

National Testing Agency

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Statistics for Business Economics

Group Number :	1
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Statistics for Business Economics

Section Id :	89951482
Section Number :	1
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	100
Number of Questions to be attempted :	100

Section Marks : 100
Mark As Answered Required? : Yes
Sub-Section Number : 1
Sub-Section Id : 899514104
Question Shuffling Allowed : Yes

Question Number : 1 Question Id : 8995146178 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No
Correct Marks : 1 Wrong Marks : 0

Ordinal Scale is used for

- 1.Result of the student (fail, pass class, first class, and distinction)
- 2.Gender of a student (Male, Female)
- 3.Age of a student (in years)
- 4.Marks of students

Options :

- 89951424349. 1
- 89951424350. 2
- 89951424351. 3
- 89951424352. 4

Question Number : 2 Question Id : 8995146179 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No
Correct Marks : 1 Wrong Marks : 0

The scale used to denote “X” salary is double then “Y” salary is

1. Nominal Scale
2. Ordinal scale
- 3.Interval Scale
- 4.Ratio Scale

Options :

- 89951424353. 1
- 89951424354. 2
- 89951424355. 3

89951424356. 4

Question Number : 3 Question Id : 8995146180 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Which of the following is the example of Qualitative variable?

1. Age
2. Height
3. Weight
4. Gender

Options :

89951424357. 1
89951424358. 2
89951424359. 3
89951424360. 4

Question Number : 4 Question Id : 8995146181 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Which of the following is an example of primary Data?

1. Data collected by investigator and used by him
2. Data collected by NSSO and used by investigator
3. Data published by Reserve Bank and Used by investigator
4. Data Published by IMF and used by Investigator

Options :

89951424361. 1
89951424362. 2
89951424363. 3
89951424364. 4

Question Number : 5 Question Id : 8995146182 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Which of the following is an example of Secondary data?

- 1.Data collected by investigator and used by him
- 2.Data collected by NSSO
- 3.Data published by Reserve Bank and Used by investigator
- 4.Data Published by IMF

Options :

- 89951424365. 1
- 89951424366. 2
- 89951424367. 3
- 89951424368. 4

Question Number : 6 Question Id : 8995146183 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

The algebraic sum of the deviation of a set of n values from their arithmetic mean is

1. n
2. 0
3. 1
4. $n + \bar{x}$

Options :

- 89951424369. 1
- 89951424370. 2
- 89951424371. 3
- 89951424372. 4

Question Number : 7 Question Id : 8995146184 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Median is

1. The most frequent Value
2. Middle most Value
3. Least frequent Value
4. Mean of the first and last value

Options :

- 89951424373. 1
- 89951424374. 2
- 89951424375. 3
- 89951424376. 4

Question Number : 8 Question Id : 8995146185 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Mode is

1. The most frequent Value
2. Middle most Value
3. Least frequent Value
4. Mean of the first and last value

Options :

- 89951424377. 1
- 89951424378. 2
- 89951424379. 3
- 89951424380. 4

Question Number : 9 Question Id : 8995146186 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Histogram is useful to determine graphically the value of

- 1.The arithmetic mean
- 2.The median
- 3.The mode
- 4.None of these

Options :

- 89951424381. 1
- 89951424382. 2
- 89951424383. 3
- 89951424384. 4

Question Number : 10 Question Id : 8995146187 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Dispersion is used to

1. Summarize data into single value
2. Measures the concentration of a set of observation
3. Measures the scatterness of a set of observation
4. Peakedness of the distribution curve

Options :

- 89951424385. 1
- 89951424386. 2
- 89951424387. 3
- 89951424388. 4

Question Number : 11 Question Id : 8995146188 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

If coefficient of kurtosis has a negative value, the distribution is

1. Platykurtic
2. Mesokurtic
3. Leptokurtic
4. skew

Options :

89951424389. 1

89951424390. 2

89951424391. 3

89951424392. 4

Question Number : 12 Question Id : 8995146189 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Consider the following statements:

- (I) Positively skewed distribution has tail on the right-hand side
- (II) negatively skewed distribution has tail on the left-hand side

1. I and II both are true
2. I is true but not II
3. I is false but not II
4. I and II both are false

Options :

89951424393. 1

89951424394. 2

89951424395. 3

89951424396. 4

Question Number : 13 Question Id : 8995146190 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

The extent of symmetry of the distribution is measured by

1. Skewness
2. Kurtosis
3. Measures of dispersion
4. Measures of Central Tendency

Options :

- 89951424397. 1
- 89951424398. 2
- 89951424399. 3
- 89951424400. 4

Question Number : 14 Question Id : 8995146191 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

The variance of the distribution is

1. The second central moment about the mean
2. The second moment about assumed mean
3. The third central moment about the mean
4. The third moment about assumed mean

Options :

- 89951424401. 1
- 89951424402. 2
- 89951424403. 3
- 89951424404. 4

Question Number : 15 Question Id : 8995146192 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

The peakedness of the distribution is measured by

1. Skewness
2. Kurtosis
3. Measures of dispersion
4. Measures of central tendency

Options :

- 89951424405. 1
- 89951424406. 2
- 89951424407. 3
- 89951424408. 4

Question Number : 16 Question Id : 8995146193 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

As the points on scatter diagram are on same line and line is in decreasing direction then it indicate

1. Perfect correlation between the variables
2. Perfect negative correlation between the variables.
3. Negative correlation between the variables.
4. No correlation between the variables.

Options :

- 89951424409. 1
- 89951424410. 2
- 89951424411. 3
- 89951424412. 4

Question Number : 17 Question Id : 8995146194 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

As the points on scatter diagram are randomly distributed, it shows

1. No correlation between the variables
2. Two variables are independent
3. No correlation between the variables and they are independent.
4. No linear correlation between the variables and they are linearly independent.

Options :

- 89951424413. 1
- 89951424414. 2
- 89951424415. 3
- 89951424416. 4

Question Number : 18 Question Id : 8995146195 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Correlation coefficient between two variable

- 1 is greater than one
2. is less than -1
3. is always zero
4. is independent of change origin

Options :

- 89951424417. 1
- 89951424418. 2
- 89951424419. 3
- 89951424420. 4

Question Number : 19 Question Id : 8995146196 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Karl Pearson's correlation coefficient is

1. A ratio of covariance between two variables to the product of their standard deviations.
2. A ratio of the product of their standard deviations of two variables to the covariance between them.
3. A ratio of covariance between two variables to the product of their variances.
4. correlation between rank values

Options :

- 89951424421. 1
- 89951424422. 2
- 89951424423. 3
- 89951424424. 4

Question Number : 20 Question Id : 8995146197 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Karl Pearson's method is not advisable to find correlation coefficient when

1. When quantitative data is given.
2. When there is no linear relation between two variables
3. Both (a) and (b)
4. data is qualitative

Options :

- 89951424425. 1
- 89951424426. 2
- 89951424427. 3
- 89951424428. 4

Question Number : 21 Question Id : 8995146198 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

For two variables x and y the regression equation is $y = 0.3x - 200$ and $\bar{x} = 500$ then the value of \bar{y} is

1. 2. 5
2. - 50
3. 0.3
4. -0.3

Options :

89951424429. 1
89951424430. 2
89951424431. 3
89951424432. 4

Question Number : 22 Question Id : 8995146199 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

A student has calculated that coefficient of determination is 0.64 and the value of one regression coefficient is - 1.2, then the value of other regression coefficient is

1. 0.53
2. - 0.53
3. 0.67
4. - 0.67

Options :

89951424433. 1
89951424434. 2
89951424435. 3
89951424436. 4

Question Number : 23 Question Id : 8995146200 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Regression coefficient y on x indicate

- (i) marginal value of the regression equation.
- (ii) slope of the regression line of y on x
- (iii) probable change in the value of y for a unit change in the value of x .

The most correct option is

1. (i) only.
2. (ii) only.
3. (iii) only.
4. (i), (ii) and (iii).

Options :

- 89951424437. 1
- 89951424438. 2
- 89951424439. 3
- 89951424440. 4

Question Number : 24 Question Id : 8995146201 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

A line obtained by applying least square principle is called

- (i) regression line
- (ii) best fitted line
- (iii) a line of average relationship.

The most correct option is

1. (i) only.
2. (ii) bot not (i) and (iii).
3. (iii) only.
4. (i), (ii) and (iii).

Options :

- 89951424441. 1
- 89951424442. 2
- 89951424443. 3
- 89951424444. 4

Question Number : 25 Question Id : 8995146202 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Regression analysis is used for

- (i) Measuring the strength of the relationship
- (ii) Establishing the mathematical relation between the correlated variables
- (iii) Estimating the value of dependent variable for the given value of independent variable.

The most correct option is

- 1. (i) only.
- 2. (ii) but not (i) only.
- 3. (iii) only.
- 4. Both (ii) and (iii).

Options :

- 89951424445. 1
- 89951424446. 2
- 89951424447. 3
- 89951424448. 4

Question Number : 26 Question Id : 8995146203 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Probability of certain event is

- 1. 0
- 2. 1
- 3. 0.5
- 4. -1

Options :

- 89951424449. 1
- 89951424450. 2
- 89951424451. 3
- 89951424452. 4

Question Number : 27 Question Id : 8995146204 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

If one die is thrown then total items of sample space are

1. Four
2. Five
3. Six
4. 2^6

Options :

- 89951424453. 1
- 89951424454. 2
- 89951424455. 3
- 89951424456. 4

Question Number : 28 Question Id : 8995146205 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

How many face cards are there in deck of card

1. 3
2. 6
3. 9
4. 12

Options :

- 89951424457. 1
- 89951424458. 2
- 89951424459. 3
- 89951424460. 4

Question Number : 29 Question Id : 8995146206 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

If two dice are thrown then total items of sample space are

1. 12
2. 18
3. 36
4. 216

Options :

- 89951424461. 1
- 89951424462. 2
- 89951424463. 3
- 89951424464. 4

Question Number : 30 Question Id : 8995146207 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

If one coin is tossed then total items of sample space are

1. One
2. Two
3. Three
4. Four

Options :

- 89951424465. 1
- 89951424466. 2
- 89951424467. 3
- 89951424468. 4

Question Number : 31 Question Id : 8995146208 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Variance of Poisson distribution is 3.2, then what is the probability $P(X=0)$?

1. $e^{-1.6}$
2. $e^{-1.5}$
3. $e^{-3.2}$
4. $e^{-6.4}$

Options :

89951424469. 1
89951424470. 2
89951424471. 3
89951424472. 4

Question Number : 32 Question Id : 8995146209 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

For a Poisson variable X, $P(x=1) = P(x=2)$ then $P(x=4)=$

1. 0.1353
2. 0.2
3. 0.19
4. 0.0902

Options :

89951424473. 1
89951424474. 2
89951424475. 3
89951424476. 4

Question Number : 33 Question Id : 8995146210 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

For discrete uniform distribution mean = 3, then $P(X = 3) =$

1. $1/3$
2. $1/4$
3. $1/5$
4. $3/5$

Options :

- 89951424477. 1
- 89951424478. 2
- 89951424479. 3
- 89951424480. 4

Question Number : 34 Question Id : 8995146211 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

For discrete uniform distribution if variance = 2 then its mean =

1. 3
2. 4
3. 5
4. 6

Options :

- 89951424481. 1
- 89951424482. 2
- 89951424483. 3
- 89951424484. 4

Question Number : 35 Question Id : 8995146212 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

If the mean of Poisson distribution is 9 then its standard deviation will be

1. 9
2. 4
3. 3
4. 0

Options :

- 89951424485. 1
- 89951424486. 2
- 89951424487. 3
- 89951424488. 4

Question Number : 36 Question Id : 8995146213 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

The probability density function of a random variable X is $1/K$, $2 < X < 9$, find K.

1. 7
2. 11
3. 13
4. 49

Options :

- 89951424489. 1
- 89951424490. 2
- 89951424491. 3
- 89951424492. 4

Question Number : 37 Question Id : 8995146214 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

If the mean of Normal distribution is 13.5, then mode is _____.

1. $\sqrt{13.5}$
2. 13.5
3. -13.5
4. 27

Options :

- 89951424493. 1
- 89951424494. 2
- 89951424495. 3
- 89951424496. 4

Question Number : 38 Question Id : 8995146215 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

The probability density function of exponential distribution is $f(x) = ke^{-x/3}$, $x > 0$. Find variance of the distribution.

1. 1/3
2. 3
3. 1/9
4. 9

Options :

- 89951424497. 1
- 89951424498. 2
- 89951424499. 3
- 89951424500. 4

Question Number : 39 Question Id : 8995146216 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

For normal distribution $P(\mu - k\sigma \leq X \leq \mu + k\sigma) = 0.95$ then $k =$ _____.

1. 1
2. 1.96
3. 2.58
4. 2.96

Options :

- 89951424501. 1
- 89951424502. 2
- 89951424503. 3
- 89951424504. 4

Question Number : 40 Question Id : 8995146217 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

For exponential distribution with mean 2, the $P(1.2 < X < 2.4) =$ _____.

1. 0.2476
2. 0.5488
3. 0.3012
4. 0.5000

Options :

- 89951424505. 1
- 89951424506. 2
- 89951424507. 3
- 89951424508. 4

Question Number : 41 Question Id : 8995146218 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Which one of the following is an estimator of unknown population mean μ ?

1. \bar{x}
2. $\bar{x} - \mu$
3. $\bar{x} + \mu$
4. \bar{x} / μ

Options :

- 89951424509. 1
- 89951424510. 2
- 89951424511. 3
- 89951424512. 4

Question Number : 42 Question Id : 8995146219 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

What is the distribution of sample observations in construction of confidence interval for population mean?

1. normal
2. chi –square
3. t
4. F

Options :

- 89951424513. 1
- 89951424514. 2
- 89951424515. 3
- 89951424516. 4

Question Number : 43 Question Id : 8995146220 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

The value of $Z_{\alpha/2}$ when $\alpha = 0.05$ is

1. 0.025
2. 1
3. 1.96
4. 2.58

Options :

- 89951424517. 1
- 89951424518. 2
- 89951424519. 3
- 89951424520. 4

Question Number : 44 Question Id : 8995146221 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

The single valued estimator used to estimate the unknown parameter of the population is called

- 1.Point Estimator
- 2.Interval Estimator
- 3.Estimator
4. Unbiased estimator

Options :

- 89951424521. 1
- 89951424522. 2
- 89951424523. 3
- 89951424524. 4

Question Number : 45 Question Id : 8995146222 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

The value of $Z_{\alpha/2}$ when $\alpha = 0.10$ is

1. 1
2. 1.33
3. 1.64
4. 1.96

Options :

89951424525. 1

89951424526. 2

89951424527. 3

89951424528. 4

Question Number : 46 Question Id : 8995146223 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

The probability that the third unit is included in the sample of size 5 from a population of size 20 is

1. 3/20
2. 1/4
3. 1/5
4. 0

Options :

89951424529. 1

89951424530. 2

89951424531. 3

89951424532. 4

Question Number : 47 Question Id : 8995146224 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Total numbers of possible random samples each of size 3 drawn by SRSWOR from the population of size 5 are

1. 5
2. 10
3. 15
4. 20

Options :

- 89951424533. 1
- 89951424534. 2
- 89951424535. 3
- 89951424536. 4

Question Number : 48 Question Id : 8995146225 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Total numbers of possible random samples each of size 2 drawn by SRSWR from the population of size 4 are

1. 8
2. 10
3. 16
4. 4

Options :

- 89951424537. 1
- 89951424538. 2
- 89951424539. 3
- 89951424540. 4

Question Number : 49 Question Id : 8995146226 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

When some of the units in the population have different types of characteristics then the population is called

- 1.Population
- 2.Heterogeneous population
- 3.Homogeneous population
- 4.supper population

Options :

- 89951424541. 1
- 89951424542. 2
- 89951424543. 3
- 89951424544. 4

Question Number : 50 Question Id : 8995146227 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

A sample proportion is the point estimator of the

- 1.Population mean
- 2.Population proportion
- 3.Population standard deviation
4. Population range

Options :

- 89951424545. 1
- 89951424546. 2
- 89951424547. 3
- 89951424548. 4

Question Number : 51 Question Id : 8995146228 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

The graphical method of LP problem uses when

1. variables are at least 4
2. variables are at least 3
3. variables are at least 2
4. variables are only 2

Options :

- 89951424549. 1
- 89951424550. 2
- 89951424551. 3
- 89951424552. 4

Question Number : 52 Question Id : 8995146229 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

A feasible solution to an LP problem

1. Must satisfy all of the problem's constraints simultaneously
2. Need not satisfy all of the constraints, only some of them
3. Must be corner point of the feasible region
4. Must optimize the value of the objective function

Options :

- 89951424553. 1
- 89951424554. 2
- 89951424555. 3
- 89951424556. 4

Question Number : 53 Question Id : 8995146230 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

While solving a LP model graphically, the region bounded by the constraints is called

1. Feasible region
2. Infeasible region
3. Unbounded solution
4. critical region

Options :

- 89951424557. 1
- 89951424558. 2
- 89951424559. 3
- 89951424560. 4

Question Number : 54 Question Id : 8995146231 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Linear programming is

1. only constrained minimization technique
2. only Constrained maximization technique
3. least square technique for economic allocation of limited resources
4. constrained optimization technique

Options :

- 89951424561. 1
- 89951424562. 2
- 89951424563. 3
- 89951424564. 4

Question Number : 55 Question Id : 8995146232 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Constraints in an LP model are always

1. non-linear
2. quadratic
3. cubic
4. linear

Options :

- 89951424565. 1
- 89951424566. 2
- 89951424567. 3
- 89951424568. 4

Question Number : 56 Question Id : 8995146233 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

In linear programming problem objective function must

1. be a quadratic
2. non identifiable
3. be qualitative
4. clearly identifiable and measurable in quantitative terms

Options :

- 89951424569. 1
- 89951424570. 2
- 89951424571. 3
- 89951424572. 4

Question Number : 57 Question Id : 8995146234 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

The resources in LPP model must be

- 1.in unlimited supply
- 2.at least three
- 3.at least four
- 4.in limited supply

Options :

89951424573. 1

89951424574. 2

89951424575. 3

89951424576. 4

Question Number : 58 Question Id : 8995146235 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Maximization of objective function in LP model means

1. maximum value occurs at allowable set of decision
- 2.lowest value is chosen among allowable decisions
- 3.any value which maximise the objective function
- 4.any value for which objective function returns positive integer

Options :

89951424577. 1

89951424578. 2

89951424579. 3

89951424580. 4

Question Number : 59 Question Id : 8995146236 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Which of the following is a part of assumptions of an LP model?

- 1.continuity only
- 2.Proportionality but not continuity
- 3.Additivity and continuity
but not proportionality
4. Additively, continuity and proportionality

Options :

- 89951424581. 1
- 89951424582. 2
- 89951424583. 3
- 89951424584. 4

Question Number : 60 Question Id : 8995146237 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

The best use of linear programming technique is to find an optimal use of

- 1.Money only
- 2.Machine only
- 3.Manpower but not machine
4. Money , manpower and machines all

Options :

- 89951424585. 1
- 89951424586. 2
- 89951424587. 3
- 89951424588. 4

Question Number : 61 Question Id : 8995146238 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

When a greater-than-or-equal constraint is not binding, then which of the following is the extra amount over the constraint that is being produced or utilized?

- 1.Slack
- 2.Surplus
- 3.surplus - slack
4. slack – surplus

Options :

- 89951424589. 1
- 89951424590. 2
- 89951424591. 3
- 89951424592. 4

Question Number : 62 Question Id : 8995146239 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

A value that indicates how much the objective function coefficient on the corresponding variable must be improved before the value of the variable will be positive in the optimal solution is?

- 1.Reduced Cost
- 2.Doubled cost
- 3.Shadow cost
- 4.Improved cost

Options :

- 89951424593. 1
- 89951424594. 2
- 89951424595. 3
- 89951424596. 4

Question Number : 63 Question Id : 8995146240 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Which of the following could be reason if no solution?

1. Triangular feasible region
2. Rectangle feasible region
3. no feasible solution or problem may be unbounded
4. bounded feasible solution

Options :

89951424597. 1

89951424598. 2

89951424599. 3

89951424600. 4

Question Number : 64 Question Id : 8995146241 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

The amount of a resource, as represented by a less-than-or- equal constraint that is not being used is?

1. Slack
2. Surplus
3. Both of the above
4. None of the above

Options :

89951424601. 1

89951424602. 2

89951424603. 3

89951424604. 4

Question Number : 65 Question Id : 8995146242 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Which of the following cannot be inferred from graphical solution?

- 1.The constraints are always non negative in nature.
2. The solution is the last corner or face of the feasible region that the objective function touches as the value of the objective function is improved.
3. The objective function defines a set of parallel lines one for each potential value of the objective function
4. The constraints should define a polygon called the feasible region

Options :

- 89951424605. 1
- 89951424606. 2
- 89951424607. 3
- 89951424608. 4

Question Number : 66 Question Id : 8995146243 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

A sample of 12 units taken from a normal population is expected to have a mean 50cm. The sample has a mean 64cm with variance of 25. To test $H_0: \mu = 50$ vs. $H_1: \mu \neq 50$, you will use

1. Z-test
- 2.F-test
- 3.t-test
- 4.Chi-square test

Options :

- 89951424609. 1
- 89951424610. 2
- 89951424611. 3
- 89951424612. 4

Question Number : 67 Question Id : 8995146244 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Usually in small sample tests sample of size is considered to be

1. < 50
2. < 30
3. > 30
4. < 100

Options :

- 89951424613. 1
- 89951424614. 2
- 89951424615. 3
- 89951424616. 4

Question Number : 68 Question Id : 8995146245 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Equality of several normal population means can be tested by

1. Z-test
2. F-test
3. t-test
4. Chi-square test

Options :

- 89951424617. 1
- 89951424618. 2
- 89951424619. 3
- 89951424620. 4

Question Number : 69 Question Id : 8995146246 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Student's t-test is applicable only when

- 1.The variate values are dependent
- 2.The variable is not distributed normally
- 3.The sample is not large
- 4.sample size is small, values are independent, distribution is normal and population variance is unknown.

Options :

- 89951424621. 1
- 89951424622. 2
- 89951424623. 3
- 89951424624. 4

Question Number : 70 Question Id : 8995146247 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Analysis of Variance utilises

- 1.Z-test
- 2.F-test
- 3.t-test
- 4.Chi-square test

Options :

- 89951424625. 1
- 89951424626. 2
- 89951424627. 3
- 89951424628. 4

Question Number : 71 Question Id : 8995146248 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Which are the mean and variance of chi square distribution with 3 degrees of freedom?

1. mean = 3 , variance = 5
2. mean = 6, variance = 3
3. mean = 3 , variance = 6
4. mean = 5, variance = 3

Options :

- 89951424629. 1
- 89951424630. 2
- 89951424631. 3
- 89951424632. 4

Question Number : 72 Question Id : 8995146249 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

MS Excel has Solver Add-in under which menu?

1. Formula
2. Data
3. Preview
4. Insert

Options :

- 89951424633. 1
- 89951424634. 2
- 89951424635. 3
- 89951424636. 4

Question Number : 73 Question Id : 8995146250 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

The software useful to solve LP problems is

1. MS Office
2. Telly
3. Distfit
4. LINDO

Options :

89951424637. 1
89951424638. 2
89951424639. 3
89951424640. 4

Question Number : 74 Question Id : 8995146251 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

In using Solver package for solving a linear programming problem, the decision variables are assigned to which cells.

1. Target
2. Changing
3. Constraints
4. Variable

Options :

89951424641. 1
89951424642. 2
89951424643. 3
89951424644. 4

Question Number : 75 Question Id : 8995146252 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Which report provides information about how sensitive your solution is to changes in the constraints?

- 1.Sensitive Reports
- 2.Answer Report
- 3.Information Report
- 4.Solution Report

Options :

- 89951424645. 1
- 89951424646. 2
- 89951424647. 3
- 89951424648. 4

Question Number : 76 Question Id : 8995146253 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Which one of the following is an example of large sample size?

1. 10
2. 15
3. 20
4. 35

Options :

- 89951424649. 1
- 89951424650. 2
- 89951424651. 3
- 89951424652. 4

Question Number : 77 Question Id : 8995146254 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Which of the following is a test of variable?

- 1.test for two variances
2. test for single proportion
3. test of goodness of fit
4. test for independence of attributes.

Options :

- 89951424653. 1
- 89951424654. 2
- 89951424655. 3
- 89951424656. 4

Question Number : 78 Question Id : 8995146255 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

In which test chi square distribution is used?

1. Test for mean
- 2.Test for two proportions
3. Test for two standard deviations
4. Test of goodness of fit

Options :

- 89951424657. 1
- 89951424658. 2
- 89951424659. 3
- 89951424660. 4

Question Number : 79 Question Id : 8995146256 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Which of the following is an example of hypotheses used in testing a single mean?

1. H: $\sigma = 2$ versus K: $\sigma > 2$
2. H: $\mu = 2$ versus K: $\mu > 2$
3. H: $\mu_1 = \mu_2$ versus K: $\mu_1 > \mu_2$
4. H: $\sigma_1 = \sigma_2$ versus K: $\sigma_1 > \sigma_2$

Options :

- 89951424661. 1
- 89951424662. 2
- 89951424663. 3
- 89951424664. 4

Question Number : 80 Question Id : 8995146257 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

What is the formula of standard error used in testing of single mean?

1. $\frac{s}{\sqrt{n}}$
2. $\frac{s^2}{\sqrt{n}}$
3. $\frac{s}{\sqrt{2n}}$
4. $\frac{s}{\sqrt{n/2}}$

Options :

- 89951424665. 1
- 89951424666. 2
- 89951424667. 3
- 89951424668. 4

Question Number : 81 Question Id : 8995146258 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Which index measures the monthly change in the cost of representative sample of goods and services?

1. Laspeyres price index
2. Paasche price index
3. Retail price index
4. Economic price index

Options :

89951424669. 1
89951424670. 2
89951424671. 3
89951424672. 4

Question Number : 82 Question Id : 8995146259 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Dorbisch-Bowley index is equal to

1. The geometric mean of Laspeyres and Paasche price indices
2. The product of price and quantity index numbers
3. The arithmetic mean of Laspeyres and Paasche price indices
4. The ratio of price and quantity index numbers

Options :

89951424673. 1
89951424674. 2
89951424675. 3
89951424676. 4

Question Number : 83 Question Id : 8995146260 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Laspeyres price index generally

1. Shows no bias
2. Shows an upward bias
3. Shows a downward bias
4. Is a perfect index number

Options :

89951424677. 1

89951424678. 2

89951424679. 3

89951424680. 4

Question Number : 84 Question Id : 8995146261 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

The Laspeyres price index

1. Considers the current year quantities as weights
2. Considers the base year prices as weights
3. Considers the base year quantities as weights
4. Considers the current year prices as weights

Options :

89951424681. 1

89951424682. 2

89951424683. 3

89951424684. 4

Question Number : 85 Question Id : 8995146262 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

An index number is used

1. To measure changes in demand
2. To measure changes in price
3. To measure change in magnitude from one situation to another
4. To measure changes in quantity

Options :

89951424685. 1

89951424686. 2

89951424687. 3

89951424688. 4

Question Number : 86 Question Id : 8995146263 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Purchasing power of money can be measured using

1. Fisher index
2. Consumer price index
3. Simple aggregate index
4. Whole-sale price index

Options :

89951424689. 1

89951424690. 2

89951424691. 3

89951424692. 4

Question Number : 87 Question Id : 8995146264 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Consumer price index is also called

1. Fixed price index number
2. Composite price index number
3. Cost of living index number
4. Whole-sale price index number

Options :

- 89951424693. 1
- 89951424694. 2
- 89951424695. 3
- 89951424696. 4

Question Number : 88 Question Id : 8995146265 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Consumer price index formula is nothing but

1. Laspeyres price index
2. Paasche price index
3. Fisher price index
4. Marshall-Edgeworth price index

Options :

- 89951424697. 1
- 89951424698. 2
- 89951424699. 3
- 89951424700. 4

Question Number : 89 Question Id : 8995146266 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Consumer price index is constructed by using

1. Market capitalization method
2. Family budget method
3. Simple aggregate method
4. Free float capitalization method

Options :

- 89951424701. 1
- 89951424702. 2
- 89951424703. 3
- 89951424704. 4

Question Number : 90 Question Id : 8995146267 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

BSE index is computed on the basis of

1. Market capitalization method
2. Method of weighted relatives
3. Family budget method
4. Free float capitalization method

Options :

- 89951424705. 1
- 89951424706. 2
- 89951424707. 3
- 89951424708. 4

Question Number : 91 Question Id : 8995146268 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

In a population of size 10 the possible number of samples of size 2 will be

1. 45
2. 40
3. 34
4. 54

Options :

- 89951424709. 1
- 89951424710. 2
- 89951424711. 3
- 89951424712. 4

Question Number : 92 Question Id : 8995146269 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

A list of all units of a population is known as.....

- 1.Sample
- 2.Element
- 3.Parameter
- 4.Frame

Options :

- 89951424713. 1
- 89951424714. 2
- 89951424715. 3
- 89951424716. 4

Question Number : 93 Question Id : 8995146270 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

There are _____ types of sampling.

1. One
2. Two
3. Three
4. Four

Options :

- 89951424717. 1
- 89951424718. 2
- 89951424719. 3
- 89951424720. 4

Question Number : 94 Question Id : 8995146271 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

How many sample of size 2 can be drawn from the population of size 5.

1. One
2. Three
3. Four
4. Ten

Options :

- 89951424721. 1
- 89951424722. 2
- 89951424723. 3
- 89951424724. 4

Question Number : 95 Question Id : 8995146272 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

A cluster means a group of

- 1.Variable
- 2.Strata
- 3.Parameter
- 4.Elements

Options :

- 89951424725. 1
- 89951424726. 2
- 89951424727. 3
- 89951424728. 4

Question Number : 96 Question Id : 8995146273 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

- 1.accepting H when H is true
2. rejecting H when H is true
3. rejecting H when H is false
- 4.accepting H when H is false

Options :

- 89951424729. 1
- 89951424730. 2
- 89951424731. 3
- 89951424732. 4

Question Number : 97 Question Id : 8995146274 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

probability of type-II error means

1. accepting H when H is true
2. rejecting H when H is true
3. rejecting H when H is false
4. accepting H when H is false

Options :

- 89951424733. 1
- 89951424734. 2
- 89951424735. 3
- 89951424736. 4

Question Number : 98 Question Id : 8995146275 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No Correct Marks : 1 Wrong Marks : 0

Critical region means a region which

1. rejects the null hypothesis
2. accepts the null hypothesis
3. rejects both null and alternative the hypotheses
4. accepts both null and alternative the hypotheses

Options :

- 89951424737. 1
- 89951424738. 2
- 89951424739. 3
- 89951424740. 4

Question Number : 99 Question Id : 8995146276 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Estimate is

1. a true value of the parameter .
2. a value of the statistic used to estimate the parameter.
3. always positive.
- 4.always integer.

Options :

89951424741. 1

89951424742. 2

89951424743. 3

89951424744. 4

Question Number : 100 Question Id : 8995146277 Question Type : MCQ Option Shuffling : No Is Question Mandatory : No

Correct Marks : 1 Wrong Marks : 0

Estimate is

1. a true value of the parameter .
2. a value of the statistic used to estimate the parameter.
3. always positive.
4. always integer.

Options :

89951424745. 1

89951424746. 2

89951424747. 3

89951424748. 4