



## **Centre for Distance Education**

**SNDT Women's University**

**Mumbai - 400 049**

**B.Com. I**

**(New Course)**

**(w.e.f. 2018-19)**

**Semester I and Semester II**

**Guidelines and Questions for Internal Assignments**

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# Semester - I

**Component Course**

**Course Name: C.C. English – Paper I**

**Subject Code: 110101**

## SECTION I

**Answer the following Questions: (Any One)**

**15 Marks**

1. Write and analyze a case study for downward communication.
2. Write and analyze a case study for grapevine communication
3. Define grapevine. What are the different types of grapevine?
4. Mention three disadvantages and advantages of grapevine.
5. How can be effective upward communication maintained in an organization?
6. How can a manager motivate the employees with the help of grapevine?
7. What are the disadvantages of grapevine?
8. Discuss the importance of effective communication in an organization.
9. What are the modern means of communication? What are the advantages and disadvantages of the modern means of communication?
10. What is meant by feedback? What role does it play in the process of communication?
11. Explain the need and the importance of communication.
12. What is meant by Non-verbal communication? Write a detail note on any two forms of Non-verbal communication.
13. Discuss the importance of channel and medium in the process of communication
14. Discuss communication as two way process.
15. Oral communication and written communication. Distinguish.
16. Explain advantages and disadvantages of face-to-face communication.
17. How can oral and written communication be made effective?
18. Explain the importance of various media and modes of communication
19. Consensus as a type of communication. Illustrate
20. Explain the various means of overcoming organizational communication barriers.
21. Explain Halo effect and Horn effect as communication barriers.
22. Enumerate the barriers to communication that exist in classroom situation. Find out how they can be overcome?

23. Discuss 'The medium is the message'.
24. Discuss 'Action speaks louder than words'.
25. Discuss 'Listening requires more efforts than hearing'.
26. Discuss 'No feedback is feedback itself'.
27. Merits and demerits of Oral communication.
28. Discuss 'Information as an objective of communication'.
29. Communication for motivation. Discuss.
30. Write a short note on 'Raising moral as an objective of communication'.
31. Explain communication as a tool for motivating employees.
32. Explain Communication by charts maps and graphs.

## **SECTION II**

**Answer the following Questions: (Any One)**

**10 Marks**

1. What is the derivation of the word communication?
2. Who is the sender?
3. What is tactile communication?
4. What is downward communication?
5. What factors contribute in making diagonal communication effective in an organization?
6. What are the advantages and disadvantages of diagonal communication
7. What are the advantages and disadvantages of written and oral communication?
8. What do you mean by internal and external communication?
9. What is meant by terms Channels of communication and Lines of communication?
10. What is Body Language? How can it be interpreted?
11. What is meant by communication? Discuss the process of communication in details. Clarity as principle of correspondence - write short note
12. Letterhead of a multinational company with illustration - write short note
13. Semi block form of letter writing - write short note
14. Conciseness as a principle of correspondence - write short note
15. Draft an enquiry quotation letter to the purchase manager of Vitronics Electronics Ltd, new link road, Andheri, Mumbai 400 052 about the items needed to open up a new Communication Centre.
16. Prepare a reply to the above enquiry letter for the above items. Invent the necessary details.

17. Write an order letter as a reply to the above mentioned quotation letter furnishing the same requirements.
18. Draft a letter to the educational institutions promoting the sale of computers to their computer laboratory.
19. You are the store manager of a medical hospital and you have received 15 first aid kits in a damaged condition. Write a complaint letter to the distributor and demand an alternative replacement at his cost.
20. Write a suitable reply to the store manager, either agreeing to the replacement or refusing it or suggesting a different alternative
21. Jupiter displays have received an enquiry letter from a college regarding display boards, racks and black boards. Draft the quotation letter to be sent to the principal of the college.
22. You want to renovate your office at Bandra - Kurla complex. Write a letter of enquiry to elegant 12 interior decorators with special mention to the estimated cost of renovation.
23. You are a wholesaler located at Ludhiana. You have received an enquiry regarding woollen garments from a departmental store located at Indore. Draft an attractive and appropriate reply giving details about quality, sizes, type variety and price list in the form of a quotation. Also offer attractive incentives to make sure you get the order.
24. You have received wooden furniture for your new office. However the delivery has been delayed due to which you had to postpone the opening. The furniture is also damaged and scratched at various places. Draft a suitable complaint cum claim letter asking for appropriate compensation.
25. You are publisher located at Bangalore. You have received an enquiry regarding supply of text books from a school located at Chennai. Draft an attractive and appropriate reply giving details. Provide a price-list in the form of quotation. Also offer incentives to make sure you get your order.

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**SECTION I**

**Answer the following Questions: (Any One)**

**15 Marks**

1. Write a brief note on
  - Scarcity
  - Economic system
  - Equilibrium
  - Production Possibilities Curve (PPC)
2. Define micro economics along with its Importance and limitations
3. Describe the concept of Cardinal and Ordinal Utility
4. Write a brief note on scale of preference
5. What are indifference curve? What are the assumptions on which indifference curve analysis of demand is based?
6. Explain why consumer's indifference curves
  - Have Negative slope
  - Do not intersect with each other
  - Are convex to the origin
  - Are parallel to each other
  - Are of straight line with a right angle bent which is convex to the origin
7. What is budget line? What does slope of the budget line measure? Construct a budget line taking a hypothetical example?
8. Explain consumer's equilibrium condition with the help of indifference curve approach. How will a change in consumer's income affect his equilibrium?
9. What is income consumption curve? Draw indifference curve diagrams showing the income consumption curve in case of normal goods and inferior goods.
10. What is price consumption curve? Do PCC take various shapes depending upon cross elasticity of X and Y. Comment
11. Using indifference curve analysis show how price effect of a commodity is decomposed into income effect and substitution effect

12. With the help of indifference curve analysis derive demand curve for a normal commodity. Explain why it slopes downward to the right.
13. What is substitution effect? Explain using a graph
14. What is marginal rate of substitution? From the table depicted below find out the marginal rate of substitution of the consumer

<b>Combination</b>	<b>X</b>	<b>Y</b>	<b>Marginal rate of Substitution</b>
1	2	16	
2	3	11	
3	4	7	
4	5	4	
5	6	2	
6	7	1	

15. What is meant by Revealed Preference Hypothesis? Explain Samuelson's Revealed Preference theory of demand based on it.
16. Write a note on Characteristics demand theory.
17. Define the concept of elasticity of demand and list the different determinants of Elasticity of Demand.
18. Define price elasticity of demand and distinguish its various types.
19. What is price elasticity of demand? Graphically explain its different types
20. Explain the concept of income elasticity of demand and distinguish its various types.

## **SECTION II**

**Answer the following Questions: (Any One)**

**10 Marks**

1. Explain the concept of cross elasticity of demand and why does cross elasticity vary between positive and negative sign.
2. How do you measure point price elasticity of demand at a point on the demand curve.
3. Differentiate between point and arc elasticity of demand.
4. How do you measure elasticity of demand with the help of total outlay method?

5. From the demand schedule given below calculate Price elasticity of demand and total revenue

<b>Price</b>	<b>quantity demanded</b>	<b>Total revenue</b>	<b>price elasticity</b>
10	20		
8	30		
6	35		
4	40		

6. If a consumer's daily income rises from Rs 300 to Rs 350, his purchase of a good X increases from 25 units to 40 units per day. Find income elasticity of demand for X
7. When the price of good X falls from Rs 10 to Rs 9, the demand for good Y increase from Rs 20 Kg to 25 Kg
8. What is the cross elasticity of demand of good Y for good X
9. Are goods X and Y compliments or substitutes
10. If demand is unitary elastic, what action could a manger take to increase total revenue
11. Determine the elasticity of demand, if in response to an increase in price of 10 per cent quantity decrease by 20 percent. Would it be elastic or inelastic?
12. What factors would you normally consider in choosing a forecasting a technique?
13. List the different methods of demand forecasting.
14. Why forecasting methods are important for an organization.
15. Which forecasting methods can be adopted by an organization introducing a new product.
16. Explain the concept of demand forecasting along with its various types.

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**SECTION I**

**Answer the following Questions: (Any One)**

**15 Marks**

1. What do you mean by 'Management'? Explain the characteristics of Management.
2. Describe the functions of management.
3. Describe the 14 principles of management suggested by Fayol.
4. Give a brief outline of the evolution of management thought during the 20<sup>th</sup> century.
5. What is meant by scientific management? Discuss its main principles, merits and limitations.
6. Explain the significance of the behavioural approach to management. What are its main features?
7. Describe the main elements of the human relations approach to management.
8. Explain Fayol's contribution to management thought.
9. Explain the systems approach of management. Discuss with example how does it provides feedback mechanism to continue the whole cycle.
10. Critically evaluable contingency approach to management.
11. What are different approaches to management? Discuss about each of them briefly.
12. What is planning? Give its characteristics.
13. What is the importance of planning?
14. Explain the steps involves in planning process.
15. What is decision-making? Give decision-making process.
16. What are the decision-making techniques?
17. What are the Components / Elements / Types of Planning Plans?
18. Define Decision - Making? Bring out its Meaning & Features?
19. Explain the Importance / Advantages of decision - making in management?
20. What are the modern approaches/techniques of decision-making?
21. Define organizing. Explain the importance of organizing.
22. What do you mean by top level management? Explain its functions.
23. Explain various types of organization in brief.
24. What is meant by line organization? Explain its merits and demerits.
25. Explain the merits and demerits of functional organization.
26. What are Organising / Organisation? Bring out its Nature / Characteristics /Features?

27. Explain the Process / Steps in Organising / Organisation as a process?
28. What are the Purpose / Need / Importance of organising / organisation?
29. What is mean by span of control? What are Importance / Advantages of Span of Control?
30. What are the factors affect to span of control?
31. Discuss the role of Authority, Responsibility and Accountability? What is difference between Authority, Responsibility and Accountability?
32. What is mean by Delegation of Authority? Explain the Role / Significance of Delegation of Authority?
33. Explain the barriers / problems to effective delegation of authority?
34. Define direction. What are its elements?
35. Explain the nature of direction function of management.
36. 'Direction function of management involves dealing with human factor.' Expound this statement.
37. Explain the principles of direction.
38. Explain the nature of the directing function of management. Discuss the elements involved in the directing process.
39. Explain in detail the principles of direction.
40. Define Controlling / Control? Bring out its features / characteristics?
41. What are the steps / elements in the Control Process?
42. What are need/Importance/Advantages of controlling?
43. Briefly explain the various control techniques?

## **SECTION II**

**Answer the following Questions: (Any One)**

**10 Marks**

1. Importance of Planning.
2. Steps in planning process.
3. Decision - Making.
4. Steps in Decision -making process.
5. Techniques of Decision-making
6. Modern techniques of decision-making.
7. Management by Objectives MBO
8. Process of MBO
9. Concept of organizing.

10. Merits of line and staff organization.
11. Committee organization
12. Delegation of Authority
13. Span of control
14. Controlling
15. Importance of Controlling
16. Direction
17. Business ethics
18. Green management
19. CSR (corporate social responsibility)

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**SECTION I**

**Answer the following Questions: (Any One)**

**15 Marks**

1. Explain Applicability of AS-9
2. Define Revenue as per AS-9
3. What is the timing for revenue recognition as per AS-9
4. Explain different methods of revenue recognition for rendering of services
5. What are the uncertainties in revenue recognition
6. Explain disclosure requirement as per AS-9
7. What do you understand by “Branch”? Explain the rules for preparing accounting records of various types of branches.
8. State the objective of branch accounting.
9. Explain the types of Branches? What are the main features of dependent branches?
10. Write a note on Stock and Debtors method in Branch Accounts.
11. Write a note on Debtors method in Branch Accounts.
12. State the difference between dependent and independent branches.
13. How is abnormal and normal loss treated in branch accounting under Stock and Debtors system?
14. Write a short note on the following:

**SECTION II**

**Answer the following Questions: (Any One)**

**10 Marks**

1. Goods in transit
2. Branch Adjustment Account
3. Cash in transit
4. Branch Stock Account
5. Branch profit and loss Account

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**SECTION I**

**Answer the following Questions: (Any One)**

**15 Marks**

1. Write down the equations  $4x - y = 6$  and  $5x - 2y = 9$  in the Matrix form and solve them by Inversion, Matrix and Determinant Methods separately.
2. Solve  $2x + y + z = 2$        $x + y + z = 0$       &  $4x - y - 3z = 20$  by using the matrix Method, inversion Method and the crammer's rule.
3. Two numbers are in the ratio 3:5 and their total sum is 344. Find the numbers.
4. Seema has Rs. 10,000 and she wants to divide it in the ratio 3:2 and give it to her daughters. Find how much amount does each daughter get?
5. Monthly salaries of Mr. Sahani and Mr. Kelkar are in the ratio 9:14 and their monthly expenditures are in the ratio 5:7. Mr. Sahani saves Rs. 2000 per month and Mr. Kelkar saves Rs. 7000 per month. Find their salaries per month.
6. The ages of father and son are in the Ratio 11:5. The ratio of their ages after 15 years will be 7:4. Find their present ages and also their ages after 7 years. Monthly wages of A and B are in the ratio 11:10. They receive an increment of Rs. 1000 each per month and the ratio of their new wages is 45:41. Find their old wages.
7. Monthly salaries of Mr. Patel and Mr. Qasim are in the ratio 7:5 and their savings are Rs. 5000 each. If their monthly expenditures are in the ratio 3:2, find their original salaries.
8. The salaries of Mr. Shah and his wife are in the ratio 14:9 and their monthly expenses are in the ratio 7:5. Mr. Shah saves Rs. 7000 and his wife saves Rs. 2000 per month, find their salaries per month.
9. Find  $x$  if  $x, 4, 26$  and  $52$  are in proportion
10. Find  $y$  if  $5, y, 20, 16$  are in proportion
11. If  $4, 20, x$  are in continued proportion, find  $x$
12. 10 women working 8 hrs. a day can make 16 baskets in 15 days. Find the no. of women working for 6 hrs. a day to make 24 basket in 25 days
13. 30 Boys working 8 hrs. a day earn Rs. 6400 in 20 days. How much 45 boys will earn in 24 days if they work 10 hrs. a day?
14. The Ratio of No. of Rich people and poor people in a society is 3:2, If 20% of the rich people and 30% of the poor are educated, find the percentage of total people (Rich & poor) who are uneducated.
15. The ratio of prices of two beds was 2:3. Two years later, the price of the 1<sup>st</sup> bed increased by 30% and that of the 2<sup>nd</sup> bed by Rs. 90,000, the ratio of new prices of the two beds is 5:7. Find the original prices of the beds.
16. Rani spends 30% of her income on food items and 15% on conveyance. If in a particular month she spent Rs. 1800 on conveyance, find her expenditure on food items during the same month.

17. In a room 60% of the people are females and 40% are males. By admitting 20 females and 30 Males, the ratio of females to males becomes 8:7, what must be the number of females and males originally in the room?
18. In 165 litres of Milk, mixed with water, the ratio of milk to water is 9:2. How much water should be added so that the ratio of milk to water becomes 5:3?
19. An agent earns  $6\frac{1}{2}\%$  commission on his total sales which is Rs. 11,520. Find the amount of his commission.
20. A salesman gets 5% commission on the first Rs. 20,000, 8% on the next Rs. 20,000 and 12% on the excess. He also receives an incentive at the rate of 3% on total sales, if it exceeds 50,000. Find his income if the total sales is worth Rs. 58000.
21. After deducting his commission at 5% on the first Rs. 8000 and at the rate  $3\frac{1}{2}\%$  on the sales over Rs. 8000, an agent remits Rs. 28,058 to his principal. Find the value of the goods sold by the agent.
22. An agent charges 3% commission on cash sales and 5% commission on credit sales. If his over all commission is  $4\frac{1}{4}\%$ , find the ratio of cash sales to the credit sales.
23. An agent was paid Rs. 1596 as commission at a rate 12% on the sale of bicycles. The selling price of each bicycle was Rs. 950. Find the number of bicycles sold by the agent.
24. A shopkeeper pays 10% commission on the total sales and pays del credere at a rate of 4% on credit sales. If cash sales were Rs. 4500 and credit sales were Rs. 7000. Find the total commission earned by the agent.
25. A company fixed the rate of commission to its salesmen as follows; 4% on the first Rs. 8000, 6% on the next Rs. 6000, 9% on the next Rs. 6000, 10% on the balance. The company had agreed to pay  $\frac{1}{4}\%$  bonus over the total sales if the sales crossed Rs. 25000. A salesman of the company secured sales worth Rs. 27,000. Calculate the total earnings of the salesman.
26. A piece of land was sold for Rs. 19,00,000 through a broker who received  $1\frac{1}{4}\%$  commission from the seller and  $1\frac{3}{4}\%$  commission from the buyer. Find the amount paid by the buyer, received by the seller and the broker.
27. A flat is sold for Rs. 4,50,000 through an estate broker who charges  $2\frac{1}{4}\%$  brokerage from the buyer and  $\frac{3}{4}\%$  brokerage from the seller. Find the amount paid by the buyer, received by the seller and the broker.
28. A plot was sold for Rs. 25,00,000 through a broker who charged  $1\frac{1}{2}\%$  commission from the buyer and  $\frac{1}{2}\%$  from the seller. Find the amount paid by the buyer, received by the seller and the broker.
29. A wholesaler allows 20% discount on the list price and a further discount of 5% for cash payment for a cupboard. Find the list price of the cupboard if it was sold for a net amount of Rs. 2090.
30. A bookseller paid Rs. 765 for a parcel of 50 books on which he had been given a discount of 15%. Find the list price of a book?
31. A firm allows 25% trade discount and 5% cash discount. What will be the net price of an article marked at Rs. 1600
32. A shopkeeper sold a T.V. for net amount of Rs. 10,450 after allowing 20% discount on the list price and further discount of 5% for cash payment. Find the list price of the T.V.
33. A firm allows 20% discount on the list price and 5% discount for cash payment. What is the net price of an article which is marked at Rs. 240?

34. Goods are marked 40% above the cost price, 10% trade discount is given and a further 5% discount for cash payment is given. Find the percentage of profit.
35. A bookseller paid Rs. 1530 for a parcel of 100 books on which he had been given a discount of 15%. Find the list price of one book.
36. An agent charges 8% commission plus a 2% del credere. If he sells goods worth Rs. 12,400, find his total earnings.
37. A merchant gives his agent 12% commission plus  $2\frac{3}{4}$  % del credere on a sale of goods worth Rs. 5280. How much does the merchant receive after paying the agent's total commission?
38. A salesman is allowed 10% commission on the Total sales made by him plus a bonus of 1.25% on the sales over Rs. 15000. If his total earnings are Rs. 2175, find the sale value.
39. A furniture dealer deals with a chair for Rs. 7219.20 after allowing 6% trade discount and 4% cash discount. If he loses 4%, find the cost price and the marked price of the chair.
40. A gift article costing Rs. 500, was sold at a profit of 9%, after giving 15% trade discount and a further discount of 5% for cash payment. Find the list price of the article.
41. After deducting the commission at 4% on first Rs. 25,000 and 6% on the balance of sales made, Shami, the agent, gave an amount of Rs. 42,048 to his principal. Find the value of goods sold by him.
42. After deducting his commission at 8% on first Rs. 15,000 and 10% on the excess of sales over Rs. 15,000, an agent remits Rs. 31,800 to his principal. Find the value of goods sold by him.
43. An estate broker, earned a sum of Rs. 64,000 by charging 1.75% commission to the buyer and 2.25% commission to the flat owner. Find the selling price of the flat; the amount received by the flat owner and the amount paid by the buyer.
44. A salesman gets a commission of 6.5% on the total value of sales made by him and an additional bonus of 0.25% on the excess of his sales over Rs. 16,000. Find his total income on a turnover of Rs. 25,000.
45. A merchant gives 7% commission and 1.5% del credere to his agent. If the agent sells goods worth Rs. 20,800, how much does he get? Find the earnings of the merchant.
46. An article is marked at Rs. 450. A trader allows a discount of 3% and gains 20% on the cost. Find the cost price of the article.
47. Riya has two investment options to invest 5,00,000; Scheme I has a discounting factor 0.7 and scheme II has a discounting factor of 0.9. In which scheme Riya should invest Rs. 5,00,000
48. Mr. Chaubey has an amount of Rs. 15,00,000 & wants to invest in company A with a discounting factor of 0.5 or he can invest in company B with a discounting factor of 0.7, please guide him so that he gets better returns. [He should invest in company A to get better Returns]
49. Find the present value at 5% rate of interest of Rs. 7408.80 payable 3 years from now.
50. Find the present worth of Rs. 25,650, at 8% rate of interest, payable 4 years from now.
51. Calculate the present value of Rs. 14,641 at 10% rate of interest, payable 4 years from now.
52. Reema promised to give Seema Rs. 3,66,025 after 4 years. If the rate of interest is 10%, what is its present worth?

53. Suresh will pay Heena Rs. 25,000 after 2 years and he will pay Sheena Rs. 32,000 after 3 years. Find the total present value of both the payments if the interest rate is 8% p.a compounded annually.
54. Amar promised to pay Sameer Rs. 15,000 after 3 years with compound rate of interest 8% p.a. He also promised to pay Rajesh Rs. 20,000 after 4 years with compound rate of interest 9% p.a. Find the present values of these payments. Also find the total present worth of the money Amar has pay.
55. Find the accumulated value after 3 years of an immediate Annuity of Rs. 4000 p.a with interest compounded at 5% p.a
56. Mr. shah invested Rs. 2000 at the end of end year in a finance company that offered him interest compounded at 10% p.a. what is the amount at the end of 4 years?
57. Find the accumulated value after one year of an annuity immediate in which Rs. 20,000 are invested every quarter at 16% p.a compounded quarterly.
58. Mrs. Desai bought a fridge with a cash payment of Rs. 8000 and 4 monthly instalments of Rs. 2500 each. What is the cost of fridge. if he company charges 12% interest, compounded annually?
59. Reema bought a scooty with an initial payment of Rs. 30,000 and six monthly instalments of Rs. 5000 each. If the seller wishes to get 12% compound interest p.a, find the price of the scooty.
60. Seema purchased a car with a down payment of Rs. 1,50,000 and the remaining amount to be paid in 10 equal quarterly instalments. If the company wants to get 12% per annum, find the instalment amount, given that the price of the car is Rs. 9,60,000. [Hint  $c = ? i = \frac{12}{4} \% \text{ (quarterly)} n = 10$ ]
61. Find the present value of an annuity immediate of Rs. 10,000 p.a for 4 years at 9% p.a.  
Formula  $PV = \frac{C}{i} [1 - (1 + i)^{-n}]$
62. Rajesh will be Rs. 5,000 every year for 3 years, at the beginning of each year. Find the Present Value of these payments at 8% p.a.
63. [Formula  $P.V = \frac{c(1+i)}{i} [1 - \frac{1}{(1+i)^n}]$ ]
64. Find the present value of an annuity of Rs. 1,331, paid at the end of each year for 3 years, at 10% p.a.
65. Calculate the present value and also the accumulated value of an annuity Due of Rs. 1,500 per year, payable for 3 years at 10% p.a
66. What is the present value of a series of cash flows of Rs. 50,000 per year, for 4 years with 8% rate of interest compounded annually
67. A loan is repaid fully, with interest in 4 equal yearly instalments of Rs, 20,000 at 7% p.a compounded annually. Find the present value of the loan.
68. Find  $x$  if  $\frac{x}{6!} - \frac{3}{6!} = \frac{4}{8!}$
69. Find  $x$  if  $\frac{1}{4!} - \frac{1}{x!} = \frac{4}{5!}$
70. Find  $n$ , if  $(n+1)! = 42(n-1)!$
71. Find  $r$ , if  ${}^{2n}C_r = {}^{2n}C_{r+2}$  [Hint = use two formulae (i)  ${}^n C_x = {}^n C_y \Rightarrow x = y$  and (ii)  ${}^n C_x = {}^n C_{n-x}$ ]
72. Find  $n$  if  ${}^{18}C_{3n} = {}^{18}C_{2n+3}$
73. Find  $x$  if  ${}^x C_8 = {}^x C_{12}$



74. In a class, there are 30 boys and 70 girls. A class teacher wants to select a class-monitor. In how many ways can this be done if either a boy or a girl is selected as the class monitor? [Hint = use the fundamental principle of addition OR means addition.  ${}^{30}C_1 + {}^{70}C_1$ ]

## SECTION II

**Answer the following Questions: (Any One)**

**10 Marks**

1. There are 4 candidates for an English scholarship, 5 candidates for a History Scholarship and 2 candidates for a Sanskrit Scholarship. In how many ways can any one of these scholarships be awarded? [By the Principle of addition]
2. Given 4 painting colours to the students, how many different borders can be painted, if a border requires use of any 2 paint colours?

{ hint = use fundamental principle  
of multiplication  
And means multiplication }

$${}^4C_1 \times {}^3C_1$$

Or we can also use permutation's formula

i.e  ${}^4P_2 = 12$

3. Find the number of two lettered words, with or without meaning, that can be formed out of the letters of the word TIME, where the repetition of the letters (a) is not allowed (b) is allowed.
4. How many 4 digit numbers can be formed using the digits 3, 6, 7 and 8 without repetitions?
5. How many 3 digit numbers can we make using the digits 2, 3, 4, 5 and 6 without repetition?
6. How many 6 letter words can we form, using the letters in the word LIBERTY with and without repetition?
7. In how many ways can we arrange 5 different books on a shelf?
8. In how many ways can we select a committee of 3 students out of 10 students?
9. How many triangles can you make using 6 non collinear points on a plane?

[ hint = a triangle requires 3 points at a  
time; therefore we need to select  
3 points everytime out of 6 points ]

10. A committee including 3 boys and 4 girls is to be formed from a group of 10 boys & 12 girls. How many different committees can be formed from the group?
11. In a certain country, the car number plate is formed by 4 digits from the digits 1, 2, 3, 4, 5, 6, 7, 8, 9 followed by 3 letters from the English alphabets. How many Number plates can be formed if neither the digits nor the letters are repeated?
12. Out of 7 consonants and 4 vowels, how many words of 3 consonants and 2 vowels can be formed?
13. In a group of 6 boys and 4 girls, 4 children are to be selected. In how many different ways can they be selected such that at least one boy should be there?

[Hint .total ways of selecting 4 children  
minus ways of selecting No boys ]

14. In how many different ways can the letters of the word 'OPITICAL' be arranged so that the vowels always come together?
15. In how many different ways can the letters of the word 'SPEAK' be arranged so that the vowels are always not together.
16. In how many ways can a group of 5 men and 2 women be formed out of a total of 7 men and 3 women?
17. In how many different ways can the letters of the word LEADING be arranged such that the vowels are
  - (i) always together
  - (ii) no two vowels are together
  - (iii) start and end with a vowel and vowels cannot be together
18. In how many different ways can the letters of the word DETAIL be arranged such that the vowels must occupy only the odd positions??
19. In a class there are 27 boys and 14 girls. The teacher wants to select 1 boy and 1 girl to represent the class for a function. In how many ways the teacher make this selection?
20. There are 8 men and 10 women and you need to form a committee of 5 men and 6 women. In how many ways can the committee be formed?
21. How many 3 letter words with or without meaning, can be formed out of the letters of the 'LOGARITHMS' if the repetition of letters is not allowed?
22. A Bag contains 2 white balls, 3 black balls and 4 red balls. In how many ways can 3 balls be
23. In how many different ways can the letters of the word 'JUDGE' be arranged such that the vowels always come together?
24. In how many ways can the letters of the word 'LEADER' be arranged? (without repetition)
25. How many 3-digit numbers can be formed from the digits 2, 3, 4, 5, 6, 7 and 9 which are divisible by 5 and none of the digits are repeated?
26. There are 6 periods in each working day of a School. In how many ways can one organize 5 subjects such that each subject is allowed only one period?
27. 25 Buses are running between two places P and Q. In how many ways can a person go from P to Q and return by a different bus?
28. A box contains 4 red balls, 3 white balls and 2 blue balls. Three balls are drawn at random. Find out the number of ways of selecting the balls of different colour?
29. A question paper has two parts P and Q, each containing 10 questions. If a student needs to choose 8 from part P and 4 from part Q in how many ways can she do that?
30. Find out the number of ways in which 6 rings of different types can be worn in 3 fingers?
31. In how many ways can 5 men draw water from 5 taps if no tap can be used more than once?
32. In how many ways can you rearrange the word JUMBLE such that the rearranged word starts with a vowel?

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**Course Name: Business Environment**

**Subject Code: 145109**

### **SECTION I**

**Answer the following Questions: (Any One)**

**15 Marks**

- What is Business Environment? Explain internal and external environment.
- Explain the steps in setting business objectives and importance of project planning.
- Explain in detail any three types of tourism.
- Discuss in detail about women entrepreneurship and problems/challenges faced by them.

### **SECTION II**

**Answer the following Questions: (Any One)**

**10 Marks**

1. Trading Blocs
2. Feasibility Study
3. Tourist transportation
4. Growth of entrepreneurship

## Semester - II

**Component Course**

**Course Name: C.C. English – Paper II**

**Subject Code: 210201**

### SECTION I

**Answer the following Questions: (Any One)**

**15 Marks**

1. Draft an order letter for stationery items you need for your new office in a prime location of your, city. Give all details regarding the same in response to the quotation you have received from the supplier
2. Draft an order letter for furniture items you need for your new office in a location of your city. Give all details regarding the same in response to the quotation you have received from the supplier.
3. Place an order to Nirali Stores , Bandra ( E), Mumbai for 20 sets of glass and 10 sets of cups and saucers specially packed in the designed gift boxes for the ladies attending Fun Week Program in the next week .Ask them to supply material within two days.
4. Write a letter to Taste Corner, Kalina, Mumbai, placing a trial order for cookies and pastries. Mention that the delivery of items has to be made at Mankhurd, Mumbai. Suggest the time and mode of payment too.
5. You have received an order for the supply of Unique microwave. Write a reply informing them that it is not in the stock for less demand. Ask them to try Sapna Soper Microwave that are more efficient hence more economical.
6. You have dispatched only a few of the double bed sheet sets ordered by the Supreme Stores, Gadchiroli. Write a letter informing that the supply of remaining part of order will be made within 10 days.
7. Place an order to Hitesh Jewelers, Bandra (E), Mumbai for 30 sets of pearl necklace, 35 designer earrings specially packed in the designed gift boxes for the ladies attending Women’s Week Program in the next week. Ask them to supply material within 2 days.

8. Write a letter to Hotspot Shop, Kalina, Mumbai, placing a trial order for biryani veg and nonveg. Mention that the delivery of items has to be made to Mankhurd, Mumbai. Suggest time and mode of payment.
9. You have received an order for the supply of Unique washing machine. Write a reply informing them that it is not in the stock for less demand. Ask them to try New Madic washing machine that is more efficient hence more economical.
10. You have dispatched only a few of the woolen garments ordered by the Supreme Stores, Gadchiroli. Write a letter informing that the supply of remaining part of order will be made within 10 days.
11. Write a letter of complaint to The Nakshatra Stores, Bandra(W), Mumbai for 5mixers and 7 juicers that you received in the damaged condition. Ask them for an exchange.
12. Write a letter to Subhadra Sports,Dadar, Mumbai, for shortage in a consignment of sport material like badminton rackets, cricket balls, footballs and carom boards which you had ordered for your institution. Give full details and ask for an appropriate compensation.
13. Mrs.Vinaya Ahuja bought a Micromax A-240 smartphone from you before six months. He now claims that it is defective and asks a replacement. The inspection shows that it was handled carelessly. Write to him that the replacement is not possible.
14. A customer has complained that he has paid for the first class catering services. But poor quality food and hospitality has been supplied to him. Accept your mistake. Ask for an apology and assure him for the better service in future.
15. Write a letter of complaint to The Speed Kitchen, Bandra(W), Mumbai for 40mixers and 20 juicers that you received in the damaged condition. Ask them for an exchange.
16. Write a letter to New Sports,Dadar, Mumbai, for shortage in a consignment of sport material like badminton rackets, cricket balls, footballs and carom boards which you had ordered for your institution. Give full details and ask for an appropriate compensation.
17. Mr. Ritesh Gholap bought a digital camera from you before six months. He now claims that it is defective and asks a replacement. The inspection shows that it was handled carelessly. Write to him that the replacement is not possible.
18. A customer has complained that he has paid for the first class furniture. But second class and inferior quality furniture has been supplied to him. Accept the mistake. Ask for an apology and assure him for the replacement.

## SECTION II

**Answer the following Questions: (Any One)**

**10 Marks**

1. My daily routine

Activities in the; morning ----- in college----afternoon----- evening -----night

2. My plan for a one day winter picnic

Day----date-----time----Matheran-----with family-----by bus-----reach----- games----- shopping-----return (time).

3. How I enjoyed summer vacation

Native place in Goa-----20 days ----- all cousins----- open ground----- swam in river----- stories by grandmother----- delicious food-----fresh fruits----- memorable stay.

4. Plan to visit to Jahangir Art Galary

Day-----date-----time----- by train and rickshaw----- at Jahangir Art Galary ----- various items-----museum ----- return.

5. My first day at college

New college ----- no friends-----tensed and exited----- new teachers----- become friend with two girls-----orientation programme in auditorium-----went to canteen----- food-----enjoyed the day.

6. A park I visited

Name of the park---- place----- distance ---- big park---- many trees---- different flowers--- spacious area to play---- ice-cream parlour---- bhel chat center--- restaurants----always crowded.

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**SECTION I**

**Answer the following Questions: (Any One)**

**15 Marks**

1. What does production function mean? What are the differences between short run and long run production function?
2. Explain the law of returns to scale using a graph and figure.
3. State and explain the law of variable proportions.
4. Explain the internal and external economies of scale. Give examples.
5. Discuss why the short run average cost curve is U shaped.
6. Explain short run cost curves, using a graph.
7. Derive the long-run average cost curves, given the short-run average cost curves.
8. Explain the concepts of total revenue, average and marginal revenue.
9. Distinguish between the average Revenue, marginal revenue and total revenue under perfect competition and imperfect competition.
10. Describe breakeven point. How it is determined with a help of a chart and algebraically.
11. State in brief alternative objectives of a business firm.
12. Explain the features of perfect competition.
13. State and explain the conditions under which a perfectly competitive firm will be in equilibrium in the short run period.
14. Explain the conditions of equilibrium of a firm in the long run under perfect competition.
15. What is monopoly? Explain the important features of monopoly.
16. Explain price and output determination or equilibrium under monopoly.
17. Describe long run equilibrium under monopoly.
18. Discuss the conditions under which Price discrimination is possible.
19. Explain the point of equilibrium of a monopoly firm using dumping.
20. What are the characteristics of monopolistic competition?
21. Discuss the short-run equilibrium conditions of a firm under monopolistic competition.
22. Explain how a monopolistic competitive firm can earn economic profit in the long run.
23. Explain the characteristics of Oligopoly.
24. Illustrate how an Oligopolistic firm achieves Equilibrium with Kinked Demand Curve.

25. Why Prices are Rigid under Oligopoly?
26. Discuss the criticism levelled against kinked demand curve hypothesis.
27. What are the objectives of price policy?
28. Explain the different methods adopted by firm to sets prices for its product.

## **SECTION II**

**Answer the following Questions: (Any One)**

**10 Marks**

1. Private and social cost
2. Accounting cost and Economic cost
3. Explicit cost and Implicit cost
4. Opportunity cost
5. Fixed and Variable factors
6. Private and social cost
7. Learning Curve
8. Producer Surplus
9. Firm
10. Industry
11. Group
12. Equilibrium
13. Discriminating Monopoly
14. Types of Price Discrimination
15. Degree of Price discrimination

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**SECTION I**

**Answer the following Questions: (Any One)**

**15 Marks**

1. Define HRM and explain its nature.
2. What is HRM? Discuss its scope.
3. Explain the importance of HRM.
4. Explain the functions of HRM.
5. What is human resource planning? Discuss its importance.
6. Explain steps in HRP process
7. What is recruitment? Explain its sources.
8. Briefly describe selection procedure of employees
9. What do you understand by job analysis? What is its importance in the management of human resources?
10. What is job analysis? What steps are involved in the preparation of job analysis?
11. What is job description? How is it prepared?
12. Define job specification? How is it different from job description?
13. Distinguish between:
  1. Job description and job specification
  2. Job enlargement and job enrichment
14. "Job analysis is the most basic personnel management function." Discuss.
15. Clearly define and discuss the relationship among job analysis, job description and job specification.
16. Define performance appraisal? What is importance/significance of performance appraisal?
17. Explain the methods of performance appraisal?
18. Explain the components of salary?
19. Define wages/salaries
20. What are the factors affecting to decide wages/salaries?

## SECTION II

**Answer the following Questions: (Any One)**

**10 Marks**

1. What is Induction? Explain its Importance.
2. What is Placement? Explain its benefits
3. What is Quality Circle?
4. Write notes on:
5. Job Rotation Job
6. Simplification
7. What are the traditional methods of performance appraisal?
8. Discuss the modern methods of performance appraisal?
9. State the limitations of performance appraisal.
10. Define training and Development.
11. Explain the methods of training managers.
12. What are the methods of training and development?
13. What is the importance of training and development?
14. What are the types of wages/salaries?
15. What is Human Resource Information system?
16. What is VRS?
17. What is organizational downsizing?
18. What is employee empowerment?
19. What is workforce diversity?

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**SECTION I**

**Answer the following Questions: (Any One)**

**15 Marks**

1. Define Single Entry. What are the features of Single Entry?
2. What are the defects or limitations of Single Entry?
3. Distinguish between Single Entry and Double Entry System.
4. Distinguish between Statement of Affairs and Balance Sheet.
5. What are the steps to convert Single Entry records into Double Entry system?
6. Distinguish between a sales and consignment.
7. If a consignment remains partly unsold (closing stock or unsold stock) at the time of balancing the books, how do you deal with it?
8. Describe how the consignment account is maintained in the books of
  - (a) consignor
  - (b) The consignee.

**SECTION II**

**Answer the following Questions: (Any One)**

**10 Marks**

1. What is "consignment of goods"? Is it the same as "goods on sale or return"?
2. Del Credere Commission
3. Treatment of normal and Abnormal Losses in Consignment Account
4. Valuation of Unsold Stock in Consignment
5. Define Single Entry. What are the features of Single Entry ?
6. What are the defects or limitations of Single Entry?
7. Distinguish between Single Entry and Double Entry System.
8. Distinguish between Statement of Affairs and Balance Sheet.
9. What are the steps to convert Single Entry records into Double Entry system?

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**SECTION I**

**Answer the following Questions: (Any Three)**

**15 Marks**

1. The Mean height of 25 male workers in a factory is 61 inches and the mean height of 35 female workers is 58 inches, find the combined mean height of 60 workers in the factory.
2. A student scores 24 in test I, 46 in test II, 23 in test III and 47 in test IV. And their weights are 2, 1, 2 and 1 respectively. Find the Weighted Average.
3. The mean wage of 200 workers working in a factory in three shifts is Rs. 520. The mean wages of 90 workers working in the 1<sup>st</sup> shift is Rs. 500. The Mean wages of 60 workers working in the 2<sup>nd</sup> shift is RS.450. what is the mean wages of workers working in the 3<sup>rd</sup> shift?
4. There are 3 groups in a class of 100 students. The first contains 25 students with an average pocket money of Rs. 62, the 2<sup>nd</sup> group consists of 50 students with an average of Rs. 55. Find the average pocket money of the students from the 3<sup>rd</sup> group, if the average pocket money for the entire class is Rs. 58.
5. Average monthly production of a factory in the first eight months is Rs. 2350 units. The monthly average production for the whole year is Rs. 2300 units, find the monthly average production for the remaining months of a year?
6. A students 'A' scored 50, 55, 60 & 45 in four subjects. Another students 'B' scored 53, 50, 47 & 59 in the same subjects. If the weights are 2, 4, 3 and 1 respectively for these subjects; decide who is a better students?
7. There are men, women and children working in a factory. The total no. of workers is 500 and their average daily wages are Rs. 82. The average daily wages of 250 male workers are Rs. 100. The average daily wages of 150 women in that factory are Rs. 80. What is the average daily wages of the children working in that factory?
8. If the average marks of boys & girls in a certain test in a class are 80 and 85 respectively and if the average marks for the entire class are 83.75. Find the percentage of boys in the class.
9. 5 tenders were obtained for a building contract. The average amount of 5 tenders was Rs. 4,50,25,000. The average amount of 4 tenders was Rs. 4,45,70,000. What is the tender amount for the fifth one?

10. The mean marks of 100 boys in a class are 45. The mean marks of the entire class of 150 students are 50. Find the mean marks of the remaining group of girls.
11. The average monthly salary of a group of 20 workers in a small factory is Rs. 2020. There are 5 skilled workers, 8 semiskilled and the remaining are unskilled workers. The average salary of skilled workers is Rs. 2500 & that of the semi – skilled workers is Rs. 2000. What is the average salary of the unskilled workers in that factory?
12. The mean weight of 50 students in a class was 53 kgs. Two new students with weights 54 kgs and 51 kgs were admitted to this class. Find the average weight of 52 students.
13. The mean of a certain number of observations is 40. If two more items with the values 50 and 64 are added to the data, the mean rises to 42. Find the no. of items in the original data.
14. The mean salary of 100 employees in a company was calculated to be Rs. 15000 per month. Later it was found that the mean salary of Mr. X was wrongly taken as Rs. 10,000 instead of Rs. 20,000. Find the correct mean salary?
15. The mean wages in a factory are 600. It was later found that one of the wages was wrongly taken as 540 instead of 450. Calculate the correct mean wages of 50 employees in the factory.
16. The mean marks of 100 students were found to be 40, later it was discovered that a score of 53 was misread as 83. Find the correct mean.
17. When should the geometric mean be used in preference to other averages?
18. Find the geometric mean of the numbers 17, 10, 28, 35 and 3
19. The increase in the sales for five years each compared to the previous year are given below. Calculate the average percentage of increase when the increase % = 7, 8, 10, 12, 18.
20. A man gets a raise of 10% in salary at the end of his first year of service and further raise of 20% and 25% at the end of second and the third year respectively, the raise in each year being calculated on his salary at the beginning of the year. To what average annual percentage increase is this equivalent?
21. In a group of 25 students, 8 students fail, 5 students get more than 70 marks, and the marks of the remaining 12 students are 62, 37, 45, 60, 53, 57, 42, 38, 40, 39, 42, & 65. Find the median marks of the whole group.  
(Hint: Failing 8 students 37, 38, 39, 40, 42, 42, 45, 53, 57, 60, 62, 65, 5 students above 70 marks

$$\text{Median} = \frac{[n+1]\text{th}}{2} \text{ item} = \frac{[25 + 1]\text{th}}{2} = 13^{\text{th}} \text{ item} = 42.)$$

22. The median marks of 100 students in stats are 58. It was later found the marks of a student were wrongly considered as 64 instead of 46 what would be the correct median?
23. In a batch of 25 students, 10 students failed in attest, by obtaining less than 35 marks. Those who passed the test got 40, 45, 57, 60, 49, 52, 42, 75, 72, 80, 87, 55, 58, 65 and 60 marks. What is the median of the marks given above?
24. In a group of 25 people, the median height is 178 cms. and the heights of the tallest and shortest person in the group are 187 cms. and 164 cms. Respectively. To this group 4 people are added with heights 160, 162, 188, 190 cms. Find the median height.
- What are the Merits and Demerits of Range?
  - What is Dispersion?
25. Following are the sales (in ₹) of departmental store for six days of a week.  
7500, 10900, 15000, 9000, 13080, 12800.  
Calculate the range and its coefficient.
26. Calculate the range of the following data regarding the price [in Rs.] of a particular share for 10 days.  
175, 177, 190, 173, 185, 180, 182, 195, 185, 190
27. The highest value in a group of observations is 38.5. The coefficient of range is 0.1. Find the lowest value in the group.
28. The students of two groups A and B obtained following marks in a test of Mathematics.  
Find which group gave more consistent performance, based on coefficient of range  
**Marks of Group A:** 35, 47, 42, 45, 40, 39, 38, 46, 41, 43  
**Marks of Group B:** 35, 70, 55, 65, 60, 42, 73, 80, 53, 57
29. The difference between the highest and the lowest value in a group of observations is 15; the coefficient of range is 0.2. Find the highest and lowest values in the group.
30. For a distribution, mean = 100, mode = 80 and S.D = 20, find Pearsonian Coefficient of Skewness.
31. For a given data as  $Q_1 = 25$ ,  $Q_2 = 35$  and  $Q_3 = 50$ . Find Bowley's Coefficient of Skewness.
32. For a distribution  $Q_3 - Q_2 = 40$ ,  $Q_2 - Q_1 = 60$ . Find Bowley's Coefficient of Skewness and interpret the result.
33. In a Certain distribution the following results were obtained  
 $\bar{x} = 45$ , Median = 48  
Coeff. of  $s_k = -0.4$
34. The person who gave you the data, failed to give the value of S.D, so calculate S.D from the above data.
35. In a frequency distribution, the Coeff. of skewness based on quartiles is 0.6. If the Sum of the upper and lower quartiles is 100 and the median is 38, find the value of the upper quartile.
36. Given  $Q_1 = 18$ ,  $Q_3 = 25$ , Mode = 21, Mean = 18, find the Coeff. of Skewness  
[Hint = use mode = 3 median -  $2\bar{x}$ , to calculate Median]

## SECTION II

**Answer the following Questions: (Any Two)**

**10 Marks**

1. The pocket money allowance of 50 students is given below. Find the arithmetic mean of the allowance

<b>Allowance in (Rs.)</b>	800	900	1000	1100	1200	1300	1400
<b>No. of Students</b>	5	7	9	11	9	5	4

2. Calculate the arithmetic mean for the following distribution

<b>Marks</b>	0 – 10	10 – 20	20 – 30	30 – 40	40 – 50
<b>No. of Students</b>	6	11	15	8	3

3. Find A.M.

<b>C.I.</b>	800 – 900	900 – 1000	1000 – 1100	1100 – 1200	1200 – 1300	1300 – 1400	1400 – 1500
<b>F</b>	8	15	18	19	18	15	7

4. Calculate the Arithmetic Mean for the following data giving daily wages of workers.

<b>Daily wages in Rs.</b>	20 – 40	40 – 60	60 – 80	80 – 100	100 – 120	120 – 140
<b>No. of workers</b>	7	12	16	13	13	4

1. From the following data, Compute Arithmetic Mean.

<b>Marks</b>	0 – 10	10 – 20	20 – 30	30 – 40	40 – 50	50 – 60
<b>No. of students</b>	5	10	25	30	20	10

2. Lives of two models of refrigerators in a survey was found to be the following

<b>Life No. of years</b>	<b>No. of Refrigerators</b>	
	<b>Model A</b>	<b>Model B</b>
0 – 2	05	2
2 – 4	16	7
4 – 6	13	12
6 – 8	7	19
8 – 10	5	9
10 – 12	4	1

3. If Average wages of workers are 732.50, find the number of workers with wages between Rs. 800 and Rs. 1000.

<b>Daily wages in (Rs.)</b>	200 – 400	400 – 600	600 – 800	800 – 1000	1000 – 1200	1200 – 1400
<b>No. of workers</b>	10	18	22	-	11	5

4. Find the missing frequency if the mean marks are 26.75

<b>Marks</b>	0 – 10	10 -20	20 – 30	30 – 40	40 -50
<b>No. of students</b>	3	-	15	10	5

5. If the mean for the following data is Rs. 56. Find the missing frequency.

<b>Daily wages (Rs.)</b>	300 – 400	400 – 500	500 – 600	600 – 700	700 – 800	800 – 900
<b>No. of persons</b>	10	20	40	-	8	6

6. Calculate the median weight from the following data:

Weight in kgs.	50	55	60	65	70
No. of Men	30	40	65	50	15

7. Calculate median for the following data:

11, 15, 16, 9, 12, 18, 10, 11, 13, 16, 8, 19, 20, & 8

8. Following is the Income distribution of the residents of a certain colony in a town

<b>Income in RS.</b>	<b>No. of individuals</b>
0 – 5000	50
5000 – 10000	80
10000 – 15000	40
15000 – 20000	25
20000 – 25000	25
25000 – 30000	15
30000 – 35000	10
35000 - 40000	5

9. If the Median of the following distribution is 120, find the missing frequency

<b>C.I</b>	0 – 50	50 – 100	100 – 150	150 – 200	200 – 250
<b>F</b>	7	-	15	13	3

10. Find three Quartiles for the following data

<b>Daily wages (in Rs)</b>	10–15	15–20	20-25	25-30	30-35	35 -40	40-45	45 -50	50 -55
<b>No. of workers</b>	12	28	36	50	25	18	16	10	5

15. Locate the quartiles graphically from the following data with the help of cumulative frequency curve “less than” type.

<b>Age (less than)</b>	10	20	30	40	50	60	70	80
<b>No. of persons</b>	15	28	53	75	100	110	115	120

16. Draw a “cumulative frequency curve” “greater than” type for the following data.



Hence locate  $Q_1$  and  $Q_3$ . Also find the no. of workers with daily wages (i) between Rs. 170 and Rs. 260. (ii) less than Rs. 260.

Daily wages (in Rs)	0-50	50-100	100-150	150-200	200-250	250-300	300-350	350-400	400-450
No. of workers	100	88	60	24	14	9	11	5	5

17. The following data represents the daily wages in Rs. Of a group of workers. If the median is 144, find the missing frequency.

Daily wages (in Rs)	0-75	75-90	90-105	105-120	120-135	135-150
No. of workers	3	3	6	5	-	6

18. If the median marks for a group of students are 27, find the no. of students getting marks.

Marks	0-10	10-20	20-30	30-40	40-50
No. of workers	5	5	10	-	3

19. If the median is 43.25, find the missing frequency.

C.I.	0-19	19-29	29-39	39-49	49-59	59-69	69-79
f	2	5	10	8	-	5	3

20. If the median for the following distribution is 262.50, find the missing frequency.

C.I.	0-175	175-225	225-275	275-325	325-375	375-425	425-475	475-525	525-575
f	2	12	1	-	3	4	6	1	1

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**Course Name: Environmental Studies**

**Subject Code: 245209**

**SECTION I**

**Answer the following Questions: (Any One)**

**15 Marks**

1. Explain population growth. What are the factors affecting density of population and Population explosion?
2. Who are the producer, consumer and decomposer of ecosystem? Write in detail about food chain, food web and ecological pyramids.
3. Explain in detail water resources.
4. What is Noise pollution? Explain in detail about its causes, effects and measures.

**SECTION II**

**Answer the following Questions: (Any One)**

**10 Marks**

1. Family welfare program.
2. Energy resources.
3. Grassland ecosystem.
4. Soil pollution.

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