PROVISIONAL ANSWER KEY

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Question1:-Hortus Malabaricus was published under the patronage of

A:-H. L . Vizher
B:-Admiral Vanreed
C:-Admiral Vandermain
D:-Admiral Wangoons
Correct Answer:- Option-B

Question2:-Among the following countries who initiated the scientific agriculture in Kerala ?

A:-Portuguese
B:-British
C:-French
D:-Dutch
Correct Answer:- Option-D

Question3:-The year in which Trippadidanam was carried out by marthanda Varma in

A:-1750
B:-1729
C:-1734
D:-1733
Correct Answer:- Option-A

Question4:-When was Malayali Memorial submitted to the king ?

A:-1890
B:-1896
C:-1891
D:-1892
Correct Answer:- Option-C

Question5:-'Samatva Samajam' probably the first social organization of Kerala was initiated by

A:-Vagbhadananda
B:-Vaikunda Swami
C:-Chattambi Swami
D:-Sree Narayana Guru
Correct Answer:- Option-B

Question6:-Nair Service Society was established in the year

A:-1914
B:-1944
C:-1924
D:-1934
Correct Answer:- Option-A

Question7:-Who started 'Sadhujanaparipalana Yogam' ?

A:-Chattambi Swami
B:-Vaghbhatananda
C:-Vaikunda Swami
D:-Ayyankali
Correct Answer:- Option-D

Question8:-Among the following who was the owner of the paper 'Swadeshabhimani' ?

A:-K. Krishna Pillai
B:-Makthi Thangal
C:-Vaikom Abdul Khader Moulavi
D:-Morkothu Kumaran
Correct Answer:- Option-C

Question9:-The 1999 Kargil war also known as
A:-Operation Vijay
B:-Operation Viswas
C:-Operation Sakti
D:-Smiling Buddha
Correct Answer:- Option-A
Question10:-The only licensed National Flag production unit in India
A:-Pune
B:-Hubli
C:-Thane
D:-Kanpur
Correct Answer:- Option-B
Question11:-First Nationalized Bank in India is
A:-RBI
B:-Andhra Bank
C:-SBI
D:-IOB
Correct Answer:- Option-C
Question12:-Who is the father of Indian Space Programme ?
A:-APJ Abdul Kalam
B:-Homi J. Bhaba
C:-Salim Ali
D:-Vikram Sarabhai
Correct Answer:- Option-D
Question13:-Which friend of Raja Ram Mohan Roy helped him in the Brahmo Samaj Movement ?
A:-Ishwar Chandra Vidya Sagar
B:-Dwarakanath Tagore
C:-Keshav Chandra Sen
D:-Rabindranath Tagore
Correct Answer:- Option-B
Question14:-When did Indian Constitution come into force ?
A:-1949 November 26
B:-1956 November 1
C:-1947 August 15
D:-1950 January 26
Correct Answer:- Option-D
Question15:-Who was the first deputy Prime Minister of Independent India ?
A:-Sardar Vallabhbhai Patel
B:-Lal Bahadur Sastri
C:-Karan Singh
D:-Morarji Desai
Correct Answer:- Option-A
Question16:-How many members are nominated by the President of India to Rajya Sabha ?
A:-8
B:-15
C:-12
D:-16
Correct Answer:- Option-C
Question17:-'Right to Education for children in India' did come in to force on
A:-2011 April 1
B:-2011 June 1
C:-2010 April 1
D:-2012 April 1
Correct Answer:- Option-C
Question18:-Where did Indias `1^(st)` ATM install ?
A:-Delhi
B:-Pune
C:-Calcutta
D:-Mumbai

Correct Answer:- Option-D

Question19:-Head quarters of Kerala Gramin Bank is situated at

A:-Ernakulam

B:-Malappuram

C:-Kozhikode

D:-Trivandrum

Correct Answer:- Option-B

Question20:-Who is the `14^(th)` President of India ?

A:-Pranab Mukherjee

B:-Ram Nath Kovind

C:-K. R. Narayanan

D:-Pratibha Pateel

Correct Answer:- Option-B

Question21:-Find the value of m if the function f(x) =`{(3  if - oo < x< 1),(mx + 5  if 1 <= x < oo):}` is continuous at x = 1.

A:-8

B:-2

C:--2

D:-3

Correct Answer:- Option-C

Question22:-Which of the following real valued functions f : R `->` R is not differentiable at x = 0 ?

A:-f(x) = 3

B:-f(x) = |x|

C:-f(x) = |x - 1|

D:-f(x) = `e^(x)`

Correct Answer:- Option-B

Question23:-If the complex function f is defined as f(z) = `(z)/(z-3)` find `int_(C)` f(z)dz if C is the circle |z - 1| = 1.

A:-0

B:-2`pi`i

C:-3

D:-1

Correct Answer:- Option-A

Question24:-Which of the following is not a solution of the differential equation y" - 5y' + 6y = 0 ?

A:-`e^(2x)`

B:-`e^(x)`

C:-0

D:-`2e^(2x) + e^(3x)`

Correct Answer:- Option-B

Question25:-In which of the following intervals is the function f(x) = `2x^(3) - 3x^(2) + 2` is increasing ?

A:-(-`oo` , 1)

B:-(0, 1)

C:-(`(1)/(2)`, 2)

D:-(2, 3)

Correct Answer:- Option-D

Question26:-How many generators are there for the cyclic group `Z_(4)` ?

A:-1

B:-2

C:-3

D:-4

Correct Answer:- Option-B

Question27:-Find the value of `lim_(x->oo)` `(4x^(2)-5x+4)/(2x^(2)+x-2)`.

A:-`oo`

B:-0

C:--2

D:-2

Correct Answer:- Option-D

Question28:-If the function f is continuous and `int^(2)_1`f(x)dx = 3 and `int^(4)_1` f(x)dx = 7 then the value of `int^(4)_2` f(x)dx =

A:-4

B:--4

C:-10

D:--10

Correct Answer:- Option-A

Question29:-Which of the following is not an eigen value of the matrix
`[[2  1  3],[0  1  0], [0  1  4]]` ?

A:-1

B:-2

C:-3

D:-4

Correct Answer:- Option-C

Question30:-` int^((pi)/(2)` `cos^(4)` x dx =
` _0`

A:-`(pi)/(4)`

B:-`(pi^(2))/(16)`

C:-`(3pi^(2))/(16)`

D:-`(3pi^)/(16)`

Correct Answer:- Option-D

Question31:-The smallest number with 15 divisors is

A:-5625

B:-324

C:-144

D:-2025

Correct Answer:- Option-C

Question32:-The remainder when `2^(1000)` is divided by 17 is

A:-1

B:-3

C:-7

D:-16

Correct Answer:- Option-A

Question33:-If `alpha` , `beta` d `gamma` are the roots of the `x^(3)+px^(2)+qx+r=0`
then the value of `alpha^(2)+beta^2` `+ gamma^(2) =` ` `

A:-`p^(2)-2q`

B:-`p^(2)+2q`

C:-`-p^(2)+2q`

D:-`-p^(2)-2q`

Correct Answer:- Option-A

Question34:-Which of the following pairs of vectors are perpendicular to each other ?

A:-3i + 4j - 5k and 4i + 3j + 2k

B:-2i + 3j - k and 3i + 2j + k

C:-2i - 3j + k and 2i + 3j + k

D:-4i + 3j - 2k and i + 4j + 8k

Correct Answer:- Option-D

Question35:-If Z represents the set of all integers and +,. represents usual addition and multiplication of integers respectively, which of the following is not a group ?

A:-(Z, +)

B:-(Z, .)

C:-(Z - {0}, .)

D:-None of these

Correct Answer:- Option-B

Question36:-If tan A = `(1)/(5)` and tan B = `(2)/(3), ` then A + B =

A:-` `30°

B:-60°

C:-90°

D:-45°

Correct Answer:- Option-D

Question37:-If `((n),(3))` = `((n),(15))`, then n =

A:-12

B:-18

C:-5

D:-None of these
Correct Answer:- Option-B
Question38:-The local maximum point of the function f(x) = `x^(3)-3x^(2)-9x+4` is at
A:-x = 1
B:-x = -3
C:-x = -1
D:-x = 3
Correct Answer:- Option-C
Question39:-Which of the following is true about the real function f(x) = [x], -5 `<=` x `<=` 5 ?
A:-f(x) is a continuous function
B:-lim f(x) exist at x = 0
C:-f(x) has only finitely many discontinuities
D:-f(x) has infinitely many discontinuities
Correct Answer:- Option-C
Question40:-The period of the function f(x) = sin 2x is
A:-`pi`
B:-`(pi)/(2)`
C:-`(pi)/(4)`
D:-`2pi`
Correct Answer:- Option-A
Question41:-The absolute value of the cross elasticity of demand of two goods X and Y are zero, then the goods are
A:-Substitutes
B:-Complementary
C:-Independent
D:-None of the above
Correct Answer:- Option-C
Question42:-Which one of the following is a measure of monopoly power of the firm ?
A:-Lerner Index
B:-Fisher Index
C:-Herfindahl Index
D:-Human Development Index
Correct Answer:- Option-A
Question43:-The absolute value of the slope of the isoquant is called
A:-Marginal rate of substitution
B:-Marginal rate of productivity
C:-Marginal rate of product transformation
D:-Marginal rate of technical substitution
Correct Answer:- Option-D
Question44:-Which of the following degree of price discrimination is a case of charging a different price in different markets ?
A:-First degree
B:-Second degree
C:-Third degree
D:-Fourth degree
Correct Answer:- Option-C
Question45:-Economic values expressed in current prices are termed as
A:-Real values
B:-Nominal values
C:-Deflator
D:-Constant price
Correct Answer:- Option-B
Question46:-The interest rate is determined by the intersection between the supply of loanable funds and the demand for loanable funds is given by
A:-Keynes
B:-Keynesians
C:-Neoclassicals
D:-Post keynesians
Correct Answer:- Option-C
Question47:-The purchasing power parity theory is associated with
A:-W. W. Leonitief

B:-Gustav cassel
C:-J. B. Say
D:-Alexander Hamilton
Correct Answer:- Option-B
Question48:-The long run supply curve of a decreasing cost industry under perfect competition is
A:-Horizontal
B:-Vetical
C:-Positively sloped
D:-Negatively sloped
Correct Answer:- Option-D
Question49:-The book 'Development as Freedom' is written by
A:-Jagdish Bhagwati
B:-Amartya Sen
C:-Vakil and Brahmananda
D:-C. Rangarajan
Correct Answer:- Option-B
Question50:-The 'ratchet' effect is related to which of the following consumption hypothesis
A:-Permanant income hypothesis
B:-Life cycle hypothesis
C:-Relative income hypothesis
D:-Absolute income hypothesis
Correct Answer:- Option-C
Question51:-Equal treated equally in taxation leads to
A:-Vertical equity
B:-Horizontal equity
C:-Real equity
D:-None of these
Correct Answer:- Option-B
Question52:-Gilt-edged market deals with
A:-Currency notes
B:-Gold
C:-Silver
D:-Govt. securities
Correct Answer:- Option-D
Question53:-Which one of the following are the cost of inflation ?
A:-Menu costs
B:-Shoe leather costs
C:-Reduction in standard of living
D:-All the above
Correct Answer:- Option-D
Question54:-The ratio of the change in the overall money supply to a given change in the monetary base is called
A:-Money multiplier
B:-Required reserve ratio
C:-Deposit ratio
D:-Income multiplier
Correct Answer:- Option-A
Question55:-If the accommodating capital is zero in the balance of payments of a country, there will be
A:-Deficit in the balance of payments
B:-Surplus in the balance of payment
C:-Equilibrium in the balance of payments
D:-Disequilibrium in the balance of payments
Correct Answer:- Option-C
Question56:-The rate at which RBI borrows from commercial banks is called
A:-Call money rate
B:-Bank rate
C:-Repo rate
D:-Reverse Repo rate
Correct Answer:- Option-D
Question57:-NITI Aayog is a replacement of

A:-Planning Commission
B:-Finance Commission
C:-Social Justice Commission
D:-Poverty Eradication Commission
Correct Answer:- Option-A

Question58:-Which one of the following is not a part of outside money ?
A:-Bank deposit
B:-Currency incirculation
C:-Gold
D:-Foreign exchange
Correct Answer:- Option-A

Question59:-Which of the following is the condition of shut down point of a firm ?
A:-Price equals average total cost
B:-Price equals average variable cost
C:-Price equals average fixed cost
D:-Total cost equals total revenue
Correct Answer:- Option-B

Question60:-The law of increasing state activity was propounded by
A:-Adolf Wagner
B:-Musgrave
C:-Collin Clark
D:-Keynes
Correct Answer:- Option-A

Question61:-Which principle has important bearing on the capital revenue classification ?
A:-Principle of consistency
B:-Principle of full disclosure
C:-Principle of materiality
D:-Principle of conservatism
Correct Answer:- Option-C

Question62:-Which of the following is used for International monetary transfer ?
A:-SWIFT
B:-NEFT
C:-RTGS
D:-None of the above
Correct Answer:- Option-A

Question63:-Who developed the 4Ps of marketing ?
A:-Peter F Drucker
B:-Hanson
C:-McCarthy
D:-Abraham Maslow
Correct Answer:- Option-C

Question64:-Assets appearing in the books but not having any real value are known as
A:-Fictitious assets
B:-Intangible assets
C:-Wasting assets
D:-All the above
Correct Answer:- Option-A

Question65:-Employee morale relates to
A:-Experience
B:-Productivity
C:-Empathy
D:-Attitude
Correct Answer:- Option-D

Question66:-Which of the following documents defines the scope of the company's activities ?
A:-Articles of association
B:-Memorandum of association
C:-Prospectus
D:-Statutory declaration
Correct Answer:- Option-B

Question67:-Which of the following items is not taken into account while computing quick ratio ?
A:-Cash
B:-Bank overdraft
C:-Bank balance
D:-Sundry creditors
Correct Answer:- Option-B
Question68:-The first mutual fund scheme in India was introduced by
A:-Government of India
B:-Reserve Bank of India
C:-Unit Trust of India
D:-State Bank of India
Correct Answer:- Option-C
Question69:-"Student" word may be used for
A:-t-test
B:-Z-test
C:-F-test
D:-None of these
Correct Answer:- Option-A
Question70:-A plan expressed in quantitative terms is known as
A:-Strategy
B:-Policy
C:-Procedure
D:-Budget
Correct Answer:- Option-D
Question71:-For all normal goods, income elasticity of demand is
A:-Negative
B:-Equal to unity
C:-Positive
D:-None of the abve
Correct Answer:- Option-C
Question72:-Goods withdrawn by the proprietor for his personal use are
A:-Added to purchases
B:-Deducted from purchases
C:-Deducted from sales
D:-Treated as sales at cost price
Correct Answer:- Option-B
Question73:-TQM's major emphasis is on
A:-Company profitability
B:-Customer delight
C:-Product quality
D:-Employee training
Correct Answer:- Option-C
Question74:-Packing cost is an item of
A:-Distribution overhead
B:-Factory overhead
C:-Administrative overhead
D:-Selling overhead
Correct Answer:- Option-D
Question75:-Civil liability of a company auditor is for
A:-Negligence
B:-Wilfully making a false statement
C:-Mis-statement in prospectus
D:-All of the above
Correct Answer:- Option-A
Question76:-Pareto's law is concerned with
A:-JIT system
B:-FSN analysis
C:-VED analysis
D:-ABC analysis

Correct Answer:- Option-D

Question77:-A company can purchase its own

A:-Equity shares

B:-Preference shares

C:-Debentures

D:-All the above

Correct Answer:- Option-D

Question78:-360 degree method relates to

A:-Organization climate

B:-Performance appraisal

C:-Employee morale

D:-Retrenchment

Correct Answer:- Option-B

Question79:-Which of the following is not a capital asset under capital gains head of income ?

A:-Stock in trade

B:-Goodwill of the business

C:-Agricultural land in Thiruvananthapuram city

D:-Jewellery

Correct Answer:- Option-A

Question80:-Garner vs Murray relates to

A:-Deficiency

B:-Insolvency

C:-Contract

D:-Hire purchase

Correct Answer:- Option-B

Question81:-Independent events A and B would be consistent with which of the following statements

A:-P(A) = .3, P(B) = .5, P(A ` nn` B) = .4

B:-P(A) = .4, P(B) = .5, P(A ` nn` B) = .2

C:-P(A) = .5, P(B) = .4, P(A ` nn` B) = .3

D:-P(A) = .4, P(B) = .3, P(A ` nn` B) = .5

Correct Answer:- Option-B

Question82:-If each of two independent file servers has a reliability of 93% and either alone can run the web site, then the overall web site availability is

A:-0.9951

B:-0.8649

C:-0.9300

D:-0.9522

Correct Answer:- Option-A

Question83:-A major airline company is concerned that its proportion of late arrivals has substantially increased in the past month. Historical data shows that on the average 18% of the company airplanes have arrived late. In a random sample of 1240 airplanes, 310 airplanes have arrived late. If we are conducting a hypothesis test of a single proportion to determine if the proportion of late arrivals has increased. What is the value of the calculated test statistic ?

A:-3.208

B:-6.416

C:--3.208

D:--6.416

Correct Answer:- Option-B

Question84:-The owner of a fish market has an assistant who has determined that the weights of catfish are normally distributed, with a mean of 3.2 pounds and standard deviation of 0.84 pounds. If a sample of 16 fish is taken, what would the standard error of the mean weight equal ?

A:-0.200

B:-0.053

C:-0.210

D:-0.800

Correct Answer:- Option-C

Question85:-A type I error occurs when we

A:-Reject a false null hypothesis

B:-Reject a true null hypothesis

C:-Don't reject a false null hypothesis

D:-Don't reject a true null hypothesis

Correct Answer:- Option-B

Question86:-We have created a 95% confidence interval population mean for with the result (8, 13).
What conclusion will we make if we test `H_(0)` : population mean = 15 vs. `H_(1)` : population mean `!=` 15 at alpha = 0.05 ?

A:-Reject `H_(0)` in favor of `H_(1)`

B:-Accept `H_(0)` in favor of `H_(1)`

C:-Fail to reject `H_(0)` in favor of `H_(1)`

D:-We cannot tell what our decision will be from the information given.

Correct Answer:- Option-A

Question87:-Given the correlation coefficient measuring the association between X and Y is 0.70, what can you say about the coefficient of determination ?

A:-0.49

B:-0.70

C:-0.90

D:-Cannot be determined

Correct Answer:- Option-A

Question88:-According to a survey of the top 10 employers in a major city in the Midwest, a worker spends an average of 413 minutes a day on the job. Suppose the standard deviation is 25 minutes and the time spent is approximately a normal distribution. What are the times that approximately 95.45% of all workers will fall ?

A:-[388 438]

B:-[338 488]

C:-[363 463]

D:-[338 438]

Correct Answer:- Option-C

Question89:-When using the normal distribution to obtain the bounds for a 99.73 percent of the values in a population, the interval generally will be _____ the interval obtained for the same percentage if Chebyshev's theorem is assumed (empirical rule).

A:-Wider than

B:-Narrower than

C:-The same as

D:-Greater than or less than (depending on the size of the SD)

Correct Answer:- Option-A

Question90:-Suppose a package delivery company purchased 14 trucks at the same time. Five trucks were purchased from manufacturer A, four from B and five from manufacturer C. The cost of maintaining each truck was recorded. The company used ANOVA to test if the mean maintenance cost of the trucks from each manufacturer were equal. To apply the F test, how many degrees of freedom are in the denominator ?

A:-2

B:-3

C:-11

D:-14

Correct Answer:- Option-C

Question91:-The chi-square distribution can assume

A:-Only positive values

B:-Only negative values

C:-Negative and positive values or zero

D:-Only zero

Correct Answer:- Option-A

Question92:-A regression equation was computed to be Y = 35 + 6X. The value of the 35 indicates that

A:-A regression line crosses the Y axis at 35

B:-The coefficient of correlation is 35

C:-The coefficient of determination is 35

D:-An increase of one unit of X will result in an increase of 35 in Y

Correct Answer:- Option-A

Question93:-Until this year the mean braking distance of a Nikton automobile moving at 60 miles per hour was 175 feet. Nikton engineers have developed what they consider a better braking system. They test the new brake system on a random sample of 64 cars and determine the sample mean braking distance x = 167 feet (assume the population standard deviation is known to be 32 feet). How many cars should be tested if Nikton wants to be 95% confident of being within 1 foot of the population mean braking distance ?

A:-4194

B:-3934

C:-3216

D:-3016

Correct Answer:- Option-B

Question94:-When carrying out a large sample test of `H_(0)` : `mu` 10 vs. `H_(a)` : `mu` ``> 10 by using a critical value, we reject `H_(0)` at level of significance `alpha` when the calculated test statistic is

A:-Less than `z_(alpha)`

B:-Less than `-z_(alpha)`

C:-Greater than `z_(alpha/2)` ``

D:-Greater than `z_(alpha)`

Correct Answer:- Option-D

Question95:-If the standard deviation of a set of scores is 7.5, what would the value of the standard deviation become if 5 points were added to every score in the set ?

A:-37.5

B:-12.5

C:-Cannot be determined without further information

D:-Stay the same

Correct Answer:- Option-D

Question96:-The distribution of salaries for most business is known to be skewed to the right or positively skewed. Which of the following would be the BEST measure to determine the location of the center of the distribution ?

A:-Variance

B:-Median

C:-Mode

D:-Mean

Correct Answer:- Option-B

Question97:-According to a recent survey approximately 25% of all college students work full time (that is, there is 0.25 probability for any given student to work full time). If the random variable X represents the number of students who work full time in samples of size 10, what is the expected value of X ?

A:-2.0

B:-2.5

C:-3.0

D:-More information is needed

Correct Answer:- Option-B

Question98:-To determine if a diet supplement is useful for increasing weight, patients are weighed at the start of the program and at the end of the program. This is an example of a(n)

A:-Test of paired differences

B:-Independent sample

C:-One-sample test for means

D:-Two-sample test for means

Correct Answer:- Option-A

Question99:-Suppose we are testing the difference between two proportions at the 0.05 level of significance. If the computed Z is -1.07, what is our decision ?

A:-Reject the null hypothesis

B:-Do not reject the null hypothesis

C:-Take a larger sample

D:-Reserve judgement

Correct Answer:- Option-B

Question100:-Using two independent samples, two population means are compared to determine if a difference exists.The number in the sample is fifteen and the number in the second sample is twelve. How many degrees of freedom are associated with the critical value ?

A:-24

B:-25

C:-26

D:-27

Correct Answer:- Option-B