



Department of Statistics

Question Bank 2021-22

Sem-I

Course/paper-I : Descriptive Statistics

Unit-I

SAQ:

1. Define Central and Raw moments
2. Write the uses of moments
3. Explain the types of skewness
4. Explain about Kurtosis

Essay Questions:

5. Define Central and Non-central Moments. Derive the relation between them
6. If first four raw moments are 5, 35, 70 and 180 respectively, find first four central moments.
7. Explain various methods of measuring Skewness and Kurtosis
8. Show that i) $\beta_2 \geq 1$ ii) $\beta_2 \geq \beta_1 + 1$

Unit-II

SAQ:

9. Explain about principle of least squares
10. Explain fitting of a straight line
11. Write the normal equations to fit a power curve

Essay Questions:

12. Explain fitting of second degree parabola by the method of least squares
13. Explain fitting of exponential curves
14. Fit a straight line to the following data

X	0	1	2	3	4	5
Y	1.3	2.4	3.6	5.2	6.4	8.2

Unit-III

SAQ:

15. Define Correlation. Explain its types
16. Define Karl Pearson's coefficient of correlation
17. Show that 'r' lies between -1 and +1
18. Explain Rank correlation

Essay Questions:

19. Show that Karl Pearson's coefficient of correlation is independent of change of origin and scale
20. Derive the formula for rank correlation coefficient in case of untied ranks
21. Derive the formula for rank correlation coefficient in case of tied ranks
22. Explain multiple and partial correlation
23. Calculate Pearson's correlation coefficient to the following data

X	5	10	15	20	25	30	35	40
Y	2	5	10	8	14	18	26	20

Unit-IV

SAQ:

24. Define Regression coefficients.
25. Write the differences between correlation and regression
26. Show that 'r' is GM of two regression coefficients
27. Define Regression

Essay Questions:

28. Derive the regression lines of X on Y and Y on X
29. Define Regression coefficients. State their properties and prove at least two of them
30. Distinguish Correlation and Regression

Unit-V

SAQ:

31. Explain the independence of attributes
32. Explain the association of attributes
33. Explain about r x s contingency table
34. Explain consistency of data

Essay Questions:

35. What is consistency of data? Write the conditions for consistency in case of 3 attributes
36. Define Yule's coefficient of association and colligation. Show that $Q = 2Y/(1+Y^2)$
37. Explain various methods of measuring association.
38. S.T $(A_1A_2...A_n) \geq (A_1)+(A_2)+....+(A_n) - (n-1)N$

Question Bank 2021-22

Sem-II

Course/paper-II: Probability Theory & Distributions

Unit-I

SAQ:

1. Define: a) Sample Space b) Exclusive events
2. Define: a) Mathematical Definition of Probability b) Statistical Definition
3. Explain axioms of Probability
4. State and prove addition theorem of probability for 2 events
5. Define: a) Conditional Event b) Conditional Probability
6. State and prove multiplication theorem of probability for 2 events
7. Let $P(A) = 0.4$, $P(B) = 0.5$, find $P(A \cup B)$ if A and B are i) Exclusive ii) Independent

Essay Questions:

8. Define: a) Exhaustive events b) Exclusive events c) Independent events d) Equally Likely Events
9. State and prove addition theorem of probability for n events
10. State and prove Boole's Inequalities
11. State and Prove Bayes' theorem
12. Box 1 contains 5 Red and 5 White balls and Box 2 contains 6 Red and 4 White balls. If a box is selected at random and a ball is drawn from it, i) find probability that it is a Red ii) if it is found to be Red, what is the probability that it is from Box 1?

Unit-II

SAQ:

13. Define Probability Mass and Density functions
14. Define Distribution function and state its properties for discrete r.v
15. Explain joint and marginal functions
16. If $f(x) = kx(1-x)$, $0 < x < 1$, find the value of k

Essay Questions:

17. The probability distribution of a discrete r.v X is given below.
Find i) k ii) Mean iii) Variance

X	-3	-1	0	1	2
P(x)	k	2k	3k	k	k

18. Explain (i) joint, marginal, conditional distribution and also explain independence of random variables
19. The pdf of X is given by $f(x) = e^{-x}$, $x > 0$. Find β_1 and β_2
20. Joint distribution of X and Y are by $f(X,Y) = 4XY \exp[-(X^2 + Y^2)]$; $X > 0$; $Y > 0$, test whether X and Y are Independent also find the condition density of X given $Y=y$.

Unit-III

SAQ:

21. Define Expectation of a r.v. State its properties
22. Define MGF. Write its properties
23. Define CF. Write its properties
24. Define PGF. State its properties
25. State and prove Cauchy-Schwartz inequality

Essay Questions:

26. State and prove additive property of expectations
27. State and prove multiplicative property of expectations
28. State and Prove Chebyshev's inequality
29. Derive the relation b/w moments and cumulants

Unit-IV

SAQ:

30. Derive MGF of Binomial distribution
31. Derive Mode of Poisson distribution
32. Derive MGF of Geometric distribution
33. Derive variance of geometric distribution
34. Derive MGF of Negative binomial distribution

Essay Questions:

35. Define binomial distribution. Derive its mean and variance
36. Derive the recurrence relation for the central moments of binomial distribution
37. Show that Poisson distribution is a limiting form of binomial distribution
38. State and prove memoryless property of geometric distribution
39. Define Hyper geometric distribution. Find its mean and variance

Unit-V

SAQ:

40. Derive MGF of rectangular distribution
41. Define single and two parameter gamma distribution
42. Derive MGF of one parameter gamma distribution
43. Write the importance of normal distribution
44. Derive mean and variance of exponential distribution

Essay Questions:

45. Define rectangular distribution over $(0, 1)$. Find first four central moments
46. State and prove memoryless property of exponential distribution
47. Define Beta distribution of first kind. Find mean and variance
48. Define Beta distribution of second kind. Find mean and variance.
49. For normal distribution, ST mean=median=mode

50. ST QD:MD:SD is 10:12:15, for normal distribution
51. Explain chief characteristics of normal distribution

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Sem-III

Course/paper-III: Statistical Inference

Unit-I

SAQ:

1. Define the terms: a) Parameter b) Sample c) Statistic
2. Define: a) Sampling distribution b) Standard error
3. Write the properties of t-distribution
4. Explain about degrees of freedom

Essay Questions:

5. Define: a) Population b) Sample c) Statistic d) Sampling distribution e) Standard Error
6. Define Chi-square distribution. Write its properties and applications
7. Define t- distribution. Write its properties and applications
8. Derive the pdf of F- distribution

Unit-II

SAQ:

9. Explain: a) unbiasedness b) Consistency
10. State Neyman factorization theorem
11. Explain method of moments
12. Explain the concept of interval estimation

Essay Questions:

13. Explain the criteria of a good estimator
14. Explain the method of Maximum Likelihood Estimation. State its properties
15. Find the sufficient statistic for the parameter of Poisson population
16. Find the MLE for the parameters of Normal population
17. Show that sample variance is not an unbiased estimator of population variance. Hence find the unbiased estimator

Unit-III

SAQ:

18. Define: a) Null Hypothesis b) Alternative Hypothesis
19. Define: a) Critical region b) Level of Significance
20. Define type-I and type-II errors

Essay Questions:

21. Explain type-I and Type-II errors and also power of test
22. Explain one-tailed and two-tailed tests
23. State and Prove Neyman-Pearson Lemma
24. Using N-P lemma, Obtain the best critical region to test $H_0: \mu = \mu_0$, against $H_1: \mu = \mu_1$, in case of normal population

Unit-IV

SAQ:

25. Explain large sample test procedure
26. Explain large sample test procedure for testing single mean
27. Explain large sample test procedure for testing single proportion
28. Explain paired t-test
29. Explain the chi-square test for goodness of fit

Essay Questions:

30. Explain the large sample test procedure for testing difference of two means
31. Explain the large sample test procedure for testing difference of two proportions
32. Explain the large sample test procedure for testing difference of two S.D's
33. Explain t-test for equality of two means
34. Explain small sample test procedure for equality of two variances
35. Explain chi-square test for independence of attributes

Unit-V

SAQ:

36. Explain run test for randomness
37. Explain signed rank test for single sample
38. Explain sign test

Essay Questions:

39. What are non-parametric methods? Write the advances and disadvantages over parametric methods
40. Explain Wald-Wolfowitz run test for equality of two populations
41. Explain Wilcoxon-Mann-Whitney U-test
42. Explain Median test.

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Sem-IV

Course/paper-IV: Sampling Techniques & Design of Experiments

Unit-I

SAQ:

1. Define Simple Random Sampling
2. Explain the methods of selecting simple random sample
3. Write merits and demerits of simple random sampling
4. In SRSWOR, ST sample mean is an unbiased estimate of population mean

Essay Questions:

5. Explain SRSWR and SRSWOR.
6. Derive the formula of variance of sample mean in SRSWOR.
7. Show that $E(s^2) = S^2$

Unit-II

SAQ:

8. Explain stratified random sampling.
9. Explain systematic sampling.
10. Write a short note on cost function.
11. Write the advantages of stratified random sampling

Essay Questions:

12. Explain stratified random sampling with proportional and optimum allocation
13. Show that $V(\underline{y}_{opt}) \leq V(\underline{y}_{prop}) \leq V(\underline{y}_{srswor})$
14. ST for fixed sample size the $V(\underline{y}_{st})$ is minimum if $n_i \propto N_i S_i$
15. Define Systematic sampling. Write its merits and demerits

Unit-III

SAQ:

16. Explain ANOVA and its basic assumptions
17. Write advantages and disadvantages of CRD
18. Explain the concept of Gauss-Markoff linear model
19. Explain Cochran's theorem

Essay Questions:

20. Explain the ANOVA of One-way classification
21. Explain the ANOVA of two-way classification
22. Explain the principles of experimental designs
23. Explain the statistical analysis of CRD

Unit-IV

SAQ:

24. Write advantages and disadvantages of RBD
25. Explain the missing plot technique in RBD
26. Explain the missing plot technique in LSD
27. Derive the efficiency of RBD over CRD

Essay Questions:

28. Give a layout of RBD. Write its statistical analysis
29. Give a layout of LSD. Write its statistical analysis
30. Derive the efficiency of LSD over RBD.

Unit-V

SAQ:

31. Write the interaction effects in 2^2 experimental design
32. Write the interaction effects in 2^3 experimental design
33. Explain the Yates procedure

Essay Questions:

34. Explain the statistical analysis of 2^2 experimental design
35. Explain the statistical analysis of 2^3 experimental design

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Sem-IV

Course/paper-V: Applied Statistics

Unit-I

SAQ:

1. Define Time series. Write its uses.
2. Explain the mathematical models in time series.
3. Explain irregular variations in Time series
4. Explain the method of semi-averages to measure trend

Essay Questions:

5. Explain the components of time series.
6. Explain trend in time series and explain method of moving averages to measure trend.
7. Explain the method of least squares to measure trend

Unit-II

SAQ:

8. Explain the method of simple averages.
9. Explain the method of link relatives.
10. Explain Deseasonalisation.

Essay Questions:

11. Explain the method of ratio to moving averages to measure seasonal variations.
12. Explain the method of ratio to trend to measure seasonal variations.
13. Explain the method of link relatives

Unit-III

SAQ:

14. Write a short note on Growth curves
15. Explain detrending

Essay Questions:

16. Explain the methods of fitting modified exponential curve.
17. Explain the method of three selected points to fit Gompertz' curve
18. Explain the methods of three selected points to fit logistic curve

Unit-IV

SAQ:

19. Write the uses of index numbers

20. Explain the methods of constructing CLI
21. Write a short note on whole sale index numbers
22. Explain weighted index numbers

Essay Questions:

23. Explain the problems involved in construction of index numbers
24. Explain the criteria of a good index numbers
25. Explain TRT and FRT with examples
26. Explain Cost of Living index numbers.

Unit-V

SAQ:

27. Write the uses of vital statistics
28. Define Vital statistics and explain its sources
29. Explain the growth rates
30. Write the uses of life tables

Essay Questions:

31. Explain the various measures of fertility
32. Explain the various measures of mortality with merits and demerits
33. Explain the complete life table

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Sem-V

Paper-V: Sampling Techniques and Design of Experiments

Unit-I

SAQ:

1. Write the advantages of sampling over census
2. Explain sampling errors
3. Write the limitations of sampling
4. Explain briefly about non-random sampling

Essay Questions:

5. Explain the principal steps involving in large scale sample survey.
6. Explain sampling and non-sampling errors
7. Explain various types of sampling

Unit-II

SAQ:

8. Define simple random sampling. Write its merits
9. In SRSWOR, show that sample mean is an unbiased estimator of population mean
10. Explain the methods of selection simple random sample
11. Write disadvantages of simple random sampling

Essay Questions:

12. In SRSWOR, show that sample mean square is an unbiased estimator of population mean square
13. In SRSWOR, Prove that the variance of sample mean is, $\text{Var}(\bar{y}_n) = \frac{N-n}{Nn} S^2$
14. Explain Simple Random Sampling with and without replacements
15. Distinguish SRSWOR and SRSWR

Unit-III

SAQ:

16. Define Stratified Random Sampling
17. Write the advantages of stratified random sampling
18. Define systematic sampling with $N=nk$

Essay Questions:

19. Explain Proportional and Optimum allocations.
20. For fixed sample size, show that variance of \bar{y}_{st} is minimum, if $n_i \propto N_i S_i$
21. Prove that $\text{Var}(\bar{y}_{st})_{\text{Opt}} \leq \text{Var}(\bar{y}_{st})_{\text{Prop}} \leq \text{Var}(\bar{y}_n)_R$
22. Explain systematic sampling with $N=nk$ and write its advantages and disadvantages

Unit-IV

SAQ:

23. Explain the concept of ANOVA
24. Write the assumptions of ANOVA
25. State Cochran's theorem
26. Explain the concept of Gauss-Markoff general linear model

Essay Questions:

27. Explain the analysis of one-way classification
28. Explain the ANOVA for two-way classification with one observation per cell.

Unit-V

SAQ:

29. Write the applications of design of experiments
30. Write the advantages and disadvantages of CRD
31. Write the applications of CRD
32. Explain the estimation of one missing observation in RBD
33. Explain the estimation of one missing observation in LSD

Essay Questions:

34. Explain the principles of design of experiments
35. Give a layout of CRD. Explain the statistical analysis of CRD
36. Give a layout of RBD. Explain its statistical analysis
37. Give a layout of 4 x 4 LSD. Explain its statistical analysis.

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Sem-V

Paper-VI: Quality and Reliability

Unit-I

SAQ:

1. Explain the causes of variation
2. Write about 4 M's in SQC
3. Explain about 3σ control limits
4. Distinguish process control and product control

Essay Questions:

5. Explain the importance of SQC in industry.
6. Explain Shewart's control charts and statistical basis.
7. Explain natural tolerance and specification limits.

Unit-II

SAQ:

8. Write the 3σ control limits for range chart
9. Distinguish defective and defect with examples
10. Explain the construction of c-chart
11. Write the applications of c-chart

Essay Questions:

12. Explain the construction and interpretation the control charts for mean and range
13. Explain the construction and interpretation of the control chart for fraction defective (p) for fixed sample size
14. Explain the construction and interpretation of the control chart for fraction defective (p) for variable sample size
15. Explain the construction and interpretation of the control chart for no. of defectives (np) for fixed sample size.
16. Explain construction of c-chart and write its applications.

Unit-III

SAQ:

17. Explain the scope of acceptance sampling
18. Explain AQL and LTPD
19. Define Consumer's Risk
20. Define ATI

Essay Questions:

- 21. Explain i) AQL ii) LTPD iii) AOQL
- 22. Explain Consumer's Risk and Producer's Risk

Unit-IV**SAQ:**

- 23. Describe single sampling plan
- 24. Write the ASN function of single sampling plan
- 25. Write OC function of single sampling plan
- 26. Write the differences between single and double sampling plans.

Essay Questions:

- 27. Explain the procedure of single sampling plan and its OC curve
- 28. Explain the procedure of double sampling plan
- 29. Explain ASN and OC functions of single sampling plan.

Unit-V**SAQ:**

- 30. Define Reliability function
- 31. Explain Hazard function.
- 32. Explain failure rates.
- 33. Explain the estimation of reliability

Essay Questions:

- 34. Explain how the exponential model is treated as a life model
- 35. Explain memoryless property of exponential model
- 36. Explain Bathtub curve in Reliability.

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Sem-VI

Paper-VIIA: Applied Statistics

Unit-I

SAQ:

1. Define Time Series and mention its uses
2. Explain mathematical models of time series
3. Explain Irregular variations
4. Explain the method of moving averages

Essay Questions:

5. Explain the components of time series
6. Explain the method of least squares to measure trend
7. Explain the method of ratio to moving averages to measure the seasonal variations
8. Explain the method of ratio to trend to measure the seasonal variations
9. Explain the method of link relatives to measure the seasonal variations

Unit-II

SAQ:

10. Write the uses of index numbers
11. Define weighted index numbers
12. Define fixed and chain base index numbers
13. Explain base shifting
14. Explain deflating
15. Define cost of living index

Essay Questions:

16. Explain the problems involved in construction of index numbers
17. Explain the criteria of a good index number
18. Show that Fisher's index is an ideal index
19. Explain the construction and methods of CLI.
20. Explain Splicing and Deflating.

Unit-III

SAQ:

21. Define Vital statistics and write its uses
22. Define CDR and ASDR
23. Define CBR and GFR
24. Explain the concept of standardization of death rates

Essay Questions:

25. Explain the sources of Vital statistics
26. Explain the measurement of mortality
27. Explain the standardized death rates with advantages
28. Explain the measurement of fertility with merits and demerits

Unit-IV**SAQ:**

29. Define Pearle's Vital index
30. Explain NRR
31. Define life table and mention its uses
32. Give a brief note on abridged life tables.

Essay Questions:

33. Explain population growth rates
34. Explain GRR and NRR
35. Explain the assumptions, columns & their relations and construction of a complete life table

Unit-V**SAQ:**

36. Explain the functions of NSSO
37. Explain area and yield statistics.
38. Define National Income.

Essay Questions:

39. Explain the function and organization of CSO
40. Explain agricultural statistics.
41. Explain the various methods to compute national income.

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Sem-VI

Paper-VIII A1: Operations Research

Unit-I

SAQ:

1. Explain the models in OR
2. Explain the characteristics of OR

Essay Questions:

3. Explain the meaning and scope of OR
4. Explain the applications of OR

Unit-II

SAQ:

5. Explain the formulation of LPP
6. Define Objective function and constraints
7. Explain the Graphical method to solve a LPP
8. Define feasible and infeasible solution

Essay Questions:

9. Solve the following LPP by Graphical method
Max $Z = X + Y$ subject to $X + 2Y \leq 2000$, $X + Y \leq 1500$, $Y \leq 600$ and $X, Y \geq 0$.
10. Solve the following LPP by Graphical method
Min $Z = 5X + 4Y$ subject to $2X + 3Y \geq 6$, $3X + 2Y \geq 6$, and $X, Y \geq 0$
11. Formulate the following problem as a LPP.
A company produces 2 products A and B. These are processed on two machines M1 and M2. One unit of product A requires 2 minutes of time on M1 and 3 minutes on M2. One unit of product B requires 1 minute on M1 and 2 minutes on M2. The machines M1 and M2 are available only for 60 hrs and 40 hrs per week respectively. The profit per unit of A is 10/- and that of B is 15/-. Find, how many units of the products A and B should be produced per week to maximize the total profit?
12. Solve the following LPP by using graphical method.
Max. $z = 3x_1 + 2x_2$
STC
 $x_1 - x_2 < 1$
 $x_1 + x_2 > 3$
with $x_1, x_2 > 0$

Unit-III

SAQ:

13. Define General form of LPP
14. Define slack and surplus variables
15. Write the assumptions of LPP
16. Define Basic and Basic feasible solutions

Essay Questions:

17. Describe the Simplex Algorithm
18. Explain advantages and limitations of LPP
19. Solve the following LPP by simplex method.

$$\text{Max. } z = 5x_1 + 10x_2 + 8x_3$$

Stc

$$3x_1 + 5x_2 + 2x_3 \leq 60$$

$$4x_1 + 4x_2 + 4x_3 \leq 72$$

$$2x_1 + 4x_2 + 5x_3 \leq 100$$

With $x_1, x_2, x_3 \geq 0$

20. Solve the following LPP by simplex method

$$\text{Max } Z = 3X_1 + 2X_2 + 5X_3 \text{ STC}$$

$$X_1 + 2X_2 + X_3 \leq 430$$

$$X_1 + 4X_2 \leq 420$$

$$3X_1 + 2X_3 \leq 460 \text{ and } X_1, X_2, X_3 \geq 0.$$

Unit-IV

SAQ:

21. Discuss about artificial variable techniques
22. Explain Big-M method
23. Write the advantages of Dual simplex method over simplex method
24. What is degeneracy in LPP? How to resolve it

Essay Questions:

25. Explain Two-phase simplex method
26. Describe dual simplex method
27. Solve the following LPP by Two-Phase simplex method

$$\text{Min } Z = 15X_1 + 3X_2,$$

Subject to

$$3X_1 - X_2 - X_3 \geq 3,$$

$$X_1 - X_2 + X_3 \geq 2$$

and $X_1, X_2 \geq 0$.

28. Use Penalty method to solve the following LPP

$$\text{Min. } z = 12x_1 + 20x_2$$

Sub. to

$$6x_1 + 8x_2 > 100$$

$$7x_1 + 12x_2 > 120$$

with $x_1, x_2 > 0$

Unit-V

SAQ:

29. Define two-person zero-sum games
30. Define pure and mixed strategies.
31. Define Payoff and Payoff matrix
32. Write the assumptions of game theory.
33. Define Optimum strategy and saddle point

Essay Questions:

34. Explain MAXIMIN-MINIMAX principle
35. Explain the dominance property.
36. Explain the games with and without saddle points.
37. Solve the following game.

Player A	Player B		
		B1	B2
	A1	2	-5
	A2	-3	6

38. Solve the following game graphically

Player A			Player B		
		B1	B2	B3	B4
	A1	2	6	8	12
	A2	10	5	2	0

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Sem-VI

Paper-VIII A2: Optimization Techniques

Unit-I

SAQ:

1. Describe the mathematical model of assignment problem
2. Explain unbalanced assignment problem
3. How can you solve a maximization assignment problem

Essay Questions:

4. Explain Hungarian method to solve an Assignment problem
5. A company has five jobs to be done. The following matrix shows the return in rupees on assignment i th machine ($i=1,2,3,4,5$) to j th job ($j=A,B,C,D,E$). Assign the five jobs to the five machines so as to maximize total expected profit.

Job Machine	A	B	C	D	E
1	5	11	10	12	4
2	2	4	9	3	5
3	3	12	5	14	6
4	6	14	4	11	7
5	7	9	8	12	5

6. Solve the following Assignment problem

Job Machine	A	B	C	D
1	4	7	8	10
2	6	5	10	12
3	12	8	3	8
4	10	8	5	1

Unit-II

SAQ:

7. Explain the assumptions of sequencing problem
8. Explain the sequencing algorithm for n jobs and 3 machines

9. Explain briefly Travelling salesman problem

Essay Questions:

10. Explain the sequencing algorithm for n jobs and 2 machines and calculation of times.
11. Explain the Travelling salesman problem with an illustration.
12. All 9 jobs have gone through two machines Ma and M2. The time required for each job on each machine (in Hrs) is given below. Find the optimum sequence that minimizes total elapsed time.

Job	A	B	C	D	E	F	G	H	I
Machine-I	2	5	4	9	6	8	7	5	4
Machine-II	6	8	7	4	3	9	3	8	11

13. Determine the optimal sequence of jobs that minimizes total based on the following information processing time on machines is given in hours and passing is not allowed.

Job	A	B	C	D	E	F	G
Machine M1	3	8	7	4	9	8	7
Machine M2	4	3	2	5	1	4	3
Machine M3	6	7	5	11	5	6	12

Unit-III

SAQ:

14. Define Transportation problem
15. Write mathematical formulation of TP
16. Show that assignment problem is a special case of TP
17. Explain North-west corner rule

Essay Questions:

18. Explain i) Row minima method ii) Matrix minima method
19. Find the IBFS to the following TP by Least Cost Method

Destination Source	D1	D2	D3	Supply
S1	12	14	10	50
S2	8	15	9	150
S3	6	5	10	400

Demand	200	100	300	600
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20. Obtain IBFS for TP by using north west corner rule

5 1 3 3 34
3 4 5 4 15
6 4 3 9 12
4 1 5 8 19
20 25 15 20

Unit-IV

SAQ:

21. Explain unbalance TP
22. Explain Transshipment problem
23. Explain VAM

Essay Questions:

24. Describe MODI algorithm
25. Explain VAM method
26. Obtain IBFS for TP by using VAM.

5 1 3 3 34
3 3 5 4 15
6 4 4 3 12
4 1 4 2 19
21 25 17 17

Unit-V

SAQ:

27. Write the rules of networking
28. Define event and activity.
29. Explain errors in networking
30. Explain PERT method

Essay Questions:

31. Explain the basic steps in PERT/CPM
32. Explain the applications of network scheduling
33. Explain Critical Path Method
34. A project has the following time schedule

Activity	1-2	1-3	1-4	2-5	3-6	3-7	4-6	5-8	6-9	7-8	8-9
Time (in Months)	2	2	1	4	8	5	3	1	5	4	3

- Construct network and compute
- i) total float for each activity
 - ii) critical path and duration