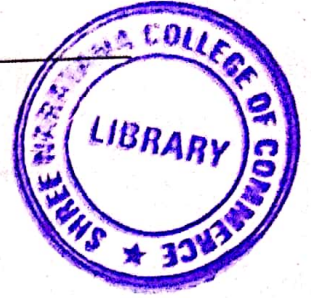# MA-101

May-2018

B.Com., Sem.-IV

CE-203 (A) : Cost Accountancy - II

Time : 3 Hours]   **[Max. Marks : 70**

1. Indu Ltd. has produced and sold 4000 units of Calculator at its 40% capacity in the year 2017-2018. The details are as under for the year ended 31-03-2018 :   **14**

Particulars	₹
Materials	5,00,000
Direct Labour	4,00,000
Direct expenses	3, 00,000
Factory indirect expenses (60% Variable)	5,00,000
Office indirect expenses (Fixed)	1,00,000
Selling and Distribution expenses (40% Variable)	2,00,000
Sales	23,00,000

Estimate for the year 2018-2019

(1) The output will be at its full production capacity.

(2) 80% of the units produced will be sold.

(3) Cost of raw materials, wages and direct expenses per unit will increase 20%, 25% and ₹ 25 respectively.

(4) Factory, office and selling and distribution overheads (Fixed) will increase by ₹ 3,00,000, ₹ 1,50,000 and ₹ 2,80,000 respectively.

(5) Variable selling and distribution expenses will increase by 25% per unit.

(6) The rate of profit on cost will remain same as per the last year.

Prepare :

(I) A statement of cost showing total as well as per unit cost for the year 2017-18.

(II) A Statement showing estimated profit and cost for the year 2018-19.

OR

Following information of Shweta Ltd. is available for the year ended on 31-03-2018. Prepare cost sheet : 14

Particulars	01-04-2017 ₹	31-03-2018 ₹
Stock of finished goods	15,000	90,000
Stock of Raw Materials	50,000	25,000

Particulars	₹
Purchase of raw materials	4,50,000
Depreciation on machinery	5,000
Depreciation of furniture	5,000
Factory Rent	10,000
Direct wages	1,50,000
Sales	8,25,000
Salary	10,000
Carriage inward	50,000
Carriage Outward	5,000
Power	15,000
Income Tax	10,000
Donation	20,000
Advertisement Expenses	10,000
Packing Expenses	15,000
Office Rent	15,000
Manager's Salary	40,000
(Factory Exp. and Office Exp. Ratio 1:1)	
Drawing office expenses	25,000
Counting House Salary	25,000
Salesman Salary	25,000
Expenses for delivery van	20,000

Find out following percentage after preparing cost sheet :

(1) Percentage of factory overheads with direct labour

(2) Percentage of office overheads with factory cost

(3) Percentage of selling and distribution expenses with production cost of goods sold.

In Addition, it comes to knowledge that Shweta Ltd. will receive an order for manufacturing special machine. For this special order, consumption of material is estimated ₹ 1,40,000 and expenses for labour will be ₹ 40,000. Company desire to earn profit at 20% on selling price.

Prepare Tender Sheet and decide the selling price.

2. The Following figures are available from Kavisha Ltd.'s financial accounts for the year ended 31-03-2018 :

14

Particulars	₹
Direct Materials consumption	50,000
Direct wages	30,000
Factory overheads	10,000
Administration overheads	21,000
Selling and Distribution overheads	42,000
Bad debts	3,000
Goodwill written off	4,000
Legal Charges	5,000
Miscellaneous Income Received	5,000
Interest on current Account Received	6,000
Sales (40,000 Units)	1,00,000
Closing Stock :	
Finished Stock (10,000 Units)	13,200
Work-in-progress (At Prime cost in both books)	20,000

The Cost Accounts reveal :

(1) Direct material consumption and direct wages are charged at actual cost.

(2) Factory overheads at 20% on prime cost

(3) Administration overheads at ₹ 0.48 per unit of production

(4) Selling and distribution overheads at ₹ 1 per unit sold. Prepare :

    (I) Cost Sheet

    (II) Financial Profit and Loss Account.

    (III) Reconciliation Statement of profit or loss as per cost accounts and financial accounts.

OR

(A) Following is the Trading Account and Profit & Loss Account of Saloni Limited for the year ended on 31-03-2018 :   7

Dr.   **Profit and Loss Account**   **Cr.**

Particulars	Amount ₹	Particulars	Amount ₹
To Materials	40,000	By Sales (8,000 Units)	1,20,000
To Direct Labour	20,000	By Finished Stock (2,000 Units)	14,000
To Factory expenses	10,000		
To Gross Profit	64,000		
	1,34,000		**1,34,000**
To Administration expenses	10,000	By Gross Profit	64,000
To Sales expenses	38,000.	By Interest and Dividend	2,000
To Loss on Sale of Machinery	2,000	By Profit on Sale of Investment	2,000
To Goodwill written off	2,000		
To Bad debts	2,000		
To Net Profit	14,000		
	68,000		**68,000**

The following information has been obtained on scrutiny of cost Accounts:

(1) Materials and wages are charged at actual cost.

(2) Factory expenses have been allocated to production at 20% of Prime cost.

(3) Administrative overhead at ₹ 0.80 per unit of production.

(4) Selling overhead at ₹ 4.50 per unit sold.

Prepare :

    (i) Cost sheet as per cost accounts.

    (ii) Reconciliation Statement

(B) Write short notes on :   7.

(1) Give Reason for disagreement between the profits as shown by cost Accounts and profit shown by financial Accounts.

(2) Over recovery and under recovery of overheads in cost Accounts.

Atmavallabh Hospital runs an Intensive care Unit. For this purpose, it has hired a building on 01-06-2017 at a rent of ₹ 60,000 per month with the understanding for 10 Months (Up to Dt. 31-03-2018). The hospital consists of 60 beds and 10 more beds can be comfortably accommodated when the occasion demands. The permanent staffs attached to the hospital are as follows :   14

2 (Two) Supervisors   :   Each at a salary of ₹ 25,000 per month

8 (Eight) Nurses   :   Each at a Salary of ₹ 5,000 per month

6 (Six) Ward boys   :   Each at a salary of ₹ 5,000 per month

Though the hospital was open for the patients all the day in a year, scrutiny of accounts upto 31-03-2018 revealed the following particulars:

(1) Only for 120 days, the hospital had the full capacity of 60 patients per day.

(2) Another 80 days, it had on an average 30 beds only occupied per day.

(3) But, there were occasions when the beds were full, extra beds were hired at a charge of ₹ 250 per day and this did not come to more than 10 extra above the normal capacity on any one day. The total hire charges for extra beds incurred for said period amounted to ₹ 1,00,000. This extra arrangement was made during the 120 days mentioned in the above point no. (1). The fees were paid on the basis of their services to the expert visiting doctors. Amount of their fees worked out to ₹ 60,000 per month in 2017-2018. The other expenses for the hire period were as under:

Medicine supplied	₹ 5,00,000
Cost of Oxygen, X-ray etc.	₹ 4,00,000
Laundry charges for cloths, bed-sheet and pillow cover etc.	₹ 3,00,000
Expenses of other services to patient's	₹ 2,00,000
Building Repairing and maintenance (Fixed)	₹ 2,00,000
General administration charges (Fixed)	₹ 1,00,000

If the hospital recovered an overall amount of ₹ 500 per day on an average from each patient, what are the total profit and loss and per patient profit and loss made by the hospital.

OR

(A) Tirth Transport Co. supplies the following information in respect of a Truck of 5 tonne capacity 　　　　7

Cost of Truck	₹ 8,00,000
Scrape value	10%
Estimated Life	12 Years
Driver's Salary	₹ 25,000 p.m.
Cleaner's Salary	₹ 20,000 p.m.
Taxes	₹ 1,80,000 p.a.
Insurance	₹ 1,20,000 p.a.
Share of general expenses	₹ 60,000 p.a.
Repairs and Maintenance	₹ 10,000 p.m.
Diesel, Oil etc.	₹ 150 per trip each way

The truck carries goods from one city to another city covering a distance of 100 km each way. Daily 2 (Two) round trips are undertaken and truck runs 25 days a month. On outward trip fright is available to the extent of full capacity and on return trip 50% of the capacity.

Work out operating cost per tonne kilometre.

(B) Write short notes on : (any **two**)

(1) Operating Costing

(2) Characteristics of operating costing

(3) Fixed and Variable Expenses

4. The following is the Trial Balance of Rupesh Builders as on 31-03-2018 :

Particulars	Debit ₹	Credit ₹
Land and Building	1,00,000	
Creditors		20,000
Bills Payable		15,000
Cash on hand and with Bank	9,000	
Drawing and Capital	35,000	2,00,000
Contract Account:		
Materials Supplied	70,000	
Plant (supplied on 01-04-2017)	80,000	
Wages paid	90,000	
Miscellaneous expenses paid for contract	40,000	2,80,000
Contractee's A/c		1,89,000
(Cash received being 90% of the work certified)		
	4,24,000	4,24,000

The contract price is ₹ 4,00,000. The contract was begun on 01-04-2017. Of the plant and material charged on contract, Plant costing ₹ 7,000 and material costing ₹ 8,000 were stolen away from the site.

On 31-03-2018 Plant costing ₹ 10,000 was returned to the stores; the value of the material on the site was ₹ 39,300 and the cost of work done but not certified was ₹ 70,000.

Provide depreciation at 10% p.a. on plant and 10% p.a. on Land and Building.
Miscellaneous expenses for the contract amounting to ₹ 20,000 were outstanding.
Prepare Contract A/c, after taking 2/3 profit, on cash basis to profit and Loss A/c and Balance Sheet as on 31-03-2018

OR

(A) The following budgeted details are available from Kaivan manufacturing co.   7

Direct Materials		₹ 2,10,000
Direct Wages :		
Hardware Dept. (8,000 Hours)	₹ 40,000	
Software Dept. (10,000 Hours)	₹ 50,000	₹ 90,000
Work overheads :		
Hardware Dept.	₹ 80,000	
Software Dept.	₹ 1,00,000	₹ 1,80,000
Administrative Overheads		₹ 1,20,000
Selling Overheads		₹ 70,000
Distribution Overheads		₹ 80,000

Assuming that the company follows absorption method of costing, you are required to:

(1) Prepare a Schedule of Overhead rates from the figures available stating the basis of overhead recovery rates used under the given circumstances.

(2) Work out a cost Estimate for following job based on overhead so computed :
Direct Material :   X 20 Kg. at ₹ 5
                    Y 10kg. at ₹ 20
Direct Labour :   Hardware Dept. 60 Hours
                  Software Dept. 80 Hours

(On the basis of hourly rate.)

(B) Write short notes : (any **two**)

(1) Characteristics of job costing

(2) Escalation clause

(3) Advantages of job Costing

5. In the following sub questions, more than one answer are given, of which only one answer is correct. Select the correct answer supported by necessary explanation/working note. (any **seven**) **14**

(1) Find out the monthly tonne kilometres from the following information :

Labdhi Transport Company carries goods from one city to other city covering a distance of 40 km. each way. On outward trip fright is available to the extent of full capacity (i.e. 8 tonne) and on return trip at 50% capacity. Daily one round trip is possible. The truck runs on an average 25 days in a month.

(A) 8,000   (B) 16,000

(C) 10,000   (D) 12,000

(2) Find out passenger kilometre fare for a bus of Kirit Travels co. from the following information :

Kilometres	1	2	3	4	5
Passengers	5,000	10,000	8,000	4,000	1,000

Fixed Cost ₹ 1,80,000 and Operating cost ₹ 4,50,000. Find out fare per passenger kilometre. If the owner wants to earn profit 25% of net earnings.

(A) 15   (B) 11.25

(C) 12   (D) None

(3) What would be the cost of direct labour, if the prime costs, conversion costs and total factory cost were ₹ 1, 22,000, ₹ 3, 00,000 and ₹ 4, 10,000 respectively?

(A) 12,000   (B) 17,000

(C) 85,000   (D) None

(4) In 2017 cost of materials and direct labour per unit were ₹ 200 and ₹ 400 respectively. In 2018 Price of materials will raise by 50% and labour cost will decrease by 7%. What will be overall increase in percentage in cost of 60th ?

(A) 50%   (B) 7%

(C) 21.33%   (D) 12%

(5) Which of the following items does not cause any difference between the profit disclosed by cost and Financial Books ?

(A) Use of different "Stock Valuation Method"

(B) Use of different methods of charging depreciation on assets.

(C) Rent of the factory building which is hired.

(D) Under or over absorption of overheads in cost accounts.

15

(6) Financial accounts show profit of ₹ 15,000. Following particulars are available for stock of cost Accounts and Financial Accounts :

Particulars	Cost Accounts (₹)	Financial Accounts (₹)
Opening stock of finished goods	24,000	18,000
Closing stock of finished goods	28,000	25,000

What will be profit as per cost accounts ?

(A) 12,000   (B) 18,000

(C) 24,000   (D) 6,000

(7) Which of the following statement is not correct ?

     (A) The concept of EBQ is similar to that of Economic Order Quantity.

     (B) In job costing, a Cost Sheet is prepared for each job.

     (C) Batch costing is a variant of job costing.

     (D) Job costing can be most suitable in oil Refinery industry.

(8) The following details are given for Job No : 999

Direct Materials   ₹ 45,200

Direct Labour   ₹ 32,000

Works expenses 40% on labour.

Other expenses 20% on work cost.

The tender price should include 10% profit on selling price. What would be the tender price of job No 999 ?

(A) 12,000   (B) 1,81,800

(C) 1,20,000   (D) 1,18,800

(9) Escalation clause means:

     (A) Cost Plus contract

     (B) Increase in contract price due to Price hike in materials and labor.

     (C) Cost of contract + Profit

     (D) Regular increase in price of contract at fixed percentage per annum.

(10) Profit of contract A/c ₹ 50,000, Estimated Profit of proforma contract account is ₹ 30,000, Work certified ₹ 80,000 and contract price ₹ 2,00,000 find out how much profit credited to P & L A/c ?

(A) 12,000   (B) 20,000

(C) 13,333   (D) 8,000

MB-101

May-2018

B.Com., Sem.-IV

CE-204 (A) : Adv. ACC. & Auditing
(Auditing-I)

Time : 3 Hours]   [Max. Marks : 70

1. (a) What is auditing ? Explain the advantages and limitations of auditing.   7
   (b) Discuss the rights of a company auditor.   7

                                    OR
   (a) Write in detail about Misappropriation of Goods.
   (b) Differentiate between Continuous Audit and Annual Audit.

2. (a) What is internal check ? Explain the characteristics of an ideal internal check
       system.   7
   (b) Differentiate between Routine Checking and Test Checking.   7

                                    OR
   (a) Explain the points to be considered by an auditor before commencing a new audit.
   (b) Differentiate between Internal Audit and Statutory Audit.

3. What is vouching ? Explain the points to be considered by an auditor while vouching. 14

                                    OR
   How will you vouch the following ?
   (a) Cash received from debtors   7
   (b) Payment of wages to workers   7

4. (a) What is verification ? How does verification differ from vouching ?   7
   (b) As an auditor, how will you verify Investments at the end of the year ?   7

                                    OR
   (a) Write in detail about valuation of different types of assets.
   (b) What points should be considered by an auditor during verification of assets ?

5. Select the correct answer for the following sub-questions :   14
   (1) Debiting Landlord's Account on payment of rent is a/an _____.
       (a) error of omission   (b) error of commission
       (c) error of principle   (d) clerical error
   (2) Suppressing sales vouchers in the books of accounts results in _____.
       (a) higher profit   (b) lower profit
       (c) no effect on profit   (d) None of the above
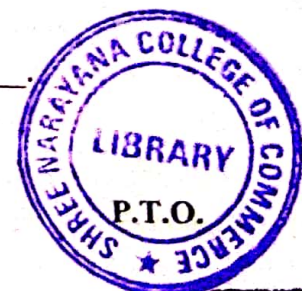
(3) Special audit is ordered by the _____.
 (a) Central government
 (b) Board of directors
 (c) Shareholders
 (d) debtors

(4) In order to verify whether the internal check system in the organization is satisfactory or not, the auditor conducts _____.
 (a) auditing in depth
 (b) propriety audit
 (c) voluntary audit
 (d) branch audit

(5) When an auditor checks all the transactions, it is called _____.
 (a) interim audit
 (b) Test checking
 (c) continuous checking
 (d) surprise checking

(6) Internal auditor submits his report to the _____.
 (a) shareholders
 (b) management
 (c) government
 (d) creditors

(7) A plan prepared by the auditor to carry out the audit work is called _____.
 (a) Audit report
 (b) Audit notebook
 (c) Audit appointment letter
 (d) Audit programme

(8) A chartered accountant should be atleast _____ years of age to be appointed as the statutory auditor of a company.
 (a) 18
 (b) 21
 (c) 25
 (d) 35

(9) Prior approval of the Central Government is necessary to remove an auditor _____ the expiry of his term.
 (a) before
 (b) on
 (c) after
 (d) All of the above

(10) Vouching of bank charges is done on the basis of _____.
 (a) pay-in-slip
 (b) cheque book
 (c) bank statement
 (d) debit card

(11) Manipulation of accounts to show higher profit is done by the _____.
 (a) top management
 (b) auditor
 (c) employees
 (d) All of the above

(12) A/an _____ cannot be appointed as the statutory auditor of a company.
 (a) individual
 (b) partnership firm
 (c) limited liability partnership firm (LLP)
 (d) company

(13) Arrears of dividend on cumulative preference shares is a _____.
 (a) long term liability
 (b) current liability
 (c) contingent liability
 (d) reserve

(14) Public deposits are disclosed in the Balance Sheet as _____.
 (a) secured loans
 (b) unsecured loans
 (c) investments
 (d) current assets

MC-101

May-2018

B.Com., Sem.-IV

CC-207 : Production Management

Time : 3 Hours]

[Max. Marks : 70

Note :   Marks indicated on the right side.

1. (A) Explain the process of Production Control.   6
           OR
           Describe the scope of Production Management.

    (B) Discuss in short. (any **one**)   4
         (1) Characteristics of Production Management.
         (2) Importance of Production Planning.

    (C) Write a short note. (any **one**)   4
         (1) Advantages of Production Control.
         (2) Differences between production planning and production control.

2. (A) Explain the process of Purchasing.   6
           OR
           Describe the importance of Scientific Purchasing.

    (B) Discuss in short. (any **one**)   4
         (1) Methods of Purchasing.
         (2) Principles of Scientific Purchasing.

    (C) Write a short note. (any **one**)   4
         (1) To make or buy.
         (2) Difference between centralized and decentralized purchasing.

3. (A) Explain the objectives of Inventory control.   6
           OR
           Explain the types of Inventory.

MC-101   3   P.T.O.

(B) Discuss in short. (any **one**)   4
  (1) ABC System
  (2) EOQ

(C) Write a short note. (any **one**)   4
  (1) VED Analysis
  (2) FSH Analysis

4. (A) Describe the process of New Product Development.   6
            OR
         Describe the process of consumer adoption.

    (B) Discuss in short. (any **one**)   4
      (1) Product Diversification.
      (2) Product Simplification.

    (C) Write a short note. (any **one**)   4
      (1) Factors affecting decisions about product-mix.
      (2) Reasons of new product failure.

5. Answer in short. (any **seven**)   14

    (1) Describe the difference between Job production and Batch production. (any two points).

    (2) What is the Product mix ?

    (3) Give the example of utility creation. (any two)

    (4) What is Blanket Purchasing ?

    (5) Which are the functions of the dispatchers ? (any two)

    (6) Describe the 5-'R' of Scientific purchasing.

    (7) Which companies adopt Centralized Purchasing ? Why ?

    (8) Make a Specimen of Bin Card.

    (9) What is the Danger Level ?

    (10) Describe the advantages of diversification of product to consumers. (any two)

    (11) What is the periodic stock taking ?

    (12) When the circumstances of hand to mouth purchase are created ?

MA-102

May-2018

B.Com., Sem.-IV

CE-203 (B) : Adv. Statistics (Statistics – V)
(New & Old Course)

Time : 3 Hours]

[**Max. Marks : 70**

Instructions : (1) Figure to the right side indicate the full marks of that questions.

(2) Statistical tables will be given on request.

(3) Use of simple calculator is allowed.

1. (a) Write two properties of mathematical expectation and variance for independent variables and dependent variables. **4**

OR

Define Mathematical Expectation. State and prove the multiplication rule on mathematical expectation.

(b) For the following bivariate probability distribution, obtain the values of Cov $(5x, 3y)$ and V $(-x + 2y)$. **6**

x \ y	6	7	8	9
0	0.1	0	0.2	0
1	0	0	0.2	0.3
2	0.1	0.1	0	0

OR

The joint probability function of a random variables x and y is as follows. Find the values of (i) V(x) (ii) Cov $(4x, 5y)$ and (iii) E$(7y + 4x)$.

y \ x	1	2	3	4
−1	0.2	0.1	0	0
0	0	0.2	0.1	0
1	0	0	0.2	0.2

5

(c) For two independent variables x and y, if

$E(x) = -5$, $E(y) = 8$, $E(x^2) = 100$, $E(y^2) = 100$ then find the values of

(i) Cov (x, y) and (ii) $V(2x - 5y)$

OR

For two dependent variables x and y, if

$E(x) = -5$, $E(y) = 8$, $E(x^2) = 100$, $V(y) = 36$, $Cov(x, y) = 80$ then find the values of

(i) $E(y^2)$ and (ii) $V(4x - 3y)$.

2. (a) Write probability mass function of Binomial distribution and state its properties. **8**

OR

Write probability mass function of Poisson distribution and obtain its mean and variance.

(b) Fit a Binomial distribution to the following data. **6**

x_i	0	1	2	3	4	5
fi	8	52	97	103	48	12

OR

For a Poisson variable x, if $P(x = 2) = 9P (x = 4) + 90P (x = 6)$ then find the value of its variance.

3. (a) Write probability mass function of Geometric distribution and obtain its mean. **4**

OR

Write probability mass function of Hyper geometric distribution and write its properties and uses.

(b) A die is thrown and getting 1 or 6 is regarded as success. Find the probability that more than 5 trials are required to get 3rd success. **6**

OR

In a bag, there are 8 red and 7 white balls. 6 balls are taken at random from it. Find the probability that (i) at most 4 balls are red (ii) at least 3 balls are white in selected 6 balls.

MA-102   6
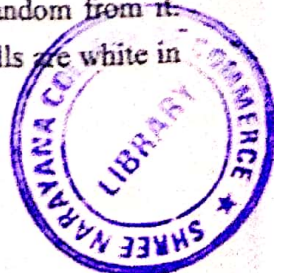
(c) For a negative binomial distribution, mean is 21 and variance is 84. Write its probability mass function. **4**

<div align="center">OR</div>

What is the probability to getting 1st time head when a coin is toss 6th time ?

4. (a) Write probability function of Normal distribution and obtain its mean. **8**
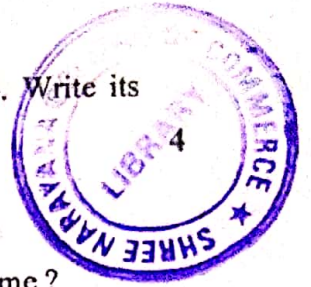
<div align="center">OR</div>

Write probability mass function of Normal distribution and write its properties and uses.

(b) If average life of mobile is 2 years and variance 16 months then using normal distribution find (i) probability that a particular mobile has a life of more than 3 years and (ii) probability that a particular mobile has a life of less than 15 months. **6**

<div align="center">OR</div>

For a normal distribution, 12.37% of the values are above 100 and 12.37% of the values are below 40. Find its mean and variance.

5. Answer the following questions in short : **14**

(1) For negative binomial distribution, if n = 15 and q = 4/5 then find the values of its mean and variance.

(2) For two independent variables x and y, if V(x) = 25 and V(y) = 30 then find the value of V(2x – 3y).

(3) For normal distribution, if mean deviation is 20 then find its standard deviation and quartile deviation.

(4) If E(x) = 25, E(y) = 40 and E(xy) = 1500 then find the value of Cov (5x, 2y).

(5) For a Poisson variable x, if P(x = 5) = P(x = 6) then find its mean and standard deviation.

(6) For normal distribution, if $Q_1 = 80$ and mode is 150 then find its standard deviation.

(7) For a binomial variable x, if $n = 6$ and $9P(x = 4) = P(x = 2)$ then find the value of $P(x = 0)$.

$[P(0 < z < 3) = 0.4987$

$P(0 < z < 0.75) = 0.2734$

$P(0 < z < 1.155) = 0.3763]$

_____

AL-101

April -2018

B.Com., Sem.-IV

209 : Commercial Communication – IV

Time : 3 Hours]   [Max. Marks : 70

1. Write brief answers of any **seven** of the following :   14
   (1) Why was the Sanskrit teacher chosen to serve on the committee ?
   (2) Describe the physical appearance of Kondiah, the grain merchant.
   (3) What is the message of the story Diamond Rice ?
   (4) Was Dr. Khanna's trip to India really a success ?
   (5) Why did Kundan Lal begin to shave every day ?
   (6) Describe the Taipan's memories of having high tea every evening after school.
   (7) Why did the Taipan want to make a second visit to the cemetery in the company of the overseer ?
   (8) Who was Scoresby ? What was special about him, according to the clergyman ?
   (9) How did Scoresby's blunder in the Crimean war bring victory to the English army ?

2. Write short notes on any **two** of the following :   14
   (1) The Grain Merchant-Kondiah
   (2) The Vanity of human life stressed in the story of the *Taipan*
   (3) *The Diamond Rice* – a satire.

3. Discuss in detail Physical Barriers to Communication.   14

                                    OR

   Define Downward Communication and mention its objectives, advantages and limitations.

4. Write a letter on behalf of Capital Traders, Sabarmati, Ahmedabad surrendering an agency.   14

                                    OR

   Draft a letter on behalf of the Principal terminating the agency.

AL-101   1   P.T.O.

5. (A) Draft a circular to the dealer on behalf of Mahi Tech Electronics Ltd., intimating about the opening of a new branch of the company.   7

OR

Write a circular letter to your dealers intimating the change of Marketing Executive.   7

(B) Do as directed :

(I) Match the following :

	A		B
(1)	to set off	(a)	quick in action
(2)	to give up	(b)	loud public protest
(3)	fleet of foot	(c)	to start a journey
(4)	a hue and cry	(d)	to leave

(II) Give meaning of the following :

(1) As busy as a bee

(2) Child's play

(3) To pass away

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AK-101

April -2018

B.Com., Sem.-IV

CC-210 : Fundamentals Statistics – II

(New Course)

Time : 3 Hours]   **[Max. Marks : 70**

1.   (a)   Define the meaning of differentiation of a function. Find the derivative of $\sqrt{5x} + 10$ using definition.   4

                                     OR

               State the rules of differentiation.

     (b)   Find derivative of following functions with respect to x.   6

               (1) $y = \dfrac{\log x + x}{5 - 11x}$

               (2) $y = x^e \cdot e^x$

                                     OR

               Find derivative of following functions with respect to x

               (1) $f(x) = \log\left[ex^3 \left(\dfrac{3x + 5}{3x - 4}\right)^2 \right]$

               (2) $y = \left(\dfrac{3}{x^2} + 2x\right)\left(\dfrac{2}{\sqrt{x}} + 3\sqrt{x}\right)$

     (c)   If $Y = f(x) = e^x$, then obtain the value of $f'(0) + f'(1)$.   4

                                       OR

               If $f(x) = x^3 \log\dfrac{1}{x}$, then obtain the value of $x^3 + x \cdot f'(x)$.

2.   (a)   Define the followings :   4
               (1)   Marginal Cost
               (2)   Marginal Revenue
               (3)   Total Revenue
               (4)   Average Revenue

                                     OR

               Explain demand and supply. Also give their laws.

     (b)   Obtain the maximum and minimum values of the following function :   6

               $f(x) = 140 - 210x + \dfrac{35x^3}{3} + \dfrac{35x^2}{2}$

                                     OR

               Demand function of a commodity is $x = 40 - P$ and its cost function is $C(x) = 10 + 5x + 6x^2$. Then find maximum profit and price for maximum profit.

(c) The cost function of a commodity is $C = 24x^{-1} + 1.5x + 5$. Find the production for minimum cost. **4**

<div align="center">OR</div>

The supply function of a commodity is $x = 7P + 5$, find elasticity of supply at $P = 5$.

3. (a) Discuss : "Index numbers are the barometers for the economic activities". **4**

<div align="center">OR</div>

Explain time reversal test and factor reversal test.

(b) Obtain Fischer's and Marshal Edgeworth's Index Number from the following data : **6**

Items	Price (in ₹)		Quantity (in kg)	
	2000	2017	2000	2017
P	8	8	10	8
Q	10	12	20	20
R	24	38	30	40
S	35	50	15	12
T	30	60	12	10
U	14	14	5	8
V	16	24	20	15

<div align="center">OR</div>

In compare to year 2001, what difference in cost of living index number is observed in the year 2016 ?

	Fuel	Clothing	Rent	Food	Misc.
Expense in %	10	20	15	35	20
Price in ₹ (2001)	25	40	50	100	85
Price in ₹ (2016)	30	70	60	150	85

(c) In usual notations $\Sigma p_1 q_0 = 1540$, $\Sigma p_0 q_0 = 900$, $\Sigma p_1 q_1 = 2140$ and $\Sigma p_0 q_1 = 1180$. Find Paasche's Index Number and verify it for time reversal test. **4**

<div align="center">OR</div>

Convert the following chain based index into fixed base Index Numbers

Year	2011	2012	2013	2014	2015	2016
Index No.	100	104.3	104.1	93.13	103.2	102.04

4. (a) Write short notes on :
   (1) Importance of time series
   (2) Method of least squares **4**

<div align="center">OR</div>

State the component of time series and describe it.

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6

(b) Find trend by moving average method taking four yearly period for the following time series :

6

| Year	Production in Units
1999	1110
2000	1130
2001	1128
2002	1125
2003	1135
2004	1120
2005	1145
2006	1142
2007	1148
2008	1160
2009	1155
2010	1154
2011	1162
2012	1165
2013	1160
2014	1165
2015	1164
2016	1170

OR

Find trend by moving average method taking three yearly period for the following time series data and determine short term variation.

Year	Sales in Lakhs (₹)
2000	224
2001	206
2002	238
2003	244
2004	198
2005	218
2006	236
2007	254
2008	214
2009	238
2010	228
2011	256
2012	260
2013	232
2014	240

(c) Find Seasonal indices for the following series :

Year	Q_1	Q_2	Q_3	Q_4
2005	69	52	64	54
2006	63	60	60	65
2007	61	64	63	67
2008	53	70	62	52
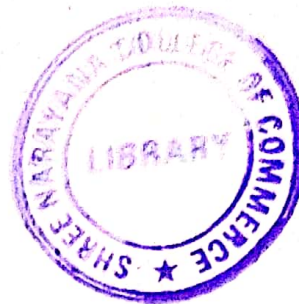
OR

The short term variation are given in the following table for a time series. Find seasonal variations :

Year	Season (Short term variation)			
	I	II	III	IV
2013	–	–	2.75	–5.25
2014	–2.75	4.25	6.50	–5.0
2015	–5.75	7.25	–1.75	–3.75
2016	–4.25	10.25	3.5	–4.1
2017	–5.50	12.3	–	–

5. Answer in **one** or **two** lines :   14

(1) If f(x) = $5x^2 + 7x - 10$, then find f'(3).

(2) If Y = $x^2 - e^{-2x} + \sqrt{x} - 20$ then find second order derivative of Y.

(3) Give formula for obtaining elasticity of demand if demand function is known.

(4) Which index number is considered to be an ideal index number ?

(5) Give the formula of converting fixed base index numbers in to chain base index numbers.

(6) State factor reversal test.

(7) What is the approximate total of seasonal variation in time series data ?

(8) What do you mean by irregular fluctuation ?

(9) What do you mean by seasonal indices ?

(10) What is meant by $\in$ < 1 ?

(11) If the function P = $400 - \dfrac{10}{x}$ is a demand function ?

(12) How can we obtain maximum value of the function ?

(13) Give formula for obtaining marginal cost.

(14) Define Seasonal Variation.

AI-112

April -2018

B.Com., Sem.-IV

Core-206 : Economics
(Economics of Growth and Development)

Time : 3 Hours]   [Max. Marks : 70

1. Meaning of economic growth and economic development, explain the indicators of economic development   14

   OR
   (A) Explain the gender related index of economic development.   7
   (B) Write a short note on physical quality of life index.   7

2. Explain the economic growth model of Prof. Harrod.   14

   OR
   Explain the economic growth model of Ragnar Nurkse and evaluate it.

3. Explain the characters of birth rate and death rate in India.   14

   OR
   (A) Write a short note : Poverty Line   7
   (B) Describe Population problem in developing country.   7

4. Discuss the reasons of imbalance income with reference to India.   14

   OR
   (A) Write a short note: Sustainable Development.   7
   (B) Explain : Global warming.   7

5. For following each question, select the best answer.   14
   (1) Development is a versatile process.
       This statement is given by _____.
       (A) Maheboob-ul-haq   (B) Michael P. Todero
       (C) Kindal berger   (D) Gerald Mayer

   (2) With reference to Human development index in 2010 India ranks at _____ in the world.
       (A) 120   (B) 121
       (C) 119   (D) 135

AI-112

(3) Which country in the world comes at first place according to the parameters of the physical quality of life index ?
    (A) Britain   (B) Sweden
    (C) China   (D) America

(4) Which sector has been suggested to prioritize for development by Hershman ?
    (A) Agriculture sector   (B) Capital industries
    (C) Infrastructure   (D) Consumer industries

(5) Harrod's growth model equation : _____
    (A) $GW = \dfrac{S}{Cr}$ (B) $GW = \dfrac{Cr}{S}$
    (C) $GW = Cr \times S$ (D) $GW = SCr$

(6) Balanced development means _____
    (A) all sector development   (B) service sector development
    (C) agriculture sector development   (D) industrial sector development

(7) What is the relationship between population and poverty ?
    (A) inverse   (B) one-way
    (C) two-way   (D) none of the above

(8) Which economist presented the principles of population transition ?
    (A) Caynes   (B) Koul & Hoover
    (C) Malthus   (D) Pigou

(9) The formula of Human poverty index is _____
    (A) $P = \dfrac{P_1 + P_2 + P_3}{3}$ (B) $P_3 = \dfrac{P_0 + P_1 + P_2}{3}$
    (C) $P_1 = \dfrac{P_0 + P_1 + P_2}{3}$ (D) $P_2 = \dfrac{P_0 + P_1 + P_3}{3}$

(10) How many parameters for unemployment are given by the Planning commission of India ?
    (A) two   (B) four
    (C) three   (D) five

(11) _____ is the main reason for income inequality in rural regions of India.
    (A) Wage difference   (B) Unequal distribution of land ownership
    (C) Difference in work efficiency (D) Hidden unemployment

(12) When was the Kyoto protocol implemented ?
    (A) April, 1998   (B) November, 2001
    (C) December, 1997   (D) March, 1994

(13) Which pollution is not man-made ?
    (A) Sea pollution   (B) Radio-active pollution
    (C) Thermal pollution   (D) Wildfires

(14) Who gave the concept of social dualism ?
    (A) J.H. Boyke   (B) H. Mint
    (C) Benjamin Higgins   (D) Lorrenz

AJ-101

April -2018

B.Com., Sem.-IV

208 : Taxation – II

Time : 3 Hours]

[Max. Marks : 70

Instructions : (1) All questions carry equal marks.

(2) Show your workings as a part of answer.

1. From the following information of Dr. Lincoln, Compute taxable income under the head "Income from Business and Profession" for the A.Y. 2017-18. 14

Receipts and Payments account for the year ended on 31-03-2017

Dr. **Cr.**

Receipt	₹	Payments	₹
To Balance b/d	15,000	By Hospital Rent	1,50,000
" Visit fees	3,00,000	" Staff Salaries	2,70,000
" Consultation fees	2,00,000	" Electricity expenses	60,000
" Gift from Patient	15,000	" Medical books	10,000
" Operation charges	7,00,000	" Purchase of Medicine	4,50,000
" Sales of Medicines	4,00,000	" Audit fees	35,000
" Income of house rent	32,000	" Subscription	5,000
" Dividend (Gross)	15,000	" Biowaste discard charges	8,000
" Sales of Surgical		" Repairing expenses	17,000
Equipments	70,000	" Misc. expenses	32,000
" Insurance Policy		" Professional tax	4,000
matured	40,000	" Deposited in P.P.F.	50,000
		" Loan to friend	40,000
		" Travelling Expenses	40,000
		(40% Personal)	
		" Purchase of Surgical	
		Equipment (1-7-16)	1,00,000
		" Depreciation on computer	4,000
		" Balance c/d	5,12,000
	17,87,000		17,87,000

7

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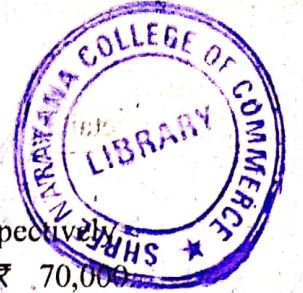
Other information :

(1) He has earned salary of ₹ 60,000 from medical College.

(2) Opening and Closing stock of Medicine were ₹ 45,000 and ₹ 55,000 respectively.

(3) The opening written down value of surgical equipment was ₹ 70,000. Depreciation is allowed at 20% p.a.

(4) Staff salary includes ₹ 80,000 paid to his wife. She is M.B.B.S. and attend hospital regularly.

OR

Profit and Loss Account for the year ended on 31-3-17 of Shri Aeric is as under. Compute his taxable income from Business and Profession.

Dr.   **Profit and Loss Account**   **Cr.**

Particulars	₹	Particulars	₹
To Salaries	3,30,000	By Gross Profit	5,30,000
" Depreciation	15,000	" Profit on sale of land	32,000
" Bad debt reserve	5,000	" Bad debt recovered	25,000
" Loss due to theft (goods)	10,000	" House Rent	10,000
" Purchase of stationery	12,000	" Prize from Lottery (Gross)	15,000
" Life Insurance Premium	7,500	" Misc. Income	3,000
" Diwali-Puja Expenses	4,000	" Discount received	2,000
" Value Added Tax	8,000		
" Personal Drawings	6,000		
" Provision for Income Tax	15,000		
" Cousin's Marriage Expenses	45,000		
" Bad debts	5,000		
" Donation	4,000		
" Interest on loan for business	15,000		
" Net Profit	1,35,500		
	6,17,000		6,17,000

Additional Information :

(1) Admissible depreciation under Income-Tax Act is ₹ 10,000.

(2) Stationery has been used completely.

(3) 40% of Bad debt recovered was disallowed in the past.

(4) Salary includes ₹ 40,000 paid to wife. She is silent partner in business.

(5) Audit fees ₹ 5,000 is not recorded in the books.

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2. Details regarding transaction done by Bela for the year ended on 31-3-17 are as under :

Assets	Date of Purchase	Purchase Price ₹	Date of Sales	Sales Price ₹	Index Number
1. Residential Flat	1-1-'70	1,20,000	31-1-'17	24,00,000	–
2. Personal Motor Car	1-1-'12	2,25,000	1-11-'16	1,85,000	785
3. Jewellery	1-12-'85	2,66,000	15-9-'16	22,75,000	133
4. Listed debentures of a Company	1-1-'01	1,21,800	31-10-'16	3,50,000	406

The fair market value of the residential flat on 1-4-81 was ₹ 2,00,000 and Index number was 100.

The amount obtained from the sales of Jewellery ₹ 18,20,000 is paid for the purchase of a new residential flat on 31-12-'16. STT is chargeable on sales of securities. Calculate the taxable capital gain for the A.Y. 2017-18. Index Number for the financial year 2016-17 is 1125.

OR

From the following particulars of Investments and Incomes of Shri Mahasukhbhai, compute taxable income under the head 'Income from other sources' for the previous year 2016-17.

(1) 12% debentures of x Ltd. ₹ 3,00,000.

(2) Agriculture income from land in Karnataka ₹ 80,000.

(3) Remuneration received for assessing answer sheet in University Examination ₹ 3,000.

(4) Received family pension ₹ 90,000.

(5) Interest on 7% Capital Investment Bonds ₹ 10,000.

(6) Interest received on 7.5% Debentures of Raja Ltd. ₹ 8,000 (TDS 10%).

(7) Interest earned on Post Office Saving Account (Jointly held) ₹ 6,000.

(8) ₹ 15,000 as dividend received on shares of Garden Vareli Ltd., Surat.

(9) Net Income from horse race ₹ 49,000 (TDS 30%).

(10) Unexplained cash ₹ 1,20,000.

Interest on Securities due on 31st December.

Mahasukhbhai incurred the following expenses :

(1) Interest paid on amount borrowed for purchasing shares ₹ 4,500.

(2) Collection charges of Interest ₹ 325.

3. (A) From the following informations compute the deductions available u/s 80 C for the A.Y. 2017-18. 7

		₹
(1)	Investment in National Saving Certificate (IX issue)	35,000
(2)	Investment as a term deposits with SBI (for 3 years)	15,000
(3)	₹ 22,000 Premium on Personal Life Insurance Policy of	2,00,000
(4)	Contribution towards P.P.F.	45,000
(5)	Premium on Self Mediclaim Insurance Policy	15,000
(6)	Paid for LIC Housing Loan (inclusive of an Interest worth ₹ 15,000)	45,000
(7)	Deposited in Post Office Saving Account	35,000

OR

Explain the following in brief. (any **two**)

(1) Deduction in respect of premium paid on Insurance Policy taken for medical treatment u/s 80D.

(2) Deduction in respect of interest on loan taken for higher education u/s 80E.

(3) Relief on Salary Paid in arrears.

(B) Explain (any **one**). 4

(1) Carry forward of loss.

(2) Provisions of Minor's Income

(C) Write answers of the following : (any **one**) 3

(1) Give three details of donation to which the income limit of 10% is not applicable and 50% amount is deductible u/s 80G.

(2) Provisions in respect of Blind or Physically Handicapped persons u/s 80 U.

4. (A) Explain the concept of Goods and Service Tax. (GST) 7

OR

Describe benefits of Goods and Service Tax.

(B) Write any **two** : 4

(1) Four Taxes, which used to be levied and collected previously by the Central Government.

(2) GST council.

(3) Time limit for availing GST Input Tax Credit.

(4) Explain : Place of Business.

(C) Give answers of the following questions in **one** sentence each :   **3**
    (1) Required turnover for compulsory registration under GST.
    (2) Three taxes which used to be levied and collected by the States.
    (3) Commodities kept outside the purview of GST.

5. Write correct answer. (any **seven**)   **14**
    (1) Under the head of Business and Profession amount incurred for the promoting family planning is allowed to write off under _____ equal instalments.
      (A)   5   (B)   3
      (C)   7   (D)   8

    (2) The loss on speculative business is set-off
      (A) Against speculative business profit.
      (B) Against non-speculative business profit.
      (C) Against (A) and (B).
      (D) None of these.

    (3) For the purpose of capital gain profit on sales of goodwill is
      (A) Taxable   (B) Tax free
      (C) Partially taxable   (D) None of these

    (4) Which of the following amount is to be invested for the exemption of capital gain for the purchase of residential assets from the sales of long term capital assets other than the Residential assets.
      (A) Capital Gain   (B) Realise Value
      (C) (A) and (B) both   (D) None of these

    (5) The income from sub-let is taxable under_____ head.
      (A) Income from House Property
      (B) Income from other sources
      (C) Income from Business & Profession
      (D) None of these

    (6) The interest of Joint Saving Account in Post Office is tax free
      (A) upto ₹ 3,500   (B) upto ₹ 7,000
      (C) upto ₹ 10,000   (D) None of these

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(7) The maximum deductible amount for senior citizens u/s 80 D.

(A) ₹ 25,000

(B) ₹ 30,000

(C) ₹ 50,000

(D) None of these

(8) Deduction allowed in respect of royalty on patents u/s 80 RRB.

(A) 100% or ₹ 3,00,000 whichever is less.

(B) 100% or ₹ 5,00,000 whichever is less.

(C) 50% or ₹ 3,00,000 whichever is less.

(D) 50% or ₹ 5,00,000 whichever is less.

(9) The registration under GST is compulsory for Special Category States whose turnover is

(A) ₹ 20 lakh or more

(B) ₹ 15 lakh or more

(C) ₹ 50 lakh or more

(D) ₹ 10 lakh or more

(10) Maximum GST Rate in India is

(A) 5%

(B) 12%

(C) 18%

(D) 28%

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