer of goods to the finished goods storeroom
 - c) transfer of materials into work in process inventory
 - d) the sale of goods to a customer
63. Under which of the following situations is finished goods inventory debited and work in process inventory credited?
- a) Transfer of goods to the finished goods storeroom
 - b) Purchase of goods on account
 - c) Transfer goods out of the factory
 - d) Transfer of material to work in process inventory
64. Under which of the following situations is raw materials inventory credited and work in process inventory debited?
- a) We ship goods to the customer
 - b) Material is transferred to the factory
 - c) We transfer goods to the storeroom
 - d) We purchase goods on account
65. The cost of direct materials used in production is debited to
- a) either manufacturing overhead or work in process
 - b) finished goods inventory
 - c) work in process
 - d) manufacturing overhead
66. The cost of direct labour used in production is recorded as a
- a) debit to work in process
 - b) debit to manufacturing overhead
 - c) debit to wages expense
 - d) debit to wages payable
67. The cost of indirect labour used in the factory is recorded as a
- a) credit to work in process
 - b) debit to manufacturing overhead
 - c) credit to wages payable
 - d) debit to wages expense
68. The journal entry needed to record the completion of a job includes a
- a) credit to work in process
 - b) credit to finished goods inventory
 - c) debit to work in process inventory
 - d) debit to cost of goods sold

69. The journal entry needed to record the completion of a job includes a
- debit to cost of goods sold
 - debit to work in process
 - debit to finished goods inventory
 - debit to raw materials inventory
70. The journal entry to issue ₹ 600 of direct materials and ₹ 40 of indirect materials involves a debit to
- manufacturing overhead for ₹ 640
 - work in process for ₹ 640
 - work in process for ₹ 600 and a credit to manufacturing overhead for ₹ 40
 - work in process for ₹ 600 and a debit to manufacturing overhead for ₹ 40
71. To record the costs of indirect labour, which of the following would be debited?
- Work in process
 - Manufacturing overhead
 - Finished goods inventory
 - Wages payable
72. To record direct labour costs incurred, which of the following would be debited?
- Finished goods inventory
 - Manufacturing overhead
 - Work in process
 - Wages payable
73. To record the requisition of direct materials, which of the following would be debited?
- Finished goods inventory
 - Work in process
 - Raw materials inventory
 - Cost of goods manufactured
74. The journal entry to record ₹ 300 of depreciation expense on factory equipment involves a
- debit to accumulated depreciation for ₹ 300
 - debit to manufacturing overhead for ₹ 300
 - debit to depreciation expense for ₹ 300
 - credit to manufacturing overhead for ₹ 300
75. Actual manufacturing overhead for the period is ₹ 20,000 while allocated manufacturing overhead is ₹ 18,000. What entry will close the manufacturing overhead balance?
- Debit manufacturing overhead and credit work in process for ₹ 2,000
 - Debit manufacturing overhead and credit cost of goods sold for ₹ 2,000
 - Debit cost of goods sold and credit finished goods inventory for ₹ 2,000
 - Debit cost of goods sold and credit manufacturing overhead for ₹ 2,000
76. A company has over allocated manufacturing overhead by ₹ 1,500. The entry to close manufacturing overhead account would be to
- debit manufacturing overhead and credit cost of goods sold for ₹ 1,500
 - debit manufacturing overhead and credit work in process for ₹ 1,500
 - debit cost of goods sold and credit manufacturing overhead for ₹ 1,500
 - debit cost of goods sold and credit finished goods inventory for ₹ 15,000

77. Manufacturing overhead has an under allocated balance of ₹ 6,200; raw materials inventory balance is ₹ 50,000; work in process inventory is ₹ 30,000; finished goods inventory is ₹ 20,000; and cost of goods sold is ₹ 1,00,000.

Which of these accounts would have a closing credit balance?

- a) Raw materials inventory
- b) Finished goods inventory
- c) Work in process inventory
- d) None of the above

78. The entry to record cost of goods sold includes a credit to

- a) Cost of Goods Sold
- b) Finished Goods Inventory
- c) Sales
- d) Work in Process Inventory

Q2) FILL IN THE BLANKS

1. In _____ system the cost accounts are distinct from financial accounts.
2. _____ cost accounting system involves use of cost control accounts.
3. _____ cost accounting system requires reconciliation of cost and financial books.
4. _____ cost accounting system is also known as inter-locking system.
5. Materials _____ Note authorizes and records the issue of materials for use.
6. Materials _____ Note records the return of unused materials.
7. _____ cost accounting system involves use of cost journals and cost ledgers.
8. Non-integrated cost accounting system follows the principles of _____ (Double / Single) entry.
9. _____ Ledger Adjustment Account is essential to make the cost ledger 'self-balancing'.
10. _____ Ledger Control Account is essential to make the cost ledger 'self-balancing'.
11. _____ Ledger Control Account is debited with purchases of materials.
12. _____ Ledger Control Account is credited with issue of materials.
13. On sale of goods, cost of such goods is credited to _____ Control Account.
14. The balance of _____ Ledger Control Account represents the total balance of materials.
15. Wages Control Account is debited with _____ (Gross / Net) Wages.
16. Factory Overhead Control Account is credited with the amount of overhead _____ (recovered / paid).
17. WIP Control Account is _____ (debited / credited) with the cost of finished goods.
18. Administration Overhead recovered is debited to _____ (Finished goods / WIP) Control Account.
19. Selling Overhead recovered is credited to _____ (Cost of Sales / Finished Goods Control) A/c.

Q3) STATE WHETHER TRUE OR FALSE

1. Work-in-progress ledger contains accounts of individual jobs.
2. Under-absorbed and over-absorbed overheads are transferred to overhead adjustment account.

3. The Stores Ledger Control Account in the Cost Ledger shows the balance of total stores in hand as on particular date.
4. In cost control accounts, sales are credited to Cost Ledger Control Account.
5. Stock Ledger contains an account of each individual item of raw material.
6. Cost Ledger Control Account is opened in the cost ledger.
7. Work-in-Process Control will be decreased (credited) for the amount of direct-labor costs incurred.
8. The ending balance in Work-in-Process Control represents the total costs of all jobs that have not yet been completed.
9. The overhead accounts are closed or become zero at the end of each year.
10. When raw materials are transferred out of the storeroom to the factory, their cost is transferred out of raw materials inventory and into work in process inventory.
11. The amount of over allocation or under allocation is found by taking the difference between the amounts of overhead allocated during the year and the amount of overhead estimated for the year.
12. The amount of over allocation or under allocation is found by taking the difference between the amounts of overhead allocated during the year and the amount of overhead incurred during the year.
13. The amount of over allocation or under allocation is typically corrected by adjusting cost of goods sold.
14. An over allocation of manufacturing overhead is typically corrected by decreasing Cost of Goods Sold on the income statement,
15. When an item is sold, finished goods control is credited and cost of goods sold is debited.
16. When indirect materials are requisitioned for a job, the raw materials inventory account is credited.
17. When raw materials are requisitioned for a job, the raw material control is credited.
18. The work in process account is debited for the cost of direct labor.
19. The entry to allocate manufacturing overhead costs to work in process requires a debit to work in process.
20. Finished goods control is debited when the product is sold.
21. Raw Materials Inventory, Factory Labor, and Manufacturing Overhead are all control accounts in the general ledger when a non-integrated cost accounting system is used.
22. The stores ledger cards are the subsidiary ledger for Raw Materials Inventory control account in the general ledger.
23. When raw materials are purchased, the Work in Process Control account is debited.
24. Actual manufacturing overhead costs should be charged to the Work in Process Control account as they are incurred.
25. Finished Goods Control is charged for the cost of jobs completed during a period.
26. When goods are sold, the Cost of Goods Sold account is debited and the Work in Process Control account is credited.

ANSWERS

Q1)

| | | | | | | | | | |
|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1. (a) | 2. (c) | 3. (d) | 4. (a) | 5. (b) | 6. (c) | 7. (d) | 8. (b) | 9. (a) | 10. (c) |
| 11. (c) | 12. (b) | 13. (c) | 14. (a) | 15. (b) | 16. (a) | 17. (c) | 18. (c) | 19. (b) | 20. (d) |
| 21. (c) | 22. (c) | 23. (b) | 24. (d) | 25. (c) | 26. (b) | 27. (c) | 28. (d) | 29. (b) | 30. (a) |
| 31. (d) | 32. (d) | 33. (b) | 34. (a) | 35. (b) | 36. (c) | 37. (b) | 38. (c) | 39. (b) | 40. (c) |
| 41. (d) | 42. (c) | 43. (b) | 44. (d) | 45. (c) | 46. (b) | 47. (d) | 48. (b) | 49. (a) | 50. (a) |
| 51. (c) | 52. (d) | 53. (d) | 54. (a) | 55. (a) | 56. (d) | 57. (b) | 58. (a) | 59. (c) | 60. (d) |
| 61. (a) | 62. (d) | 63. (a) | 64. (b) | 65. (c) | 66. (a) | 67. (b) | 68. (a) | 69. (c) | 70. (d) |
| 71. (b) | 72. (c) | 73. (b) | 74. (b) | 75. (d) | 76. (a) | 77. (d) | 78. (b) | | |

Q2)

- | | | |
|---------------------|--------------------|---------------------|
| (1) Non-integrated | (2) Non-integrated | (3) Non-integrated |
| (4) Non-integrated | (5) Requisition | (6) Return |
| (7) Non-integrated | (8) Double | (9) General |
| (10) Cost | (11) Stores | (12) Stores |
| (13) Finished Goods | (14) Stock | (15) Gross |
| (16) recovered | (17) credited | (18) Finished Goods |
| (19) Cost of Sales | | |

Q3) True: 1, 2, 3, 8, 9, 10, 12, 13, 14, 15, 16, 17, 18, 19, 22, 25

False: 4, 5, 6, 7, 11, 20, 21, 23, 24, 26

2 - CONTRACT COSTING

Q1) MULTIPLE CHOICE QUESTIONS

A. Conceptual

1. Contract costing is a basic method of
 - a) Historical costing
 - b) Specific order costing
 - c) Process costing
 - d) Standard costing
2. Contract costing is a variant of _____ Costing.
 - a) Job
 - b) Process

- c) Unit
 - d) Batch
3. Contract costing usually applicable in
 - a) Constructional Works
 - b) Textile Mills
 - c) Cement industries
 - d) Chemical Industries
 4. _____ is the person for whom the Contract job is undertaken.
 - a) Contractor
 - b) Contractee
 - c) Sub-contractor
 - d) Job-worker
 5. Which one of the following is not a contract cost?
 - a) Direct wages
 - b) Depreciation of plant
 - c) Sub-contractors' fees
 - d) Architects' certificates
 6. The degree of completion of work is determined by comparing the work certified with
 - a) Contract price
 - b) Work in progress
 - c) Cash received on contract
 - d) Retention money
 7. In contract costing credit is taken only for a part of the profit on
 - a) Completed contract
 - b) Incomplete contract
 - c) Work uncertified
 - d) Work Certified
 8. In contract costing payment of cash to the contractor is made on the basis of
 - a) Uncertified work
 - b) Certified work
 - c) Work in progress
 - d) Retention Money
 9. The cost of any sub-contracted work is
 - a) A direct expense of a contract and is debited to the contract account
 - b) An indirect expense of a contract and is debited to the contract account
 - c) A direct expense of a contract and is debited to the client account
 - d) An indirect expense of a contract and is debited to the client account
 10. Progress payments received by the contractor from the client are
 - a) Debited to the contract account
 - b) Credited to the contract account
 - c) Debited to the client account
 - d) Credited to the client account
 11. Retention Money is equal to
 - a) Work certified Less Work uncertified
 - b) Contract price Less Work certified

- c) Work certified Less Payment received by contractor
d) None of the above
12. Material supplied by the Contractee
a) is debited to the Contract Account
b) is ignored in the Contract Account
c) is credited to the Contract Account
d) is debited to the Contractee's Account
13. Cost of material lost or destroyed
a) is credited to the Contract Account
b) is debited to the Contract Account
c) is debited to the Costing Profit and Loss Account
d) is credited to the Costing Profit and Loss Account
14. Work Certified is valued at
a) Cost price
b) Market price
c) Cost or market price whichever is less
d) Estimated price
15. Value of Work Certified Less Profit =
a) Work-in-progress
b) Cost of Work Certified
c) Retention Money
d) Cost of uncertified work
16. The Total Value of Work Completed during an accounting year is equal to
a) Work Certified + Progress Payment Received
b) Work Certified + Work Uncertified
c) Work Certified + Retention Money
d) None of the above
17. Notional Profit is equal to
a) Work certified Less Cost of work certified
b) Work certified Less Cost of work completed
c) Payment received Less Work certified
d) None of the above
18. Work-in-progress at year end is equal to
a) only closing stock of materials
b) only work certified
c) only work uncertified
d) the total of all the above
19. Work certified is less than 25% of the contract price. The transfer to P & L A/c will be
a) 1/3rd of Notional profits
b) NIL
c) 2/3rd of Notional profits
d) 100% of Notional profits
20. Work certified is between 25% and 50% of the contract price. The transfer to P&L A/c will be
a) 1/3rd of Notional profits, reduced in the ratio of cash received to work certified
b) NIL

- c) $\frac{2}{3}$ rd of Notional profits, reduced in the ratio of cash received to work certified
d) 100% of Notional profits
21. Work certified is between 50% and 90% of contract price. Transfer to P&L A/c will be
a) $\frac{1}{3}$ rd of Notional profits, reduced in the ratio of cash received to work certified
b) NIL
c) $\frac{2}{3}$ rd of Notional profits, reduced in the ratio of cash received to work certified
d) 100% of Notional profits
22. The entire contract is complete. The transfer to P & L A/c will be
a) $\frac{1}{3}$ rd of Notional profits
b) NIL
c) $\frac{2}{3}$ rd of Notional profits
d) Entire profit
23. If a contract is 40% complete, credit taken to the profit and loss account is
a) 40% of the notional profit
b) $\frac{1}{3}$ rd of Notional profits, reduced in the ratio of cash received to work certified
c) NIL
d) $\frac{2}{3}$ rd of Notional profits, reduced in the ratio of cash received to work certified

B. Numerical

24. Value of work certified – ₹ 5,00,000, Cost of work to date – ₹ 4,00,000
Cost of work not yet certified – ₹ 1,00,000. Notional Profit is
a) ₹ 1,00,000
b) Nil
c) Loss ₹ 1,00,000
d) ₹ 2,00,000
25. The total profit on a contract for ₹ 3,00,000 is ₹ 60,000 and the contract is 60% complete and has been certified accordingly. The retention money is 20% of the certified value, then the amount of profit that can be prudently credited to Profit and Loss Account
a) ₹ 60,000
b) ₹ 36,000
c) ₹ 28,800
d) ₹ 48,000
26. Contract cost - ₹ 2,80,000
Contract value - ₹ 5,00,000
Cash received - ₹ 2,70,000
Uncertified work - ₹ 30,000
Deduction from bills by way of retention money is 10%.
How much profit, if any, you would take to the profit and loss account?
a) ₹ 50,000
b) ₹ 33,333
c) ₹ 30,000
d) Nil

| | |
|---|------------|
| 27 – 28 : Total cost of contract to date | - 3,83,000 |
| Cost of contract not yet to certified | - 23,000 |
| Value of work certified | - 4,20,000 |
| Cash received to date | - 3,78,000 |

27. Value of work-in-progress is

- a) ₹ 65,000
- b) ₹ 41,000
- c) ₹ 23,000
- d) ₹ 14,000

28. Reserve for contingencies is

- a) ₹ 60,000
- b) ₹ 24,000
- c) ₹ 36,000
- d) ₹ 1,000

Q2) FILL IN THE BLANKS

1. Contract costing is a variant of _____(Job / Process) Costing.
2. _____ is the person for whom the Contract job is undertaken.
3. Material supplied by the Contractee _____ (is / is not) debited to the Contract Account.
4. Cost of material lost or destroyed is _____ (debited / credited) to the Contract Account.
5. _____ (Profit on / Cost of) material sold is credited to the Contract Account.
6. Cost of Closing Stock appears on the _____ (debit / credit) side of the Contract Account.
7. The Contractee's Account is _____ (debited / credited) and the Contract Account is (debited / credited) with the Contract Price, on completion of the Contract.
8. When the Contractee makes any payment towards the Contract Price, _____ (Bank / Contractee's) Account is debited and _____(Contract / Contractee's) Account is credited with the amount so received.
9. Value of the work certified but not paid is known as _____ money.
10. TDS A/c is shown as part of the current__ (assets/liabilities) of the contractor.
11. If the contract is less than_____% complete, no profit should be taken into account.
12. If the Contract is complete between 25% and 50% _____ (1/3 or 2/3) of the notional profit reduced in the ratio of cash received to work certified, may be transferred to the profit and loss account.
13. If the Contract is complete between 50% and 90% _____ (2/3 or 100%) of the notional profit reduced in the ratio of cash received to work certified, may be transferred to the profit and loss account.
14. Value of Work Certified _____ (Less / Add) Profit = Cost of Work Certified
15. Contract Price ₹ 10,00,000, Work Certified 60%; value of Work Certified is ₹_____.
16. Cash received ₹ 4,80,000 being 80% of Work Certified; value of Work Certified is ₹_____.
17. Retention Money = Value of Work_____ (Certified/Uncertified) – Cash Received

18. Contact price ₹ 5,00,000, work certified 60%, payment received from contractee 80%; payment received from contractee is ₹ _____.
19. Total Costs incurred to date ₹1,20,000 to complete 60% of the contract work. However, architect gave certificate only for 50% of the contract price. Cost of Work Uncertified is ₹ _____.
20. Contract Price ₹ 6,00,000, 7/10th of the contract was completed. However, architect gave certificate only for 50% of the contract price on which 80% was paid. Cost incurred to date ₹ 3,50,000. Cost of Work Uncertified is ₹ _____.
21. Contract Price ₹ 6,00,000, 7/10th of the contract was completed. However, architect gave certificate only for 50% of the contract price on which 80% was paid. Cost incurred to date ₹3,50,000. Payment received from contractee is ₹ _____.
22. Value of Work Certified ₹ 2,50,000; Cost of Work Uncertified ₹ 20,000; Total Cost incurred till date ₹ 1,20,000. Notional Profit is ₹ _____.
23. Contract Price ₹ 8,00,000, Current cost incurred to date ₹ 4,00,000, Cash received 80%. Value of work certified ₹ 1,90,000, Cost of work uncertified ₹ 2,40,000. Amount of profit credited to P&L A/c is ₹ _____.
24. Contract Price ₹ 8,00,000, Current cost incurred to date ₹ 4,00,000, Cash received 80%. Value of work certified ₹ 2,00,000, Cost of work uncertified ₹ 2,60,000. Amount of profit credited to P&L A/c is ₹ _____.
25. Contract Price ₹ 8,00,000, Current cost incurred to date ₹ 4,00,000, Cash received 80%. Value of work certified ₹ 4,00,000, Cost of work uncertified ₹ 1,20,000. Amount of profit credited to P&L A/c is ₹ _____.
26. Contract Price ₹ 8,00,000, Current cost incurred to date ₹ 4,00,000, Cash received 80%. Value of work certified ₹ 4,80,000, Cost of work uncertified ₹ 64,000. Amount of profit credited to P & L A/c is ₹ _____.
27. Contract Price ₹ 5,60,000, Current costs incurred to date ₹ 5,00,000, Value of work certified ₹ 4,20,000, Cost of work uncertified ₹ 2,000, Estimated additional costs likely to be incurred to complete the unfinished work ₹ 2,00,000. Amount of profit/(loss) taken to P & L A/c is ₹ _____.

Q3) STATE WHETHER TRUE OR FALSE

1. Any material supplied by the Contractee (e.g. cement in construction Contract), is debited to the Contract Account.
2. The cost of material lost or destroyed is debited to the Contract Account.
3. The sale price of material for a contract is credited to the Contract Account.
4. The price received on sale of special plant purchased for a contract is credited to the Contract Account.
5. Retention Money = Payment received Less Work Certified.
6. If the contract is less than 25% complete, entire profit is credited to the profit and loss account.
7. If a contract is 40% complete, 40% of the notional profit is credited to the profit and loss account.
8. If a contract is 60% complete, 1/3rd of the notional profit is credited to the profit and loss account.
9. A contract is 40% complete. There is a notional loss. 100% of the notional loss is debited to the profit and loss account.

10. Cost of normal wastage of materials is debited to the Contract Account.
11. Cost of abnormal wastage of materials in a contract is transferred to the Costing Profit & Loss Account.
12. In contract costing, the percentage of price not paid by the contractee is known as margin money.
13. In contract costing, the work - in - progress does not include uncertified work.
14. Job order system is appropriate for a manufacturer, which produces product as special orders.
15. A contract is a small Job while a job is a big contract.
16. Work certified is valued at cost.
17. Work uncertified is valued terms of contract price,
18. Work-in-progress is valued at cost plus profit which has not been taken to the Profit & Loss A/c.
19. Cash received on contract is credited to Contract Account.

Answers

Q1)

| | | | | | | | | | |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1.(b) | 2.(a) | 3.(a) | 4.(b) | 5.(d) | 6.(a) | 7.(b) | 8.(b) | 9.(a) | 10.(d) |
| 11.(c) | 12.(b) | 13.(a) | 14.(a) | 15.(b) | 16.(b) | 17.(a) | 18.(d) | 19.(b) | 20.(a) |
| 21.(c) | 22.(d) | 23.(b) | 24.(d) | 25.(c) | 26.(c) | 27.(b) | 28.(b) | | |

Q2)

- | | | |
|-----------------------|------------------------|-----------------|
| (1) Job | (2) Contractee | (3) is not |
| (4) credited | (5) Cost of | (6) credit |
| (7) debited; credited | (8) Bank; Contractee's | (9) retention |
| (10) assets | (11) 25 | (12) 1/3 |
| (13) 2/3 | (14) Less | (15) 6,00,000 |
| (16) 6,00,000 | (17) Certified | (18) 2,40,000 |
| (19) 20,000 | (20) 1,00,000 | (21) 2,40,000 |
| (22) 1,50,000 | (23) Nil | (24) 16,000 |
| (25) 64,000 | (26) 76,800 | (27) (1,40,000) |

Q3) True : 4, 9, 10, 11, 14

False : 1,2, 3, 5, 6, 7, 8, 12, 13, 15, 16, 17, 18, 19

3 - PROCESS COSTING

Q1) MULTIPLE CHOICE QUESTIONS

I. PROCESS COSTING - MAIN PRODUCT

A. Conceptual

1. Process costing is applied when
 - a) small number of different products are manufactured
 - b) large number of different products are manufactured
 - c) large number of identical products are manufactured
 - d) small numbers of customized made-to-order products are manufactured
2. Which of the following does not use process costing?
 - a) Oil refining
 - b) Distilleries
 - c) Sugar
 - d) Air-craft manufacturing
3. Which cost accumulation procedure is most applicable in continuous mass-production manufacturing environments?
 - a) Standard
 - b) Actual
 - c) Process
 - d) Job order
4. Which of the following statements is false?
 - a) In process costing, cost is accumulated according to processes or departments
 - b) In job costing, the basis of cost accumulation is job order or batch size
 - c) In process costing, cost is accumulated on time basis
 - d) In job costing, cost is computed at the end of the cost period
5. Process Cost is based on the concept of
 - a) Average Cost
 - b) Marginal Cost
 - c) Standard Cost
 - d) Differential Cost
6. Normal Loss is equal to
 - a) Normal Output – Actual Output
 - b) Actual Output – Normal Output
 - c) Input x % of Normal Loss
 - d) None of the above
7. Normal Output is equal to
 - a) Input – Abnormal Loss
 - b) Input – Normal Loss
 - c) Input – Abnormal Gains
 - d) None of the above

8. Unit Cost is equal to
- Normal Cost \div Normal Output
 - Total Cost \div Normal Output
 - Normal Cost \div Total Output
 - Total Cost \div Total Output
9. Abnormal Loss is equal to
- Input – Actual Output
 - Actual Output – Normal Output
 - Normal Output – Actual Output
 - Actual Output – Input
10. Abnormal Gains are equal to
- Actual Output – Normal Output
 - Normal Output – Actual Output
 - Actual Output – Input
 - Input – Actual Output
11. Process cost is very much applicable in
- Construction Industry
 - Pharmaceutical Industry
 - Airline Company
 - None of these
12. In process costing, each producing department is a
- Cost unit
 - Cost centre
 - Investment centre
 - Sales centre
13. Which of the given units can never become part of first department of Cost of Production report?
- Units received from preceding department
 - Units transferred to subsequent department
 - Lost units
 - Units still in process
14. When production is below standard specification or quality and cannot be rectified by incurring additional cost, it is called
- Defective
 - Spoilage
 - Waste
 - Scrap
15. What will be the impact of normal loss on the overall per unit cost?
- Per unit cost will increase
 - Per unit will decrease
 - Per unit cost remain unchanged
 - Normal loss has no relation to unit cost

B. Numerical

16. 12,000 kg of a material were input to a process in a period. The normal loss is 10% of input. There is no opening or closing work-in-progress. Output in the period was 10,920 kg. What was the abnormal gain/loss in the period?
- Abnormal gain of 120 kg
 - Abnormal loss of 120 kg
 - Abnormal gain of 1,080 kg
 - Abnormal loss of 1,080 kg
17. Wastage of a raw material during a manufacturing process is 20% of input quantity. What input quantity of raw material is required per kg of output?
- 0.8 kg
 - 1.2 kg
 - 1.25 kg
 - 1.33 kg
18. 400 litres of a chemical were manufactured in a period. There is a normal loss of 25% of the material input into the process. An abnormal loss of 5% of material input occurred in the period. How many litres of material (to the nearest litre) were input into the process in the period?
- 500
 - 520
 - 560
 - 571
19. A company uses process costing to value its output. The following was recorded for the period:
- Input materials 2,000 units at ₹ 4.50 per unit
 Conversion costs ₹ 13,340
 Normal loss 5% of input valued at ₹ 3 per unit
 Actual loss 150 units
 There were no opening or closing stocks.
 What was the valuation of one unit of output to one decimal place?
- ₹ 11.8
 - ₹ 11.6
 - ₹ 11.2
 - ₹ 11.0
20. A company uses process costing to value its output and all materials are input at the start of the process.
- The following information relates to the process for one month:
- | | |
|---------------|-------------------------------------|
| Input | 3,000 units |
| Opening stock | 400 units |
| Losses | 10% of input is expected to be lost |
| Closing stock | 200 units |
- How many good units were output from the process if actual losses were 400 units?
- 2,800 units
 - 2,900 units
 - 3,000 units
 - 3,200 units

21. The cost of production of 40 units in Process I consisting of materials ₹ 1,500; Labour ₹ 1,300 and Overhead ₹ 164. The normal waste is 5% of input.
- 40 units are transferred to next process @ ₹ 70 each
 - 40 units are transferred to next process @ ₹ 74.10 each
 - 38 units are transferred to next process @ ₹ 78 each
 - 40 units are transferred to next process @ ₹ 78 each
22. Particulars for Process A.
- | | |
|-----------------------|---------|
| Materials (200 Units) | ₹ 4,000 |
| Labour | ₹ 3,000 |
| Indirect Expenses | ₹ 2,000 |
- Normal wastage is 5% of the input. One unit of wastage is sold at ₹ 16.50 each.
- 190 units are transferred to next process at ₹ 9,000
 - 200 units are transferred to next process at ₹ 9,000
 - 190 units are transferred to next process at ₹ 7,000
 - 190 units are transferred to next process at ₹ 8,835
23. In process Y, 75 units of a commodity were transferred from process X at a cost of ₹ 1,310. The labour and overhead expenses incurred by the process were ₹ 190. 20% of the units entered are normally lost and sold @ ₹ 4 per unit. The output of the process was 70 units.
- Process Account Credit Side showed Abnormal Gains of ₹ 240
 - Process Account Debit Side showed Abnormal Loss of ₹ 240
 - Process Account Credit Side showed Abnormal Loss of ₹ 240
 - Process Account Debit Side showed Abnormal Gains of ₹ 240
24. Input in a process is 4000 units and normal loss is 20%. When finished output in the process is only 3,240 units, there is an
- Abnormal loss of 40 units
 - Abnormal gain of 40 units
 - Neither abnormal loss nor gain
 - Abnormal loss of 60 units
25. Details of the process for the last periods are as follows:
- | | |
|----------------------|----------------|
| Put into process | 5,000 kg |
| Materials | ₹ 2,500 |
| Labour | ₹ 700 |
| Production Overheads | 200% of labour |
- Normal losses are 10% of input in the process. The output for the period was 4,200 kg from the process. There was no opening and closing work-in-process. What were the units of abnormal loss?
- 500 units
 - 300 units
 - 200 units
 - 100 units
26. You are required to identify how many good units were outputs from the process.
- | | Units |
|----------------------|-------|
| Units put in process | 4,000 |
| Lost units | 500 |
| Units in process | 200 |

- a) 3,300 units
 - b) 4,000 units
 - c) 4,200 units
 - d) 4,500 units
27. A chemical process has normal wastage of 10% of input. In a period, 2,500 kg of material were input and there was abnormal loss of 75 kg. What quantity of good production was achieved?
- a) 2,175 kg
 - b) 2,250 kg
 - c) 2,425 kg
 - d) 2,500 kg

II. JOINT PRODUCTS / BY-PRODUCTS

A. Conceptual

28. Costs incurred prior to the point of separation of the joint or by-products are termed as
- a) Process cost
 - b) Joint cost
 - c) Main cost
 - d) Separable cost
29. When a single manufacturing process yields two products, one of which has a relatively high sales value compared to the other, the two products are respectively known as
- a) joint products and byproducts
 - b) joint products and scrap
 - c) main products and byproducts
 - d) main products and joint products
30. A process gives rise, incidentally, to an item of low value, which is called
- a) a joint product
 - b) a by-product
 - c) scrap
 - d) waste
31. By products and main products are differentiated by
- a) number of units per processing period
 - b) weight or volume of outputs per period
 - c) the amount of sales value per unit
 - d) none of the above
32. A Petroleum company assigns certain value based on the calorific value to each petroleum product, and these values become the basis of apportionment of joint cost among petroleum products. This is an example of -
- a) Average Unit Cost Method
 - b) Physical Unit Method
 - c) Survey method
 - d) None of the above
33. Under this method of allocation of joint costs, even high quality items may have a lower price
- a) Contribution Margin Method

- b) Survey method
 - c) Average Unit Cost Method
 - d) None of the above
34. This is also known as Weighted Average Cost Method'.
- a) Contribution Margin Method
 - b) Survey method
 - c) Net Realizable Value Method
 - d) None of the above
35. Under this method of allocation of joint costs, higher-priced items are charged more costs -
- a) Contribution Margin Method
 - b) Market Value Method
 - c) Average Unit Cost Method
 - d) None of the above
36. This method of allocation of joint costs is useful when the products are not saleable at the split-off stage without further processing
- a) Market value at the point of separation
 - b) Net Realizable Value
 - c) Market value at finished stage
 - d) None of the above
37. For the purpose of allocating joint costs to joint products, the sale price at point of sale, reduced by costs to complete after split-off, is assumed to be equal to -
- a) Joint Costs
 - b) Total Costs
 - c) Net Sales Value at split-off
 - d) Sale price Less normal profit margin at point of sale
38. Joint Costs are normally allocated on the basis of relative
- a) Profitability
 - b) Sales Value
 - c) Direct Labour Hours
 - d) Direct Machine Hours
39. Net Realizable Value is defined as
- a) Sales value at split-off point
 - b) Sales price minus fixed costs
 - c) Sales price minus joint costs
 - d) Sales price minus costs to complete the product
40. Joint Cost are allocated according to sales value of individual products under -
- a) Market Value Method
 - b) Average Unit Cost Method
 - c) Survey Method
 - d) Physical Unit Method
41. Under the Market Value Method, Joint Costs are allocated according to_____ of individual products
- a) Cost Price
 - b) Market price or cost price whichever is less
 - c) Sales Value

- d) Cost and Demand Price
42. Under the Average Unit Cost Method of apportionment of joint costs, the cost per unit of each product is
- Constant
 - Different
 - Same
 - Semi-Variable
43. All costs incurred beyond the split off point that are assignable to one or more individual products are called
- byproduct costs
 - joint costs
 - main costs
 - separable costs

B. Numerical

44-45 : Three products A, B and C are obtained from a process. The following details are provided-

| Particulars | A | B | C |
|-----------------------|-----|-----|-----|
| Sales (kg.) | 500 | 400 | 100 |
| Selling price per kg. | 25 | 22 | 37 |

Joint costs are ₹ 90,000

44. The amount of joint costs allocated to product B on Sales Value method will be -
- ₹ 45,000
 - ₹ 31,680
 - ₹ 25,720
 - ₹ 13,320
45. The amount of joint costs allocated to product C on Physical Unit method will be
- ₹ 45,000
 - ₹ 36,000
 - ₹ 18,000
 - ₹ 9,000

Q2) FILL IN THE BLANKS

I. Process Costing – Main Product

- _____ (Job / Process) Costing is used in case of industries where work is done against specific order.
- Process costing is ordinarily applied where all the operations are performed in _____ (one/more than one) department.
- Examples of industries that would use _____ (process / job) costing include the pharmaceuticals and semiconductor industry.
- Job Costing and Process Costing _____ (can /cannot) be simultaneously used in the same industry.
- In Process Costing ordinarily distinction _____ (is / is not) made between direct materials and indirect materials.

6. _____ (Waste / Scrap) has no sale value.
7. The sale value of scrap is always _____ (more / less) than its cost of production.
8. The sale value of scrap is credited to the _____ (Process / Costing P & L) Account.
9. Realizable value of Normal Loss is _____ (debited / credited) to Process Account.
10. _____ (Abnormal / Normal) Loss is treated as cost of production.
11. _____ (Normal / Abnormal) process loss affects the cost per unit of output.
12. Normal Loss _____ (is / is not) absorbed by good units in process costing.
13. The cost of units of abnormal loss is _____ (debited / credited) to the Process account.
14. The sale value of units of abnormal loss is credited to the _____ (abnormal loss / costing profit & loss) account.
15. Realizable value of abnormal loss is credited to _____ (Process / Abnormal Loss) Account.
16. Abnormal Loss _____ (is / is not) absorbed by good units in process costing.
17. _____ (Normal / Abnormal) process loss does not affect the cost per unit of output.
18. The sale value of units of abnormal gains is _____ (debited / credited) to the abnormal gains account.
19. Realizable value of abnormal gain is debited to _____ (Process / Abnormal Gains) Account.
20. The sale value of units of abnormal gains is credited to the _____ (abnormal gains / normal loss) account.
21. The cost of units of abnormal gain is _____ (debited / credited) to the Process account.
22. The cost of good units _____ (is / is not) reduced by the abnormal gain in process costing.
23. Abnormal loss is _____ (debited / credited) to Process Account and Abnormal Gain is _____ (debited / credited) to Process Account.

II. Joint Products / By-Products

24. When a production process is such that from a set of same input, two or more distinguishably different products are produced together, products of greater importance are termed as products.
25. The costs incurred prior to the point of separation of the by-products are termed as _____ Costs.
26. The costs incurred _____ (before / after / up-to) the point of separation of the joint - products are termed as Joint Costs.
27. The physical unit method of allocation of joint costs gives _____ (equal / unequal) importance and value to all the joint products.
28. In case by-products are produced, the net realizable value of by-products is _____ (debited / credited) to the cost of production of the main product.
29. _____ (Separable / Joint) costs are assignable after the split off point.
30. A _____ (joint product / by-product) has a minimal sales value.
31. Joint products are of _____ (equal / unequal) importance.
32. The proportion of joint products _____ (can / cannot) be changed at the will of the management.
33. Joint products are produced from _____ (same / different) material(s).

34. Joint products are produced from _____ (same / different) process(es).
35. Split off point refers to the point at which joint products are ____ (separated / sold).
36. Joint costs refer to the total cost incurred upto the point when the products are _____ (separated/ sold).
37. Joint costs = Common materials costs + _____ (Common / Subsequent) processing costs.
38. Apportionment of joint costs affects the _____ (overall / product-wise) profitability.
39. Product _____ (should be / should not be) processed further if the incremental sales revenue after further processing exceeds the further processing costs.
40. Product _____ (should be / should not be) sold at split off point if the incremental sales revenue at split off point is less than the further processing costs.

Q3) MATCH THE FOLLOWING COLUMNS

A.

| COLUMN A | COLUMN B |
|---------------------------|---|
| 1. Normal Loss | (a) Normal Cost / Normal Output |
| 2. Normal Output | (b) Unit Cost x Units of Abnormal Loss |
| 3. Unit Cost | (c) Unit Cost x Units of Actual Output |
| 4. Abnormal Loss | (d) Input x % of Normal Loss |
| 5. Abnormal Gains | (e) Actual Output - Normal Output |
| 6. Cost of Actual Output | (f) Unit Cost x Units of Abnormal Gains |
| 7. Cost of Abnormal Loss | (g) Input - Normal Loss |
| 8. Cost of Abnormal Gains | (h) Normal Output - Actual Output |

B.

| COLUMN A | COLUMN B |
|---|--|
| 1. Equal economic importance | a) Contribution Margin Method |
| 2. Credit NRV to cost of production | b) Average Unit Cost Method |
| 3. Sales values of products at the split off point | c) Physical Units Method |
| 4. Add costs of further processing after split-off points | d) By-products |
| 5. Deduct estimated profit margins | e) Joint Products |
| 6. Apportion Variable Costs on basis of units produced | f) Market value at finished state method |
| | g) Market value at point of separation method |
| | h) Net Realizable Value Method |

Q4) STATE WHETHER TRUE OR FALSE

I. Process Costing - Main Product

1. The sale value of residue etc. is credited to the Process Account.
2. Invisible waste has no sale value.
3. The sale value of scrap, is always more than the cost of production, leading to abnormal gains.
4. Normal Loss is treated as normal cost of production.

5. The actual sale of units of scrap representing normal loss is credited to P&L A/c.
6. The sale value of the units of abnormal loss is credited to the Process Alc.
7. The sale value of units of abnormal gains is debited to the abnormal gains account and credited to the normal loss account.
8. The cost of units of abnormal loss is credited to the Process account.
9. The cost of units of abnormal gain is debited to the Process account.
10. The sale value of units of abnormal loss is credited to the abnormal loss account
11. Abnormal loss is charged to costing profit and loss account.
12. Costs are accumulated by time period in a process costing system.
13. Process costing is ordinarily applied where all the operations are performed in one department.
14. Process Costing is used in case of industries where work is done against specific order.
15. The cost of good units is reduced by the abnormal gain in process costing.

II. Joint Products By-Products

16. When two or more inputs are used together to produce a product, such inputs are termed as joint products.
17. When two or more products are produced together, products of greater importance are termed as by-products.
18. The costs incurred after the point of separation of the joint-products are termed as Joint Costs.
19. The physical unit method of allocation of joint costs gives equal importance and value to all the joint products.
20. In Contribution Margin Method, the variable costs are apportioned over the joint products on the basis of the contribution ratios.
21. Under the Market Value method, the joint costs up-to the point of sale are apportioned in the ratio of sale values of joint products at such point.
22. In case by-products are produced, the net realizable value of by-products is credited to the cost of production of the main product.
23. A by-product has a minimal sales value.
24. Joint products are of unequal importance.
25. The proportion of joint products can be changed at the will of the management.
26. Joint products are produced from the different processes.
27. Split off point refers to the point at which joint products are sold.
28. Joint costs refer to the total cost incurred upto the point when the products are sold.
29. Joint costs = Common materials costs + subsequent processing costs.

Answers:

Q1)

| | | | | | | | | | |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1.(c) | 2.(d) | 3.(c) | 4.(d) | 5.(a) | 6.(c) | 7.(b) | 8.(a) | 9.(c) | 10.(a) |
| 11.(b) | 12.(b) | 13.(a) | 14.(b) | 15.(a) | 16.(a) | 17.(c) | 18.(d) | 19.(b) | 20.(a) |
| 21.(c) | 22.(d) | 23.(d) | 24.(b) | 25.(b) | 26.(a) | 27.(a) | 28.(b) | 29.(c) | 30.(b) |

| | | | | | | | | | |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 31.(c) | 32.(b) | 33.(c) | 34.(b) | 35.(b) | 36.(c) | 37.(c) | 38.(b) | 39.(d) | 40.(a) |
| 41.(c) | 42.(c) | 43.(d) | 44.(b) | 45.(d) | | | | | |

Q2)

- | | | |
|---------------------|------------------------|--------------------|
| (1) Job | (2) more than one | (3) process |
| (4) can | (5) is not | (6) Waste |
| (7) less | (8) Process | (9) credited |
| (10) Normal | (11) Normal | (12) is |
| (13) credited | (14) abnormal loss | (15) Abnormal Loss |
| (16) is not | (17) Abnormal | (18) debited |
| (19) Abnormal Gains | (20) normal loss | (21) debited |
| (22) is not | (23) credited; debited | (24) Joint |
| (25) Joint | (26) before | (27) equal |
| (28) credited | (29) Separable | (30) by-product |
| (31) equal | (32) cannot | (33) same |
| (34) same | (35) separated | (36) separated |
| (37) Common | (38) product-wise | (39) should be |
| (40) should be | | |

Q3) A : (1 – d), (2 – g), (3 – a), (4 – h), (5 – e), (6 – c), (7 – b), (8 – f)

B : (1 – e), (2 – d), (3 – g), (4 – f), (5 – h), (6 – a)

Q4) True : 1, 2, 4, 7, 8, 9, 10, 11, 12, 19, 22, 23

False : 3, 5, 6, 13, 14, 15, 16, 17, 18, 20, 21, 24, 25, 26, 27, 28, 29

4 – INTRODUCTION TO MARGINAL COSTING

Q1) MULTIPLE CHOICE QUESTIONS

A. Conceptual

1. What distinguishes absorption costing from marginal costing?
 - a) Product costs include both prime cost and production overhead
 - b) Product costs include both production and non-production costs
 - c) Stock valuation includes a share of all production costs
 - d) Stock valuation includes a share of all costs
2. The Marginal Cost Statement
 - a) shows the gross profit
 - b) is sent to the shareholders
 - c) shows classification of costs as direct and indirect
 - d) can be used to predict future profits at different levels of activity
3. CVP analysis requires costs to be categorized as
 - a) fixed or variable
 - b) direct or indirect
 - c) product or period
 - d) standard or actual
4. Contribution equals :
 - a) Sales minus cost of sales
 - b) Sales minus cost of production
 - c) Sales minus variable costs
 - d) Sales minus fixed costs
5. Contribution is equal to
 - a) Fixed cost + profit
 - b) Sales – variable cost
 - c) Fixed cost – loss
 - d) All the above
6. Which of the following costs is not deducted from sales revenue in computation of contribution?
 - a) Direct materials
 - b) Direct labour
 - c) Fixed factory overheads
 - d) Variable selling overheads
7. The selling price per unit less the variable cost per unit is the :
 - a) Fixed cost per unit
 - b) Gross profit per unit
 - c) Operating profit per unit
 - d) Contribution per unit
8. If contribution margin increases by ₹ 2 per unit, then operating profits will

- a) also increase by ₹2 per unit
 - b) increase by less than ₹2 per unit
 - c) decrease by ₹ 2 per unit
 - d) cannot say
9. P/V ratio is equal to
- a) Profit/volume
 - b) Contribution/sales
 - c) Profit/contribution
 - d) Profit/sales
10. Profit – volume ratio is improved by reducing
- a) Variable cost
 - b) Fixed cost
 - c) Both of them
 - d) None of them
11. At the break-even point, which equation will be true
- a) Variable cost – fixed cost = contribution
 - b) Sales = variable cost + fixed cost
 - c) Sales – fixed cost = contribution
 - d) Sales – contribution = variable cost
12. The break even points in units is equal to
- a) Fixed cost/P/V ratio
 - b) Fixed cost x sales/total contribution
 - c) Fixed cost / contribution per unit
 - d) Fixed cost / total contribution
13. When fixed cost increases, the break-even point
- a) Increases
 - b) Decreases
 - c) No effect
 - d) Can't say
14. When variable cost decreases, then break-even point
- a) Increases
 - b) Decreases
 - c) No effect
 - d) Can't say
15. When selling price decreases, then break-even point
- a) Increases
 - b) Decreases
 - c) No effect
 - d) Can't say
16. When sales increases then break-even point
- a) Increases
 - b) Decreases
 - c) Remains constant
 - d) None of these
17. Which of the following can improve break-even point?
- a) Increase in variable cost
 - b) Increase in fixed cost

- c) Increase in sale price
 - d) Increase in sales volume
 - e) Increase in production volume
18. Which of the following describes the margin of safety?
- a) actual contribution margin achieved compared with that required to break-even
 - b) actual sales compared with sales required to break-even
 - c) actual versus budgeted net profit margin
 - d) actual versus budgeted sales
19. Margin of safety is expressed as
- a) Profit / PV ratio
 - b) $(\text{Actual sales} - \text{sales at BEP}) / \text{Actual sales}$
 - c) $\text{Actual sales} - \text{Sales at BEP}$
 - d) All of the above
20. Under which of the following cases the margin of safety decreases?
- a) Reduction in fixed cost
 - b) Increase in variable cost
 - c) Increase in the level of production or selling price or both
 - d) Change in the sales mix in order to increase the contribution
 - e) Substitute the existing unprofitable product with the profitable ones
21. In the break-even chart, the margin of safety point lies
- a) To the left of break-even point
 - b) To the right of break-even point
 - c) On break-even point
 - d) Can't say
22. Fixed cost is equal to
- a) Break-even sales x Margin of safety
 - b) Sales x Margin of safety
 - c) Sales x Profit-volume ratio
 - d) Profit-volume ratio x Break even sales
23. Which of the following factors is to be multiplied with contribution margin ratio to calculate profit?
- a) Unit contribution margin
 - b) Margin of safety
 - c) Variable costs per unit
 - d) Unit sales price
 - e) Change in sales volume
24. In cost-volume-profit analysis, profit is equal to
- a) Sales Revenue x P/V ratio – Fixed Cost
 - b) Sales units x contribution per unit - fixed costs
 - c) Total contribution – Fixed cost
 - d) All the above
25. The sales volume in value required to earn the target profit, the formula is
- a) Target profit / Contribution per unit
 - b) $(\text{Fixed cost} + \text{Target profit}) \times \text{P/V ratio}$
 - c) $(\text{Fixed cost} + \text{Target profit}) / \text{Contribution on per unit}$

- d) $(\text{Fixed cost} + \text{Target profit}) / \text{P/V ratio}$
26. There is a reduction in the selling price. This will, other factors remaining same
- increase contribution margin
 - reduce fixed costs
 - increase variable costs
 - reduce operating income
27. There is an increase in advertising expenses. This will, other factors remaining same
- reduce operating income
 - reduce contribution
 - decrease selling price
 - increase variable costs
28. Cost-volume-profit analysis is used PRIMARILY by management :
- as a planning tool
 - for control purposes
 - to prepare external financial statements
 - for correct financial results

B. Numerical

29. The contribution to sales ratio of a company is 20% and profit is ₹ 64,500. If the total sales of the company are ₹7,80,000, the fixed cost is
- ₹ 1,56,000
 - ₹ 1,21,500
 - ₹ 1,05,600
 - ₹ 91,500
 - ₹ 90,000
30. The total cost of manufacturing 4,000 units of a product is ₹ 4,50,000 which includes fixed costs of ₹ 2,50,000. If the company desires to produce 5,000 units, then the total cost will be-
- ₹ 5,27,778
 - ₹ 5,20,000
 - ₹ 5,00,000
 - ₹ 4,95,000
 - ₹ 4,83,500
31. The total cost of manufacturing 3,600 units of Product X is ₹ 81,000 which includes variable cost per unit of ₹ 15.00. If the company desires to produce 3,850 units, then the total cost would be
- ₹ 86,625
 - ₹ 84,750
 - ₹ 57,750
 - ₹ 52,250
 - ₹ 50,700
32. P Limited incurs fixed costs of ₹ 1,00,000 per annum. The company manufactures a single product and sells it for ₹ 50 per unit. If the contribution to sales ratio is 40%, the break-even sales in units are
- 5,000

- b) 6,000
- c) 6,500
- d) 7,000
- e) 7,500

33. A company manufactures a single product with a variable cost per unit of ₹ 22. The contribution to sales ratio is 45%. Monthly fixed costs are ₹ 1,98,000. What is the breakeven point in units?
- a) 4,950
 - b) 9,000
 - c) 11,000
 - d) 20,000
34. A Ltd. manufactures and sells product 'B'. The sale price per unit of the product is ₹ 35. The company will incur a loss of ₹ 5.00 per unit if it sells 4,000 units; but if the volume is raised to 12,000 units, the company will make a profit of ₹ 4.50 per unit. The break-even point in units is
- a) 5,700
 - b) 6,612
 - c) 5,250
 - d) 6,162
35. The profit-volume ratio and margin of safety ratio are 30% and 40% respectively. If the total sales is ₹ 3,00,000, the profit of the firm is
- a) ₹ 54,000
 - b) ₹ 48,000
 - c) ₹ 36,000
 - d) ₹ 30,000
 - e) ₹ 25,000
36. A company manufactures a single product which it sells for ₹ 15 per unit. The product has a contribution to sales ratio of 40%. The company's weekly break-even point is sales of ₹ 18,000, What would be the profit in a week when 1,500 units are sold?
- a) ₹ 900
 - b) ₹ 1,800
 - c) ₹ 2,700
 - d) ₹ 4,500
37. An organization manufactures a single product. The total cost of making 4,000 units is ₹ 20,000 and the total cost of making 20,000 units is ₹ 40,000. Within this range of activity the total fixed costs remain unchanged. What is the variable cost per unit of the product?
- a) ₹ 0.80
 - b) ₹ 1.20
 - c) ₹ 1.25
 - d) ₹ 2.00
38. 5,400 units of a company's single product were sold for a total revenue of ₹ 1,40,400. Fixed costs in the period were ₹ 39,420 and net profit was ₹ 11,880. What was the contribution per unit?
- a) ₹ 7.30

- b) ₹ 9.50
 c) ₹ 16.50
 d) ₹ 18.70
39. Sales are ₹ 3,20,000, fixed costs are ₹ 80,000 and variable costs are ₹ 1,20,000. What is the safety margin?
 a) ₹ 18,900
 b) ₹ 20,000
 c) ₹ 1,92,000
 d) ₹ 1,28,000
 e) ₹ 1,31,000
40. An organization manufactures a single product which has a variable cost of ₹ 36 per unit. The organization's total weekly fixed costs are ₹ 81,000 and it has a contribution to sales ratio of 40%. This week it plans to manufacture and sell 5,000 units. What is the organization's margin of safety in units?
 a) 1,625
 b) 2,750
 c) 3,375
 d) 3,500
41. An organization's break-even point is 4,000 units at a sales price of 50 per unit, variable cost of ₹ 30 per unit, and total fixed costs of ₹ 80,000. If the company sells 500 additional units, by how much will its profit increase?
 a) ₹ 25,000
 b) ₹ 15,000
 c) ₹ 12,000
 d) ₹ 37,000
 e) ₹ 10,000
42. Banta Ltd. manufactures product KDM for last ten years. The company maintains a margin of safety of 36% with an overall contribution to sales ratio of 35%. If fixed cost is ₹ 8.4 lakh, the profit of the company is
 a) ₹ 11.400 lakh
 b) ₹ 24.000 lakh
 c) ₹ 4.725 lakh
 d) ₹ 37.500 lakh
 e) ₹ 8.644 lakh
43. A company wishes to make a profit of ₹ 1,50,000. It has fixed costs of ₹ 75,000 with a C/S ratio of 0.75 and a selling price of ₹ 10 per unit. How many units would the company need to sell in order to achieve the required level of profit?
 a) 10,000 units
 b) 15,000 units
 c) 22,500 units
 d) 30,000 units
44. A company has a profit-volume ratio of 20%. To maintain the same contribution, by what percentage (%) must sales be increased to offset 10% reduction in selling price?
 a) 10
 b) 20

- c) 100
- d) 50
- e) 80

45. The following data is obtained from the records of the Plum Ltd.:

| Particulars | First year (₹) | Second year (₹) |
|-------------|----------------|-----------------|
| Sales | 1,28,000 | 1,44,000 |
| Profit | 16,000 | 22,400 |

The break-even sales of the company in rupees is

- a) ₹1,36,000
- b) ₹ 1,30,000
- c) ₹ 1,00,000
- d) ₹ 88,000
- e) ₹ 90,000

Q2) ALL IN THE BLANKS

1. The price reduction policy, _____ (increases/reduces) the P/V ratio and _____ (increases/reduces) the break-even point.
2. _____ Costing, is defined by CIMA, as "the ascertainment, by differentiating between fixed and variable Costs, of marginal costs, and of the effect on profit of changes in the volume and type of output."
3. _____ Cost is the amount by which total costs change if the output is changed by one unit.
4. _____ Cost = Prime Cost + Variable Overheads
5. Sales – Variable Cost = _____.
6. Contribution – Fixed Costs = _____.
7. Contribution = _____ x PV Ratio
8. _____ = Margin of Safety x Profit Volume Ratio
9. In the break-even chart Volume (in Units) is shown on the _____ (X / Y) axis.
10. _____ = Fixed Cost + Profit
11. _____ = 100 – Variable cost to Sales Ratio
12. _____ = Sales – (Variable Cost + Fixed Cost)
13. An increase in the physical sales volume _____ (will/will not) change P/V Ratio.
14. An increase in the fixed cost, _____ (will / will not) change P/V Ratio.
15. A decrease in the variable cost per unit will _____ (increase / decrease) P/V Ratio.
16. A decrease in the contribution margin will _____ (increase / decrease) P/V Ratio.
17. An increase in the selling price per unit will _____ (increase / decrease) P/V Ratio.
18. A decrease in the both selling price and variable cost _____ (will / will not) change P/V Ratio.
19. A 10% increase in the selling price and variable cost per unit _____ (will / will not) change P/V Ratio.
20. A 10% increase in the selling price per unit and 10% decrease in the physical sales volume will _____ (increase / decrease) P/V Ratio.

Q3) STATE WHETHER TRUE OR FALSE

1. Marginal Costing is a method of costing.
2. Contract Costing is a technique of costing.
3. In Absorption Costing Fixed as well as Variable Costs are charged to products.
4. Absorption costing ignores the Cost - Volume - Profit Relationship.
5. Increase in price leads to lower Margin of Safety.
6. In the break-even chart, Fixed Costs Line will be straight line parallel to the X-axis.
7. A large angle of incidence in the break-even chart indicates higher rate of profit.
8. Contribution margin is also known as Gross profit.
9. If activity increases by 10% the semi variable cost per unit will reduce in proportion to the change in activity.
10. In Marginal Costing the price can be fixed on the basis of only Variable Costs.
11. If the selling price is below the total cost but above the marginal cost the contribution will lead to an over-recovery of fixed expenses.
12. If the product is sold at marginal cost, the loss will be equal to the variable expenses.
13. The effect of a price reduction is always to improve the PN ratio.
14. The effect of a price reduction is always to lower the break-even point.
15. If the selling price and the variable cost decline by the same amount, the contribution per unit will decrease.
16. To perform cost-volume-profit analysis, a company must be able to separate costs into fixed and variable components.
17. In CVP analysis, variable costs include direct variable costs, but do not include indirect variable costs.
18. If the selling price per unit is ₹ 20 and the contribution margin percentage is 30%, then the variable cost per unit must be ₹ 6.
19. Total revenues less total fixed costs equal the contribution margin.
20. Breakeven point is that quantity of output where total revenues equal total costs.
21. An increase in the tax rate will increase the breakeven point.
22. If a company's breakeven sales is ₹ 100 and its sales is ₹ 125, then its margin of safety percentage is 25%.
23. If contribution margin decreases by ₹ 10 per unit, then operating profits will increase by ₹ 10 per unit.
24. If variable costs per unit increase, then the breakeven point will decrease.
25. If a company increases fixed costs, then the breakeven point will be lower.
26. Contribution margin and gross margin mean one and the same thing.
27. Gross Profits will always be greater than contribution margin.
28. At the break-even point, variable expenses and fixed expenses are equal.
29. The contribution margin at the break-even point is zero.

30. Margin of Safety = Break-even sales – Fixed cost.
 31. Margin of safety indicates profit.
 32. Sales below break-even point means profit.
 33. Contribution is always equal to fixed costs.
 34. Margin of safety implies 'break-even point'.
 35. A firm incurs a loss when contribution is equal to fixed cost.
 36. A firm earns profit when contribution is equal to fixed costs.
 37. The variable cost ratio is $1 - P/V$ ratio

ANSWERS

Q1)

| | | | | | | | | | |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1. (c) | 2. (d) | 3. (a) | 4. (c) | 5. (d) | 6. (c) | 7. (d) | 8.(a) | 9.(b) | 10.(a) |
| 11.(b) | 12.(c) | 13.(a) | 14.(b) | 15.(a) | 16.(c) | 17.(c) | 18.(b) | 19.(d) | 20.(b) |
| 21.(c) | 22.(d) | 23.(b) | 24.(d) | 25.(d) | 26.(d) | 27.(a) | 28.(a) | 29.(d) | 30.(c) |
| 31.(b) | 32.(a) | 33.(c) | 34.(d) | 35.(c) | 36.(b) | 37.(c) | 38.(b) | 39.(c) | 40.(a) |
| 41.(e) | 42.(c) | 43.(d) | 44.(e) | 45.(d) | | | | | |

Q2)

- | | | |
|------------------------|--------------------------|---------------|
| (1) reduces; increases | (2) Marginal | (3) Marginal |
| (4) Marginal | (5) Contribution | (6) Profit |
| (7) Sales | (8) Profit | (9) X |
| (10) Contribution | (11) Profit Volume Ratio | (12) Profit |
| (13) will not | (14) will not | (15) increase |
| (16) decrease | (17) increase | (18) will not |
| (19) will not | (20) increase | |

Q3)

True : 3, 4, 6, 7, 10, 16, 20, 31, 37

False : 1, 2, 5, 8, 9, 11, 12, 13, 14, 15, 17, 18, 19, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 32, 33, 34, 35, 36

5 – INTRODUCTION TO STANDARD COSTING

Q1) MULTIPLE CHOICE QUESTIONS

A Conceptual

1. The objective of standard costing is to
 - a) Determine profitability of a product
 - b) Determine break-even production level
 - c) Control costs
 - d) Allocate costs with more accuracy
2. A standard cost system may be used in
 - a) job order costing, but not process costing
 - b) process costing, but not job order costing
 - c) either job order costing or process costing
 - d) neither job order costing nor process costing
3. An estimate of what cost should be is known as
 - a) Actual cost
 - b) Ideal cost
 - c) Standard cost
 - d) Forecast cost
4. A standard cost is
 - a) the total amount that appears on the budget for product costs
 - b) a pre-determined cost which is calculated from management's standards of efficient operation
 - c) the total number of units x the cost expected
 - d) any amount that appears on a budget
5. Which of the following best describes a basic standard?
 - a) A standard set at an ideal level, which makes no allowance for normal losses, waste and machine downtime
 - b) A standard which assumes an efficient level of operation, but which includes allowances for factors such as normal loss, waste and machine downtime
 - c) A standard which is kept unchanged over a long period of time
 - d) A standard which is based on current price levels
6. A standard which assumes efficient level of operations, but which includes allowance for factors such as waste and machine downtime is known as an
 - a) Ideal standard

- b) Normal standard
 - c) Attainable standard
 - d) Neither (a) nor (b) nor (c)
7. What standard is based on the assumption of most favourable conditions possible?
- a) Ideal Standard
 - b) Normal Standard
 - c) Expected Standard
 - d) Attainable Standard
8. The standard cost card contains quantities and costs for
- a) direct material only
 - b) direct labour only
 - c) direct material and direct labour only
 - d) direct material, direct labour, and overhead
9. Which one of the following does NOT accurately describe one of the ways in which standards are developed?
- a) Standard material quantities may be determined by engineering studies
 - b) Supplier price lists may be used to determine standard prices of materials
 - c) Time and motion studies are sometimes used to determine labour efficiency standards
 - d) Employee time cards are often used to determine standard labour wage rates
10. What term can be defined as a means of assessing the difference between a predetermined amount and the actual amount?
- a) Variance analysis
 - b) Differential costing
 - c) Incremental costing
 - d) Marginal Costing
11. A total cost variance is best defined as the difference between
- a) total standard cost for the last year and total standard cost in the current year
 - b) total standard cost for the last year and total actual cost in the current year
 - c) the standard cost value of output budgeted in a period and the total actual cost incurred
 - d) the standard cost value of output achieved in a period and the total actual cost incurred
12. If standard cost is lower than the actual cost, the difference is known as
- a) Favourable
 - b) Adverse
 - c) Positive
 - d) Negative
13. A favourable variance occurs when
- a) actual costs are less than marginal costs
 - b) standard costs are less than actual costs
 - c) actual costs are less than the selling price
 - d) actual costs are less than standard costs
14. The "standard quantity allowed" is computed by multiplying the :
- a) actual input in units by the standard output allowed
 - b) actual output in units by the standard input allowed
 - c) actual output in units by the standard output allowed

- d) standard output in units by the standard input allowed
15. The difference between the actual price and the standard price, multiplied by the actual quantity of materials purchased is the
- materials cost variance
 - materials usage variance
 - materials price variance
 - materials efficiency variance
16. The difference between the actual quantity and the standard quantity, multiplied by the standard price is the
- materials efficiency variance
 - materials volume variance
 - materials price variance
 - materials usage variance
17. Which of the following is correct with regard to using the standard quantity to compute materials variances?
Standard quantity is used -
- Materials Price Variance: Yes; Materials Usage Variance: No
 - Materials Price Variance: Yes; Materials Usage Variance: Yes
 - Materials Price Variance: No; Materials Usage Variance: No
 - Materials Price Variance: No; Materials Usage Variance: Yes
18. Which of the following is correct with regard to using the standard unit price to compute materials variances?
Standard unit price used:
- Materials Price Variance: Yes; Materials Usage Variance: No
 - Materials Price Variance: Yes; Materials Usage Variance: Yes
 - Materials Price Variance: No; Materials Usage Variance: No
 - Materials Price Variance: No; Materials Usage Variance: Yes
19. The term "standard hours allowed" measures
- budgeted output at actual hours
 - budgeted output at standard hours
 - actual output at standard hours
 - actual output at actual hours
20. The labour rate variance is computed as :
- $(\text{Actual labour hours worked} - \text{Standard labour hours allowed}) \times \text{Actual labour rate}$
 - $(\text{Actual labour hours worked} - \text{Standard labour hours allowed}) \times \text{Standard labour rate}$
 - $(\text{Actual labour rate} - \text{Standard labour rate}) \times \text{Standard hours allowed}$
 - $(\text{Actual labour rate} - \text{Standard labour rate}) \times \text{Actual hours worked}$
21. If the actual number of labour hours worked is less than the standard labour hours allowed for equivalent units produced, this indicates
- An unfavourable labour rate variance
 - A favourable total labour variance
 - An unfavourable labour efficiency variance
 - A favourable labour efficiency variance
22. Which of the following is correct with regard to the standard labour hours being used to compute labour variances?

Standard labour hours used :

- a) Labour Rate Variance: Yes; Labour Efficiency Variance: No
- b) Labour Rate Variance: Yes; Labour Efficiency Variance: Yes
- c) Labour Rate Variance: No; Labour Efficiency Variance: No
- d) Labour Rate Variance: No; Labour Efficiency Variance: Yes

23. Which of the following is correct with regard to using the standard labour rate to compute labour variances?

Standard labour rate used:

- a) Labour Rate Variance: Yes; Labour Efficiency Variance: No
- b) Labour-Rate Variance: Yes; Labour Efficiency Variance: Yes
- c) Labour Rate Variance: No; Labour Efficiency Variance: No
- d) Labour Rate Variance: No; Labour Efficiency Variance: Yes

24. What is the primary benefit of a standard costing system?

- a) It records costs at what should have been incurred
- b) It allows for a comparison of differences between actual and standard costs
- c) It is easy to implement
- d) It is inexpensive and easy to use

25. The standard which can be attained under the most favourable conditions possible

- a) Ideal Standard
- b) Expected Standard
- c) Current Standard
- d) Normal Standard

26. A standard which is established for use unaltered for an indefinite period is called

- a) Current standard
- b) Ideal standard
- c) Basic standard
- d) Expected standards

27. Which of the following is not a type of standard, conceptually speaking?

- a) Ideal standards
- b) Negative standards
- c) Expected standards
- d) Current standards

28. Which of the following statements about ideal standards is false?

- a) It is called theoretical or maximum efficiency standard
- b) These are standard costs that are set for production under optimal condition
- c) It makes no allowances for wastage, spoilage and machine breakdowns
- d) It can be used for cash budgeting or product costing

29. The cost of product as determined under standard cost system is

- a) Fixed cost
- b) Historical cost
- c) Direct cost
- d) Predetermined cost

30. The amount of work achievable in an hour, at standard efficiency levels, is

- a) An ideal standard
- b) The direct labour usage per hour
- c) A standard hour
- d) The direct labour efficiency variance

- 31.** While computing variances from standard costs, the difference between the actual and the standard prices multiplied by the actual quantity yields a
- Yield variance
 - Volume variance
 - Mix variance
 - Price variance
- 32.** While evaluating deviations of actual cost from standard cost, the technique used is
- Regression analysis
 - Variance analysis
 - Linear progression
 - Trend analysis
- 33.** Which of the following statements is / are true?
- The standard cost per unit of materials is used to calculate a materials price variance
 - The standard cost per unit of materials is used to calculate a materials usage variance
 - The standard cost per unit of materials cannot be determined until the end of the period
- Only (i) above
 - Only (ii) above
 - Only (iii) above
 - Both (i) and (ii) above
- 34.** The labour cost variance may be expressed as
- Budgeted labour cost – Actual labour cost
 - (Standard wage rate x Output achieved) – Actual wage cost
 - (Standard hours – Actual hours) x Actual wage rate
 - (Standard hours – Actual hours) x Standard wage rate
- 35.** Which of the following statements is / are true?
- The standard direct labour hours per unit of output is used to calculate a labour rate variance
 - The standard direct labour hours per unit of output is used to calculate a labour efficiency variance
 - The standard direct labour hours per unit of output cannot be determined until the end of the period
- Only (i) above
 - Only (ii) above
 - Only (iii) above
 - Both (i) and (ii) above
- 36.** Which of the following is a purpose of standard costing?
- To determine profit at different levels
 - To determine break even production level
 - To control costs
 - To allocate cost with more accuracy
- 37.** Which of the following best describe a basic standard?
- A standard set at an ideal level, which makes no allowance for normal losses, waste and machine downtime.

- b) A standard which assumes an efficient level of operation, but which includes allowances for factors such as normal loss, waste and machine downtime.
- c) A standard which is kept unchanged over a period of time
- d) A standard which is based on current price levels.

B. Numerical

38. Actual units of direct materials used were 20,000 at an actual cost of ₹ 40,000. Standard unit cost is ₹ 2.10. Assuming the materials price variance is recognized when the materials are used, the materials price variance (MPV) is:
- a) ₹ 1,000 favourable
 - b) ₹ 1,000 unfavorable
 - c) ₹ 2,000 favourable
 - d) ₹ 2,000 unfavorable
39. If material cost variance is ₹ 9,400 (favourable) and material usage variance is ₹ 8,200 (adverse): then material price variance (MPV) is
- a) ₹ 5,600 (favourable)
 - b) ₹ 5,600 (adverse)
 - c) ₹ 6,400 (favourable)
 - d) ₹ 17,600 (adverse)
 - e) ₹ 17,600 (favourable)
40. The actual materials price (AP) was ₹ 3.50, the actual quantity (AQ) of material was 5,100 units, and the materials price variance (MPV) was ₹ 1,275 unfavorable. The standard materials price (SP) was :
- a) ₹ 3.75
 - b) ₹ 3.30
 - c) ₹ 3.00
 - d) ₹ 3.25
41. During the month of December 2013, XLNT Ltd. used 5,000 kgs of materials at a total standard cost of ₹ 20,000. The material usage variance was ₹360 (adverse). The standard usage of material (SQ) for the period is
- a) 4,000 kgs
 - b) 4,910 kgs
 - c) 5,000 kgs
 - d) 5,850 kgs
 - e) 6,340 kgs
42. The standard units (SQ) were 5,200, the standard price (SP) was ₹ 3.25, and the materials quantity variance (MQV) was ₹ 325 favourable. The actual units (AQ) were:
- a) 5,300
 - b) 5,000
 - c) 5,100
 - d) 5,200
43. Last month 27,000 direct labour hours were worked at an actual cost of ₹ 2,36,385 and the standard direct labour hours of production were 29,880. The standard direct labour cost per hour was ₹ 8.50. What was the labour efficiency variance (LEV)?

- a) ₹ 17,595 Adverse
- b) ₹ 17,595 Favourable
- c) ₹ 24,480 Adverse
- d) ₹ 24,480 Favourable

44. Consider the following data pertaining to Roy Ltd. for the month of June 2014 :

| | | |
|------------------------------|---|----------|
| Actual direct labour hours | - | 27,600 |
| Standard direct labour hours | - | 28,000 |
| Total direct labour cost (₹) | - | 1,93,200 |

If direct labour efficiency variance is ₹ 2,560 (favourable), the direct labour rate variance (LRV) is

- a) ₹ 12,252 (adverse)
- b) ₹ 15,560 (adverse)
- c) ₹ 15,560 (favourable)
- d) ₹ 16,560 (adverse)
- e) ₹ 16,560 (favourable)

45. The standard hourly rate was ₹ 1.40. The actual rate was ₹ 1.30. The labour rate variance was ₹ 600, favourable. The actual labour hours (AH) were:

- a) 6,000
- b) 6,400
- c) 1,000
- d) 1,500

46. A Ltd. used 4,538 kgs of material at a standard cost of ₹ 2.50 per kg. The material usage variance was ₹ 280 (Favourable). The standard usage of material for the period is

- a) 4,700 kgs
- b) 4,650 kgs
- c) 4,600 kgs
- d) 4,588 kgs

47. R Ltd. a manufacturer of portable radios, purchases the components from subcontractors and assembles them into a complete radio. Each radio requires three units each of part X which has standard cost of ₹ 145 per unit.

Following is the result pertaining to part X for the month of December 2010:

| Particulars | Units |
|---------------------------|--------|
| Purchases (₹ 18,00,000) | 12,000 |
| Consumed in manufacturing | 10,000 |
| Radios manufactured | 3,000 |

The material usage variance for the month of December 2010 is

- a) ₹ 1,45,000 unfavorable
- b) ₹ 1,45,000 favourable
- c) ₹ 4,35,000 unfavorable
- d) ₹ 4,35,000 favourable

48. X Ltd. has furnished the following data for the month of March 2010:

| Particulars | Standard | Actual |
|--------------------------|----------|--------|
| Material cost per kg (₹) | 70 | 72 |
| Material used (kgs) | 3,500 | 3,420 |

The material price variance is

- a) ₹ 7,000 (Adverse)
- b) ₹ 7,000 (Favourable)
- c) ₹ 6,840 (Adverse)
- d) ₹ 6,840 (Favourable)

49. During the month of September 2010, 7,800 kg. of material was purchased at a total cost of ₹ 16,380. The stocks of material increased by 440 kg. It is company's policy to value the stocks at standard purchase price. If the material price variance was ₹ 1,170 (Adverse), the standard price per kg. of material is

- a) ₹ 1.95
- b) ₹ 2.10
- c) ₹ 2.23
- d) ₹ 2.25

50. The standard and the actual requirements of material of a company are as under:

Standard – 2,400 units at the rate of ₹ 20 per unit

Actual – 2,600 units at the rate of ₹ 19 per unit

The material cost variance is

- a) ₹ 2,600 (Adverse)
- b) ₹ 1,400 (Favourable)
- c) ₹ 2,400 (Adverse)
- d) ₹ 1,400 (Adverse)

51. Last month 27,000 direct labour hours were worked at an actual cost ₹ 2,36,385 and the standard direct labour hours of production were 29,880. The standard direct labour cost per hour was ₹ 8.50.

What was the labour efficiency variance?

- a) ₹ 17,595 Adverse
- b) ₹ 17,595 Favourable
- c) ₹ 24,480 Adverse
- d) ₹ 24,480 Favourable

52. In the four week production period just completed, B Ltd. produced 570 units. The standard labour cost for each unit was ₹ 13.50, based on budgeted production of 550 units. The actual labour cost for the period was ₹ 8,238.

What was the labour rate variance for the period?

- a) ₹ 543 adverse
- b) ₹ 543 favourable
- c) ₹ 813 adverse
- d) ₹ 813 favourable

53. During a period, 17,500 labour hours were worked at a standard cost of ₹ 6.50 per hour. If the labour efficiency variance is ₹ 7,800 (favourable), the standard direct labour hours are

- a) 20,000
- b) 19,200
- c) 18,700
- d) 18,500

Q2) FILL IN THE BLANKS

1. _____ Cost is defined as – “pre-determined cost which is calculated from management's standards of efficient operation and the relevant necessary expenditure”.
2. A _____ Standard is the Standard which is "established for use unaltered for an indefinite period which may be a long period of time".
3. A _____ Standard is the Standard which is "established for use over a short period of time, and is related to current conditions".
4. A/An _____ Standard is the Standard "which can be attained under the most favourable conditions possible".
5. A(n) _____ standard reflects perfect operating conditions.
6. The cost that should be achieved given materials, labour, and overhead standards is the cost.
7. _____ Time means the time expected to be required for the workers to complete a job or to produce one unit of output.
8. Cost _____ is the difference between a standard cost and the comparable actual cost during a period.
9. The difference between what was paid and what should have been paid for actual inputs is called the _____ variance.
10. There is _____ (favourable / adverse) whenever the actual rupees spent are less than the standard cost.
11. There is _____ (favourable / adverse) variance whenever the actual rupees spent are greater than the standard cost.
12. Material _____ Variance is the difference between the Standard cost of material specified for the output achieved and the Actual cost of direct material used.
13. The standard price is the price that should have been paid per unit of _____ (input / output).
14. The quantity of _____ (input / output) allowed per unit of _____ (input / output) is the Standard Quantity.
15. Standard Quantity is the quantity of materials that should have been used to produce the _____ (budgeted / actual) output.
16. The difference between what was paid for materials purchased and what should have been paid is the materials _____ variance.
17. The difference between the materials actually used and the materials allowed for actual output multiplied by the standard price is the material _____ variance.
18. The difference between standard quantities and actual quantities multiplied by the standard price is the _____ variance.
19. Material _____ Variance is the difference between the Standard Quantity specified for the actual output and the Actual Quantity used for the actual output.
20. Material _____ Variance is computed by the formula : $(SQ - AQ) \times SP$.
21. Material _____ Variance is computed by the formula : $(SP - AP) \times AQ$.
22. The difference between the actual payroll and what should have been paid for the actual hours worked is the Labour _____ Variance.
23. Standard Hours are the labour hours that should have been used to produce the _____ (actual/standard) output.
24. Labour _____ Variance is the difference between the Standard Hours specified for the actual output and the Actual Hours used for the actual output.

25. Labour _____ Variance is computed by the formula: (Standard Hours Actual Hours) x Standard Rate.
26. Labour Cost Variance = Labour _____ Variance + Labour _____ Variance.
27. The difference between the actual direct labour hours used and the standard labour hours allowed multiplied by the standard hourly wage rate is the Labour _____ Variance.

Q3) STATE WHETHER TRUE OR FALSE

1. Estimated Cost is defined as - "a pre-determined cost which is calculated from management's standards of efficient operation and the relevant necessary expenditure".
2. An Ideal Standard is the Standard which is "established for use unaltered for an indefinite period which may be a long period of time".
3. A Basic Standard is the Standard which is "established for use over a short period of time".
4. A Basic Standard is the Standard "which can be attained under the most favourable conditions possible".
5. Labour Cost Variance is further divided into (a) Labour Yield Variance and (b) Labour Rate Variance.
6. Standard Costing helps to know "what the cost will be."
7. Variance Analysis is part of Marginal Costing.
8. Standards for the same activity are the same for different firms.
9. Standard cost can be used for valuation of stock and work-in-progress.
10. The main purpose of standard costing is cost control.
11. Comparison of actual results with an Ideal Standard would result in large unfavourable variances.
12. Standard Cost is nothing but average cost as per the cost records for past years.
13. All variances are expressed in monetary terms only.
14. If the standard cost is lower than the actual cost, the variance is Favourable.
15. Total Cost Variances are calculated based on budgeted sales level.
16. Quantity variance and price variance are synonymous terms.
17. A standard price is the price that should be paid per unit of output.
18. Standard Price is used while computing all Material Cost Variances.
19. Standard Quantity is used while computing all Material Cost Variances.
20. Standard Quantity is not used while computing Material Price Variances.
21. Actual Quantity is used while computing all Material Cost Variances.
22. Actual Price is used while computing all Material Cost Variances.
23. Actual Price is used while computing Material Usage Variances.
24. Standard Rate is used while computing all Labour Cost Variances.
25. Standard Hour is used while computing all Labour Cost Variances.
26. Standard Hour is not used while computing Labour Rate Variances.
27. Actual Hour is used while computing all Labour Cost Variances.
28. Actual Rate is used while computing all Labour Cost Variances.
29. Actual Rate is used while computing Labour Efficiency Variances.

ANSWERS

Q1)

| | | | | | | | | | | |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1. (a) | 2. (c) | 3. (b) | 4. (d) | 5. (d) | 6. (c) | 7. (a) | 8. (d) | 9. (d) | 10.(a) | 11.(d) |
| 12.(b) | 13.(d) | 14.(b) | 15.(c) | 16.(d) | 17.(d) | 18.(b) | 19.(c) | 20.(d) | 21.(d) | 22.(d) |
| 23.(b) | 24.(b) | 25.(a) | 26.(c) | 27.(b) | 28.(d) | 29.(d) | 30.(c) | 31.(d) | 32.(b) | 33.(d) |
| 34.(b) | 35.(b) | 36.(c) | 37.(c) | 38.(c) | 39.(e) | 40.(d) | 41.(b) | 42.(c) | 43.(d) | 44.(d) |
| 45.(a) | 46.(b) | 47.(a) | 48.(c) | 49.(a) | 50.(d) | 51.(d) | 52.(a) | 53.(c) | | |

Q2)

- | | | |
|-----------------|-----------------------|-----------------|
| (1) Standard. | (2) Basic | (3) Current |
| (4) Ideal | (5) ideal | (6) standard |
| (7) Standard | (8) Variance | (9) price |
| (10) favourable | (11) adverse | (12) Cost |
| (13) input | (14) input; output | (15) actual |
| (16) price | (17) usage | (18) usage |
| (19) Usage | (20) Usage | (21) Price |
| (22) Rate | (23) actual | (24) Efficiency |
| (25) Efficiency | (26) Efficiency, Rate | (27) Efficiency |

Q3)

True: 9, 10, 11, 13, 18, 20, 21, 24, 26, 27

False: 1, 2, 3, 4, 5, 6, 7, 8, 12, 14, 15, 16, 17, 19, 22, 23, 25, 28, 29

6 – SOME EMERGING CONCEPTS OF COST ACCOUNTING

Q1) MULTIPLE CHOICE QUESTIONS

A. Target Costing

1. Place the following steps for the implementation of target costing in order :
A = Derive a target cost
B = Develop a target price
C = Perform value engineering
D = Determine target profit
 - a) B, D, A, C
 - b) B, A, D, C
 - c) A, D, B, C
 - d) A, B, C, D
2. In target costing
 - a) the target cost is established first, then the target price.
 - b) the target cost is the estimated long-run cost that enables a product or service to achieve a desired profit
 - c) the focus of target costing is to undercut the competition
 - d) target costs are generally higher than current costs
3. The product strategy in which companies first determine the price at which they can sell a new product and then design a product that can be produced at a low enough cost to provide adequate operating income is referred to as
 - a) Cost-plus pricing
 - b) Target costing
 - c) Benchmark costing
 - d) Full costing
4. The costing technique that produces a stipulated profit when a product is sold at its estimated market-driven price is termed:
 - a) Life cycle costing
 - b) Product costing
 - c) Target costing
 - d) Standard costing
5. The four tasks that follow take place in the concept known as target costing:
 1. Value engineering
 2. Establish a target selling price

3. Establish a target cost

4. Establish a target profit

Which is the correct sequence of these tasks?

a) 1, 3, 4, 2

b) 3, 1, 4, 2

c) 2, 4, 3, 1,

d) 2, 3, 1, 4

6. R uses target costing and sells a product for ₹ 36 per unit. The company seeks a profit margin equal to 25% of sales. If the current manufacturing cost is ₹ 29 per unit, the firm will need to implement a cost reduction of

a) ₹ 0

b) ₹ 2

c) ₹ 9

d) ₹ 20

7. S Corporation uses target costing and sells a product for ₹ 40 per unit. The company seeks a profit margin equal to 30% of sales. If target-costing calculations revealed a need for a ₹ 4 cost reduction, the firm's current manufacturing cost must be:

a) ₹ 12

b) ₹ 24

c) ₹ 28

d) ₹ 32

8. Which of the following denotes a target cost?

a) Market price – Desired profit margin

b) Standard selling price – Standard profit margin

c) Standard selling price – Target profit margin

d) Desired selling price – Desired profit margin

e) Market price – Return on Investment (ROI)

9. Which of the following is true with respect to target costing?

a) It is a method of price determination

b) It is used to develop a short run price

c) It is a process where the cost of the product is determined and then an appropriate price is chosen

d) It is the maximum manufacturing cost for a product which is arrived at by subtracting the acceptable profit margin from the expected market price

B. Life Cycle Costing

10. Which of the following is usually the longest stage in the product life cycle?

a) Introduction phase

b) Growth phase

c) Maturity phase

d) Saturation phase

e) Decline Phase

11. Which of the following is not a characteristic or assumption of Product Life Cycle Costing?

a) Product cost, revenue and profit patterns tend to follow predictable courses through the product life cycle

- b) Each phase of the product life cycle poses different threats and opportunities
 - c) The products have infinite life period
 - d) Profit per unit varies as product move through their life cycle
 - e) Products require different functional emphasis in each phase
12. Most of a product's life-cycle costs are locked in by decisions made during the _____ business function of the value chain.
- a) Design
 - b) Manufacturing
 - c) Customer-service
 - d) Marketing
13. Life-cycle costing is particularly important when
- a) the development period for R&D is short and inexpensive
 - b) there are significant non-production costs
 - c) most costs are locked in during production
 - d) a low percentage of costs are incurred before any revenues are received
14. Life-cycle costing
- a) has little in common with target costing
 - b) is most useful to companies that manufacture small items such as household plastics
 - c) helps companies estimate revenues over a multiyear horizon
 - d) gives companies more insight into total costs when manufacturing costs consume the majority of the resources

C. Benchmarking

15. The comparison of a company's practices and performance levels against those of other organizations is most commonly known as
- a) Benchmarking
 - b) Continuous improvement
 - c) Re-engineering
 - d) Comparative analysis.
16. Comparing the way a “best-in-class” company performs a specific activity (such as distribution) is called
- a) Competitive Benchmarking
 - b) Internal Benchmarking
 - c) Analogues Benchmarking
 - d) Operational Benchmarking
17. Benchmarking allows a company to
- a) Identify its strengths and weaknesses
 - b) Imitate those ideas that are readily transferable
 - c) Improve on methods in use by others
 - d) All of the above
18. Benchmarking
- | | |
|--------------------------------------|--------------------------------|
| Identifies “best-in-class” companies | analyzes the “performance gap” |
| a) Yes | No |
| b) No | Yes |
| c) Yes | Yes |
| d) No | No |
19. Which of the following is not a step in benchmarking procedures?

- a) Analyze the “worst-in-class” companies
- b) Engage in continuous improvement
- c) Analyze the “performance gap”
- d) Identify “best-in-class” companies

D. Activity Based Costing (ABC)

- 20.** In ABC indirect costs are allocated to the products based on
- a) types of activities used by the product
 - b) the extent to which the activities are used
 - c) both (a) and (b)
 - d) none of the above
- 21.** Four basic steps are used in an ABC system. List the proper order of these steps given below:
- (A) Identify the primary activities and estimate a total cost pool for each.
 - (B) Allocate the costs to the cost object using the activity cost allocation rates.
 - (C) Select an allocation base for each activity.
 - (D) Calculate an activity cost allocation rate for each activity.
- a) C, A, B, D
 - b) A, C, D, B
 - c) B, A, C, D
 - d) A, D, C, B
- 22.** All of the following are considered to be part of the activity levels often used to implement ABC, with the exception of
- a) production-level activity
 - b) batch-level activity
 - c) product-level activity
 - d) unit-level activity
- 23.** Which of the following systems focuses on activities as the fundamental cost objects and uses the costs of those activities for compiling the indirect costs of products?
- a) Job costing
 - b) Activity-based costing
 - c) Process costing
 - d) Product costing
- 24.** Regarding activity-based costing systems, which of the following statements is true?
- a) ABC systems accumulate overhead costs by departments.
 - b) ABC costing systems are less complex and, therefore, less costly than traditional systems.
 - c) ABC costing systems have separate indirect cost allocation rates for each activity.
 - d) ABC costing systems can be used in manufacturing firms only.
- 25.** Examples of activities at the batch level of costs include:
- a) cutting, painting, and packaging
 - b) material ordering, machine set up, and inspection
 - c) designing, part-specification, and advertising
 - d) heating, lighting, and security

- e) none of the above
26. Examples of activities at the product level of costs include:
- a) cutting, painting, and packaging
 - b) material ordering, machine set up, and inspection
 - c) designing, part-specification, and advertising
 - d) heating, lighting, and security
 - e) none of the above
27. Which of the following is typically regarded as a cost driver in traditional accounting practices?
- a) Number of purchase orders processed
 - b) Number of customers served
 - c) Number of transactions processed
 - d) Number of direct labour hours worked
28. The term cost driver refers to
- a) any activity that can be used to predict cost changes
 - b) the attempt to control expenditures at a reasonable level
 - c) the person who gathers and delivers cost data to the management accountant
 - d) any activity that causes costs to be incurred
29. Cost allocation bases in activity-based costing should be
- a) Cost drivers
 - b) Cost pools
 - c) Activity centers
 - d) Resources
30. Costs that are common to many different activities within an organization are known as costs.
- a) Product-level
 - b) Facility-level
 - c) Batch-level
 - d) Unit-level
31. Relative to traditional product costing, activity-based costing differs in the way costs are
- a) processed
 - b) allocated
 - c) benchmarked
 - d) incurred
32. In activity-based costing, final cost allocations assign costs to
- a) departments
 - b) processes
 - c) products
 - d) activities
33. Activity rates are determined by
- a) dividing the actual cost for each activity pool by the actual activity base for that pool
 - b) dividing the cost budgeted for each activity pool by the estimated activity base for that pool
 - c) dividing the actual cost for each activity pool by the estimated activity base for that pool

- d) dividing the cost budgeted for each activity pool by the actual activity base in that pool
34. Providing the power required to run production equipment is an example of a
- a) Unit-level activity
 - b) Batch-level activity
 - c) Product-level activity
 - d) Organization-sustaining activity
35. The following tasks are associated with an activity-based costing system:
- (1) Calculation of cost application rates
 - (2) Identification of cost drivers
 - (3) Assignment of cost to products
 - (4) Identification of cost pools
- Which of the following choices correctly expresses the proper order of the preceding tasks?
- a) 1, 2, 3, 4
 - b) 2, 4, 1, 3
 - c) 3, 4, 2, 1
 - d) 4, 2, 1, 3
 - e) 4, 2, 3, 1
36. Which of the following is not a broad, cost classification category typically used in activity-based costing?
- a) Unit – level
 - b) Batch – level
 - c) Product – sustaining level
 - d) Facility – level
 - e) Management – level
37. In an activity-based costing system, direct materials used would typically be classified as a
- a) unit – level cost
 - b) batch – level cost
 - c) product – sustaining cost
 - d) facility – level cost
38. In an activity-based costing system, materials receiving would typically be classified as a
- a) unit – level activity
 - b) batch – level activity
 - c) product – sustaining activity
 - d) facility – level activity
39. The salaries of a manufacturing plant's management are said to arise from
- a) Unit – level activities
 - b) Batch – level activities
 - c) product – sustaining activities
 - d) facility – level activities
40. An activity that has a direct cause-effect relationship with the resources consumed is a (n)
- a) cost driver
 - b) overhead rate

- c) cost pool
- d) product activity

41. A well-designed activity-based costing system starts with
- a) identifying the activity-cost pools
 - b) computing the activity-based overhead rate
 - c) assigning manufacturing overhead costs for each activity cost pool to products
 - d) analysing the activities performed to manufacture a product
42. Assigning overhead using ABC will usually
- a) decrease the cost per unit for low volume products as compared to a traditional overhead allocation
 - b) increase the cost per unit for low volume products as compared to a traditional overhead allocation
 - c) provide less accurate cost per unit for low volume products than will traditional costing
 - d) result in the same cost per unit for low volume products as does traditional costing
43. The primary benefit of ABC is it provides
- a) better management decisions
 - b) enhanced control over overhead costs
 - c) more cost pools
 - d) more accurate product costing
44. Which of the following is *not* a benefit of activity-based costing?
- a) More accurate product costing
 - b) Enhanced control over overhead costs
 - c) Better management decisions
 - d) Less costly to use
45. Which of the following is a limitation of activity-based costing?
- a) More cost pools
 - b) Less control over overhead costs
 - c) ABC can be expensive to use
 - d) Poorer management decisions
46. Which of the following is *not* a facility-level activity?
- a) Plant management
 - b) Product design
 - c) Personnel administration
 - d) Training
47. Which of the following is *not* a product-level activity?
- a) Product design
 - b) Engineering changes
 - c) Inventory management
 - d) Equipment setups
48. Which of the following is *not* a batch-level activity?
- a) Engineering changes
 - b) Equipment setups
 - c) Inspection
 - d) Materials handling
49. Which of the following is *not* a unit-level activity?

- a) Purchase ordering
 - b) Assembling
 - c) Painting
 - d) Sewing
50. Which of the following is *not* a facility-level activity?
- a) Plant depreciation
 - b) Property taxes
 - c) Engineering changes
 - d) Utilities
51. Which of the following is *not* a product-level activity?
- a) Product design
 - b) Engineering changes
 - c) Material handling
 - d) Inventory management
52. Which of the following is *not* a batch-level activity?
- a) Purchase ordering
 - b) Equipment setups
 - c) Inspection
 - d) Assembling
53. Which of the following is *not* a unit-level activity?
- a) Drilling
 - b) Cutting
 - c) Sanding
 - d) Inspecting
54. Which of the following is a unit-level activity?
- a) Painting
 - b) Purchase ordering
 - c) Inspection
 - d) Material handling
55. Which of the following is a batch-level activity?
- a) Assembling
 - b) Product design
 - c) Engineering changes
 - d) Purchase ordering
56. Which of the following is a product-level activity?
- a) Equipment setups
 - b) Product design
 - c) Property taxes
 - d) Utilities
57. Which of the following is a facility-level activity?
- a) Engineering changes
 - b) Product design
 - c) Property taxes
 - d) Inspection
58. Activities required to support or sustain an entire production process are called
- a) Unit – level activities
 - b) Batch – level activities

- c) Product – level activities
 - d) Facility – level activities
59. Cost allocation bases in activity-based costing should be
- a) cost drivers
 - b) value – added activities
 - c) activity centers
 - d) processes
60. What is the purpose of ABC?
- a) To identify what product costs are incurred by a company
 - b) To allocate and assign all product costs incurred to the appropriate products or services
 - c) To determine a cost object for which cost information is needed
 - d) To allocate and assign indirect costs
 - e) To analyze the activities that cause cost pools to increase
61. What type of activity is the cost of processing purchase orders?
- a) Unit – level activity
 - b) Product line activity
 - c) Batch – level activity
 - d) Facility support activity
62. What type of activity is the cost of designing products?
- a) Unit – level activity
 - b) Product level activity
 - c) Batch – level activity
 - d) Facility support activity
63. Which one of the following is the most appropriate cost driver for the ordering and receiving materials cost pool?
- a) Number of receiving clerks
 - b) Number of sales invoices
 - c) Number of parts ordered
 - d) Number of purchases orders
64. In an activity-based cost system, to what does 'pooling costs' refer?
- a) Assigning various overhead costs to products
 - b) Collecting various types of costs that relate to an activity
 - c) Determining how much direct materials and labour should be allocated to a specific product or service
 - d) Comparing the actual performance of managers against the budget
65. What is one aspect of ABC that differs from traditional costing?
- a) Under ABC, allocation is based on the activities which generate the respective expenses
 - b) Under ABC, overhead costs are equally divided between products, jobs, or departments
 - c) Under ABC, direct and indirect costs are allocated based on a cause and effect relationship.
 - d) Under ABC, allocation is based on the units produced which is a more accurate allocation of costs
66. ABC is

- a) a method of accounting for material, labour and overhead costs related to products
 - b) a method of allocating indirect costs
 - c) another name for benchmarking
 - d) a cost object
67. Which of the following is a typical cost pool?
- a) Products manufactured
 - b) A service offered to customers
 - c) Direct labour
 - d) A machine used for packaging products
68. In establishing an Activity Based Costing System, an organization's goal is to
- a) allocate costs to all activities within an organization
 - b) define all activities within the organization and the costs required to perform those activities
 - c) assign costs to pools according to the reasons the costs are assumed to be incurred
 - d) allocate costs to products from pools where costs are accumulated based upon the activities that cause the costs to be incurred
69. Cost drivers are
- a) a group of individual costs whose total is allocated
 - b) used to assign costs
 - c) selected to minimize allocated costs
 - d) equivalent to cost pools
 - e) a product, service or department to which costs are accumulated
70. How is an activity cost rate calculated when using ABC to assign manufacturing overhead costs?
- a) Multiply manufacturing overhead rate by actual cost driver level
 - b) Divide estimated activity pool amount by estimated cost driver level
 - c) Multiply estimated activity pool amount by estimated cost driver level
 - d) Divide manufacturing overhead rate by actual cost driver level
71. Which one of the following is a collection of overhead costs related to a cost object?
- a) Cost pool
 - b) Cost driver
 - c) Cost object
 - d) Cost allocation
72. An accounting system that collects financial and operating data on the basis of the underlying nature and extent of the cost drivers is
- a) Direct costing
 - b) Activity-based costing
 - c) Target costing
 - d) Cycle-time costing

Q2) FILL IN THE BLANKS

1. Traditional Costing allocates overheads on the basis of __ (volume / activities).
2. ABC allocates overheads on the basis of _____ (volume / activities).

3. Close down costs are taken into consideration in _____ (Life Cycle / Target) Costing.
4. Target cost = Target _____ Less Target _____.
5. _____ costing is the management process responsible for identifying, anticipating and satisfying customer requirements profitably.
6. The purpose of _____ costing is to identify the production cost for a proposed product such that the product, when sold, generates the desired profit margin.
7. The target cost gap is the _____ cost less the _____ cost.
8. _____ is the first phase in the product life cycle.
9. Design costs are incurred during the _____ phase of the product life cycle.
10. Promotional costs are incurred at the _____ phase of the product life cycle.
11. Distribution costs are incurred at the _____ phase of the product life cycle.
12. A _____ is a target fixed based on the best practice.
13. _____ is the continuous process of measuring products, services or activities against the best levels of performance that may be found either inside or outside the organization.
14. Standard cost is an examples of a _____ benchmark.
15. The first step in the process of benchmarking is _____.
16. _____ benchmarking involves considering high level aspects such as core competencies, developing new products etc.
17. _____ benchmarking involves the comparison of competitors' products, processes and business results with own products, processes and results.
18. _____ benchmarking involves the comparison of an organization's critical business operations against best-practice-organization in the same field.
19. _____ benchmarking involves benchmarking operations from within the same organization.
20. _____ Benchmarking involves seeking help of outside organizations that are known to be best in class.
21. _____ (Under/ over) costing results when a product consumes a high level of resources but is allocated a low cost.
22. _____ (ABC / Target) costing is defined as "Cost attribution to cost units on the basis of benefits received from indirect activities i.e. ordering, setting-up, assuring quality etc.
23. _____ are elements that are used for performing the activities.
24. A cost _____ is a term used to indicate grouping of costs incurred on a particular activity which drives them.
25. Any element that would cause a change in the cost of activity is cost _____.
26. ABC is suitable when there is a _____ (wide / narrow) range of products.
27. ABC is suitable when the operations are _____ (complex / simple).
28. ABC is suitable when the overheads form a _____ (high / low) proportion of the total costs.
29. In ABC, overheads are allocated in proportion of _____ (volume / activities).
30. Use of indirect materials is a/an _____ level activity.
31. Machine set up is a/an _____ level activity.
32. Producing parts specifications is a/an _____ level activity.
33. Plant security is a/an _____ level activity.

Q3) MATCH THE FOLLOWING COLUMNS**A)**

| COLUMN A | COLUMN B |
|------------------------------------|-------------------------------|
| 1. Machine set-up costs | (a) Number of machine hours |
| 2. Machine operating costs | (b) Number of orders executed |
| 3. Materials handling and dispatch | (c) Number of set-ups |

B)

| COLUMN A | COLUMN B |
|------------------------------|------------------------------|
| 1. Unit level activities | (a) Maintenance of buildings |
| 2. Batch level activities | (b) Designing the product |
| 3. Product level activities | (c) Material ordering |
| 4. Facility level activities | (d) Indirect consumables |

C)

| COLUMN A | COLUMN B |
|------------------------------|--|
| 1. Unit level activities | (a) Producing parts to a certain specification |
| 2. Batch level activities | (b) Inspection of every item produced |
| 3. Product level activities | (c) Production manager's salaries |
| 4. Facility level activities | (d) Machine set up |

D)

| COLUMN A | COLUMN B |
|---------------------------|----------------------------------|
| 1. Research & Development | (a) Number of service calls |
| 2. Design of products | (b) Number of customers |
| 3. Marketing | (c) Sales revenue |
| 4. Distribution | (d) Number of parts per product |
| 5. Customer service | (e) Personnel hours on a project |

E)

| COLUMN A | COLUMN B |
|--------------------------------|-------------------------------|
| 1. Ordering costs | (a) Number of production runs |
| 2. Materials handling costs | (b) Number of production runs |
| 3. Machine set-up costs | (c) Number of orders |
| 4. Machine operating costs | (d) Number of dispatches |
| 5. Production scheduling costs | (e) Number of machine set-ups |
| 6. Dispatching costs | (f) Number of machine hours |

F)

| COLUMN A | COLUMN B |
|----------------------------|------------------------|
| 1. Development phase | (a) Plants scrapped |
| 2. Introduction phase | (b) Manufacturing cost |
| 3. Growth phase / Maturity | (c) Capacity costs |
| 4. Decline phase | (d) R & D cost |

G)

| COLUMN A | COLUMN B |
|-----------------------|--------------------------|
| 1. Development phase | (a) Product support cost |
| 2. Introduction phase | (b) Promotional cost |
| 3. Maturity phase | (c) Design cost |
| 4. Replacement phase | (d) Plants reused |

H)

| COLUMN A | COLUMN B |
|-----------------------------|--|
| 1. Strategic benchmarking | (a) Operations from within the same organization |
| 2. Performance benchmarking | (b) Developing new products |
| 3. Process benchmarking | (c) Competitors' products |
| 4. Internal benchmarking | (d) Outside organizations that are known to be best in class |
| 5. External Benchmarking | (e) Organization's critical business operations |

Q4) STATE WHETHER TRUE OR FALSE

1. Life cycle costing is the profiling of cost over a product's production life.
2. Traditional costing systems are generally more accurate than ABC costing.
3. Companies that use ABC trace direct materials and direct labour to cost objects just as would be done using traditional costing systems.
4. The use of direct labour hours or direct machine hours to trace costs to products occurs with the use of absorption costing but not with the use of ABC.
5. Activity-based costing involves a two-stage allocation in which overhead costs are first assigned to departments and then to jobs on the basis of direct labour hours.
6. Machine setup is normally considered a batch-level cost.
7. Machine setup is normally considered a unit-level cost.
8. Building depreciation is generally considered an organizational or facility cost.
9. Activity-based costing is appropriate for a company that manufactures a wide variety of products.
10. Activity-based costing is appropriate for a company that manufactures a single product.
11. Activity-based costing is appropriate for a company that has low overhead costs that are proportional to the unit volumes of products
12. Activity-based costing is appropriate for a company that has high overhead costs that are not proportional to unit volumes of individual products.
13. Activity cost pools are cost accumulations associated with a given activity.
14. Activity cost pools are assigned to products, using factory overhead rates for each activity.
15. Activity rates are computed by dividing the cost budgeted for each activity pool by the estimated activity base for that pool.
16. Direct labour hours are not a cost pool that is regularly used in the activity-based costing method.
17. Activity based costing is much easier to apply than single plant-wide factory overhead allocation.
18. Activity Based Costing can be used to allocate period costs to various products that the company sells.

19. Activity based costing can only be used to allocate manufacturing factory overhead.
20. Traditionally, overhead is allocated based on direct labour cost or direct labour hours.
21. Current trends in manufacturing include less direct labour and more overhead.
22. The first step in activity-based costing is to assign overhead costs to products, using cost drivers.
23. When overhead is properly assigned in ABC, it will usually decrease the unit cost of high-volume products.
24. ABC leads to enhanced control over overhead costs.
25. ABC usually results in less appropriate management decisions.
26. ABC is generally more costly to implement than traditional costing.
27. ABC eliminates all arbitrary cost allocations.
28. ABC is particularly useful when product lines differ greatly in volume and manufacturing complexity.
29. ABC is particularly useful when overhead costs are an insignificant portion of total costs.
30. Activity-based costing focuses on reducing costs and improving processes.
31. Plant management is a batch-level activity.
32. Painting is a product-level activity.
33. A company that uses only volume-based measures will overcast its low-volume products.
34. ABC will be most useful in estimating fixed costs.
35. Volume-based measures will tend to overcast high volume products.
36. Direct materials are normally considered as batch-level costs.
37. Unit level costs occur once for each unit produced.
38. Batch level costs occur once for each unit produced.
39. Machine setup is normally considered a batch-level cost.
40. Machine setup is normally considered a unit-level cost.
41. Building depreciation is generally considered an organizational or facility cost.
42. Building depreciation is generally considered a product or process level cost.

ANSWERS

Q1)

| | | | | | | | | | |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1.(a) | 2.(b) | 3.(b) | 4.(c) | 5.(c) | 6.(b) | 7.(d) | 8.(a) | 9.(d) | 10.(c) |
| 11.(c) | 12.(a) | 13.(b) | 14.(c) | 15.(a) | 16.(a) | 17.(d) | 18.(c) | 19.(a) | 20.(c) |
| 21.(b) | 22.(a) | 23.(b) | 24.(c) | 25.(b) | 26.(c) | 27.(d) | 28.(d) | 29.(a) | 30.(b) |
| 31.(b) | 32.(c) | 33.(b) | 34.(a) | 35.(d) | 36.(e) | 37.(a) | 38.(b) | 39.(d) | 40.(a) |
| 41.(d) | 42.(b) | 43.(d) | 44.(d) | 45.(c) | 46.(b) | 47.(d) | 48.(a) | 49.(a) | 50.(c) |
| 51.(c) | 52.(d) | 53.(d) | 54.(a) | 55.(d) | 56.(b) | 57.(c) | 58.(d) | 59.(a) | 60.(d) |
| 61.(b) | 62.(b) | 63.(d) | 64.(b) | 65.(a) | 66.(b) | 67.(d) | 68.(d) | 69.(b) | 70.(b) |
| 71.(a) | 72.(b) | | | | | | | | |

Q2)

(1) volume

(2) activities

(3) Life Cycle

- | | | |
|-----------------------|------------------|-----------------|
| (4) price, profit | (5) Target | (6) target |
| (7) estimated, target | (8) Development | (9) development |
| (10) introduction | (11) Growth | (12) benchmark |
| (13) Benchmarking | (14) financial | (15) planning |
| (16) Strategic | (17) Performance | (18) Process |
| (19) Internal | (20) External | (21) Under |
| (22) ABC | (23) Resources | (24) pool |
| (25) driver | (26) wide | (27) complex |
| (28) high | (29) activities | (30) unit |
| (31) batch | (32) product | (33) facility |

- Q3)** [A] : (1 – c), (2 – a), (3 – b)
 [B] : (1 – d), (2 – c), (3 – b), (4 – a)
 [C] : (1 – b), (2 – d), (3 – a), (4 – c)
 [D] : (1 – e), (2 – d), (3 – c), (4 – b), (5 – a)
 [E] : (1 – c), (2 – a), (3 – e), (4 – f), (5 – b), (6 – d)
 [F] : (1 – d), (2 – c), (3 – b), (4 – a)
 [G] : (1 – c), (2 – b), (3 – a), (4 – d)
 [H] : (1 – b), (2 – c), (3 – e), (4 – a), (5 – d)

Q4)

True: 3, 6, 8, 9, 12, 13, 14, 15, 18, 20, 21, 23, 24, 26, 28, 30,34,35,37, 39, 41.

False: 1, 2, 4, 5, 7, 10, 11, 16, 17, 19, 22, 25, 27, 29, 31, 32, 33, 36, 38, 40, 42.