Register Number ⬚⬚⬚⬚⬚⬚⬚⬚⬚

Paper I

[Comprising Ten Subjects]

(P.G. Degree Standard)

Time Allowed : 3 Hours]   **[Maximum Marks : 300**

Read the following instructions carefully before you begin to answer the questions.

IMPORTANT INSTRUCTIONS

1.   This Booklet has a cover (this page) which should not be opened till the invigilator gives signal to open it at the commencement of the examination. As soon as the signal is received you should tear the right side of the booklet cover carefully to open the booklet. Then proceed to answer the questions.

2.   This Question Booklet contains **200** questions. Prior to attempting to answer the candidates are requested to check whether all the questions are there in series without any omission and ensure there are no blank pages in the question booklet. In case any defect in the Question Paper is noticed it shall be reported to the Invigilator within first 10 minutes.

3.   Answer all questions. All questions carry equal marks.

4.   You must write your Register Number in the space provided on the top right side of this page. Do not write anything else on the Question Booklet.

5.   An Answer Sheet will be supplied to you separately by the Invigilator to mark the answers.

6.   You will also encode your Register Number, Subject Code, Question Booklet Sl. No. etc. with Blue or Black ink Ball point pen in the space provided on the side **2** of the Answer Sheet. If you do not encode properly or fail to encode the above information, action will be taken as per commission's notification.

7.   Each question comprises *four* responses (A), (B), (C) and (D). You are to select ONLY ONE correct response and mark in your Answer Sheet. In case you feel that there are more than one correct response, mark the response which you consider the best. In any case, choose ONLY ONE response for each question. Your total marks will depend on the number of correct responses marked by you in the Answer Sheet.

8.   In the Answer Sheet there are **four** circles Ⓐ, Ⓑ, Ⓒ and Ⓓ against each question. To answer the questions you are to mark with Blue or Black ink Ball point pen ONLY ONE circle of your choice for each question. Select one response for each question in the Question Booklet and mark in the Answer Sheet. If you mark more than one answer for one question, the answer will be treated as wrong. *e.g.* If for any item, Ⓑ is the correct answer, you have to mark as follows :

Ⓐ ● Ⓒ Ⓓ

9.   You should not remove or tear off any sheet from this Question Booklet. You are not allowed to take this Question Booklet and the Answer Sheet out of the Examination Hall during the examination. After the examination is concluded, you must hand over your Answer Sheet to the Invigilator. You are allowed to take the Question Booklet with you only after the Examination is over.

10.   The sheet before the last page of the Question Booklet can be used for Rough Work.

11.   Failure to comply with any of the above instructions will render you liable to such action or penalty as the Commission may decide at their discretion.

12.   Do not tick-mark or mark the answers in the Question booklet.

◆

1. A researcher who gain some systematic knowledge of the universe and its population on which he based his research before the complete study is called

   (A)   sample study   (B)   pilot study

   (C)   census study   (D)   survey study

2. Many scholarly research works have a brief list of references, called

   (A)   Selected Bibliography

   (B)   Annotated Bibliography

   (C)   Pertinent Bibliography

   (D)   Working Bibliography

3. During the 11th Five Year Plan, the Planning Commission has fixed the target of

   (A)   6 percent rate of growth in agriculture

   (B)   4 percent rate of growth in agriculture

   (C)   4.9 percent rate of growth in agriculture

   (D)   0.5 percent rate of growth in agriculture

4. Which one of the following statement is true?

   (A)   An increase in project scope is likely to increase the project cost

   (B)   A decrease in the project time is likely to increase project quality

   (C)   An increase in the project quality requirements is likely to decrease project cost

   (D)   A decrease in the project cost is likely to decrease project time

5. Which of the following is not part of "India Renewable Resources Development Project"?

   (A)   Wind-Farm Development Project

   (B)   Photo-Voltaic Market Development Project

   (C)   Small Hydro-Power Development Project

   (D)   Ethanol Development Project

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6. A person is said to be an employed on a standard person year basis, if he works for

   (A) 8 hours a day for 273 days of the year

   (B) 8 hours a day for 300 days of the year

   (C) 8 hours a day for 365 days of the year

   (D) 8 hours a day for 265 days of the year

7. According to the final poverty line and poverty head count ratio for (2009-10) which state has the highest number of population living below poverty line?

   (A) Chhatisgarh   (B) Manipuri

   (C) Bihar   (D) Orissa

8. The cannons of public expenditure are

   (A) cannons of benefit, economy, sanction and elasticity

   (B) cannon of productivity, deficit, equitable distribution and inelasticity

   (C) cannons of justice, equal distribution, economy and flexibility

   (D) cannons of productivity, social advantage, reducing poverty and flexibility

9. To standardize a variable you

   (A) subtract its mean and divide by its standard deviation

   (B) integrate the area below two points under the normal distribution

   (C) add and subtract 1.96 times the standard deviations to the variable

   (D) divide it by its standard deviation, as long as its mean is 1

10. Logit values of logit model

    (i) are linear function of independent variables

    (ii) are varying between $-\infty$ to $+\infty$

    (iii) are log values of odds ratio

    (A) only (i) is correct

    (B) only (i) and (ii) are correct

    (C) all (i), (ii) and (iii) are correct

    (D) all (i), (ii) and (iii) are incorrect

11. The term 'Regression' was introduced by

   (A)   Karl Pearson   (B)   Ragnar Frisch

   (C)   Francis Galton   (D)   John Maynard Keynes

12. Which of the following about the measurement of variables is not true?

   (A)   Nominal scale only involve the assignment of numbers and not alphabets or symbols as value

   (B)   Ordinal scale assigns numbers to indicate relative position of preferences

   (C)   Numbers assigned in nominal scale merely indicates a label for different categories

   (D)   Rates and differences are possible in scale measurement

13. Which of the following assumption(s) is/are required to show unbiasedness and efficiency of OLS estimates?

   (i) $\mathrm{var}(u_t) = \sigma^2$, a constant and $E(u_t) = 0$ for all t

   (ii) $\mathrm{cov}(u_t, u_{t-j}) = 0$ for all values of $j \neq 0$

   (iii) $\mathrm{cov}(u_t, x_t) = 0$

   (iv) $u_t \sim N(0, \sigma^2)$ i.i.d for all t

   (A)   (i) and (ii) only   (B)   (iv) only

   (C)   (i) and (iii) only   (D)   (i), (ii) and (iii)

14. —————— is the most popular non-parametric test of significance in social science research.

   (A)   t-test   (B)   F-test

   (C)   Chi-square test   (D)   Correlation

15. The Gauss Markov theorem stated as follows :

   (A)   The regression model is unbiased

   (B)   Given the assumptions of the CLRM the least square estimators are efficient.

   (C)   Given the assumptions of CLRM, the least square estimators, in the class of unbiased linear estimators, have minimum variance (BLUE)

   (D)   Give the assumption of CLRM are linear

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16. Match the List I and List II and choose the correct code given below :

List I

(a) Time series
(b) Additive model
(c) Measurement of trend
(d) Seasonal variation

List II

1. weather and social custom
2. T+S+C+I
3. chronological order of measure
4. moving average method

	(a)	(b)	(c)	(d)
(A)	3	2	1	4
(B)	3	2	4	1
(C)	3	4	1	2
(D)	3	1	4	2

17. In a multiple linear regression, what means homoscedasticity of the error term?

(A) All the error term U_i have the same variance across all observations $i = 1, 2, ...n$

(B) The regressions have each the same variance across all random observations $i = 1, 2, ...n$

(C) Two error term U_i and U_j with $i \neq j$ have always a different variance for $i = 1, 2, ...n$

(D) The error term U_i do not have same variance across all $i = 1, 2, ...n$

18. In a randomized controlled experiment

(A) there is a control group and a treatment group

(B) you control for random answers

(C) the control group receives treatment on even days only

(D) you control for the effect of random numbers are not truly randomly generated

19. Which of the following is NOT a reason for heteroscedasticity?

(A) The phenomena of error learning

(B) The presence of outliers

(C) The misspecification of the model

(D) The even distribution of values of dependent / outcome variables

20. Find the odd one out from the following

(A) Random walk without Drift

(B) Random walk with Drift

(C) Random walk with Drift and Trend

(D) White noise

21. Indemnity is calculated based on the formula

(A) Indemnity = Threshold yield × Sum insured

(B) Indemnity = $\dfrac{\text{Shortfall in the yield of the crop}}{\text{Threshold yield of the crop}}$ × Sum insured

(C) Indemnity = Economic yield − Threshold yield

(D) Indemnity = (Economic yield − Threshold yield) × Sum insured

22. ――――――― is known as marginal efficiency of capital or yield on the investment.

(A) Financial rate of return

(B) Net present value

(C) Average rate return

(D) Internal rate of return

23. The marginal rate of technical substitution between two perfect substitute factors is

(A) constant

(B) less than one

(C) greater than one

(D) equal to zero

24. Match the following List I and List II and select the correct pair :

    List I

    (a) Average fixed cost

    (b) Average variable cost

    (c) Long run average cost

    (d) Average cost

    List II

    (i) cost of production

    (ii) planning curve

    (iii) reciprocal of APP

    (iv) rectangular hyperbola

(A) (a) – (iv) (b) – (ii) (c) – (i) (d) – (iii)

(B) (a) – (iii) (b) – (iv) (c) – (ii) (d) – (i)

(C) (a) – (iv) (b) – (iii) (c) – (ii) (d) – (i)

(D) (a) – (ii) (b) – (i) (c) – (iv) (d) – (iii)

25. Linking together of two or more functions in the marketing process within a single firm or under a single ownership is called as

(A) Horizontal integration

(B) Vertical integration

(C) Ownership integration

(D) Contract integration

26. The following one is a renewable resource

(A) Iron and Granite

(B) Fish and trees

(C) Aluminium and trees

(D) Trees and petroleum

27. Which of the following is a debit entry in a country's balance of payments accounts?
    (A) Inflow of capital from abroad
    (B) Imports of goods and services
    (C) Exports of goods and services
    (D) Transfer receipt from a friendly country

28. In correlation analysis we measure the
    (A) Degree of linear association between two variables
    (B) Degree of causation between two variables
    (C) Predictability of the two variables
    (D) Regression between the two variables

29. If, in a data, collected for several companies over a number of years, has the same number of observations for each company, it is called as
    (A) Unbalanced panel data
    (B) Balanced panel data
    (C) Micro panel data
    (D) Longitudinal data

30. Dantzig developed the most powerful mathematical tool to solve linear programming problem is known as
    (A) Simplex method
    (B) Regression analysis
    (C) Correlation analysis
    (D) Complex method

31. If G is a group of even order, for every $a \neq e$ if $a^2 = e$ then G is
    (A) Abelian group
    (B) Sub group
    (C) Normal sub group
    (D) Quotient sub group

32. Let G be the group of integers under addition, H_n the subgroup consisting of all multiples of a fixed integer 6 in G. Then the index of H_6 in G is
    (A) ∞
    (B) 2
    (C) 3
    (D) 6

33. If M and N are two normal subgroups of a group G and $M \cap N = (e)$, then for any $n \in N, m \in M$,
    (A) $n + m = m + n$
    (B) $nm = mn$
    (C) $n + m \neq m + n$
    (D) $nm \neq mn$

34. The particular integral of $(D^2 - 2D + 1)y = xe^x \sin x$ is

(A) $e^x[-x\sin x - 2\cos x]$ (B) $e^{-x}[x\sin x + 2\cos x]$

(C) $e^x[2\sin x + x\cos x]$ (D) $e^{-x}[2\sin x - x\cos x]$

35. The alternating series $\sum_{n=1}^{\infty} \frac{(-1)^{n+1}}{n}$ is

(A) Neither convergent nor absolutely convergent

(B) Not convergent but it is absolutely convergent

(C) Convergent but it is not absolutely convergent

(D) Convergent and also absolutely convergent

36. The series $\sum_{n=1}^{\infty} (-1)^{n-1} \sin\left(\frac{1}{n}\right)$ is

(A) Convergent and absolute convergent

(B) Divergent

(C) Convergent but not absolute convergent

(D) Convergent and not conditionally convergent

37. The sum of the series

$1 - \frac{1}{2} - \frac{1}{4} + \frac{1}{3} - \frac{1}{6} - \frac{1}{8} + \frac{1}{5} - \frac{1}{10} - \frac{1}{12} + \dots$ is

(A) $\frac{1}{2} \log 2$

(B) $\log 2$

(C) $2 \log 2$

(D) $\log \frac{1}{2}$

38. A harmonic function satisfies the differential equation

(A) $\frac{\partial^2 u}{\partial z \, \partial \bar{z}} = 0$ (B) $\frac{\partial^2 u}{\partial z^2} = 0$

(C) $\frac{\partial u}{\partial \bar{z}} = 0$ (D) $\frac{\partial u}{\partial z} = 0$

39. The measure of central tendency which remains unaltered by extreme observations is

(A) Mean
(B) Median
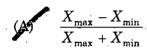(C) Mode
(D) Geometric mean

40. An average rainfall of a city from Monday to Saturday is 0.3 inch. Due to heavy rainfall on Sunday, the average rainfall for the week increased to 0.5 inch. What was the rainfall on Sunday?

(A) 7.1 inch
(B) 5.1 inch
(C) 1.7 inch
(D) 8.1 inch

41. Formula for coefficient of range of the set of observations $X_1 .... X_n$ is

(A) $\dfrac{X_{max} - X_{min}}{X_{max} + X_{min}}$
(B) $\dfrac{X_{max} + X_{min}}{X_{max} - X_{min}}$

(C) $\dfrac{X_{max}}{X_{min}}$
(D) $\dfrac{X_{max} - X_{min}}{X_{max}}$

42. An important characteristic of measures of dispersion is

(A) Simple to calculate

(B) Single value is representative of the group of data

(C) Peaked of a curve

(D) Judge the reliability of measures of central tendency

43. Three urns of same appearance have the following proportion of balls.

First urn   :   2 black, 1 white

Second urn   :   1 black, 2 white

Third urn   :   2 black, 2 white

One of the urns is selected and one ball is drawn. It turns out to be white. What is the probability of drawing a white ball again, the first one not having been returned?

(A) 1/3
(B) 2/3
(C) 1/2
(D) 3/2

44. The standard deviation of the sampling distribution is called

    (A) σ -sigma

    (B)   Coefficient of variation

    (C)   Standard error

    (D)   Sampling error

45. The standard error of the statistic median is

    (A) $0.50\ \sigma/\sqrt{n}$

    (B) $1.25331\ \sigma/\sqrt{n}$

    (C) $1.55113\ \sigma/\sqrt{n}$

    (D) $2\ \sigma/\sqrt{n}$

46. The first unit is selected by simple random sampling and other units depends on the first unit is related to

    (A)   Simple random sampling

    (B)   Stratified sampling

    (C)   Systematic sampling

    (D)   Cluster sampling

47. Probability of reject H0 when H0 true is called

    (A)   Power of the test

    (B)   Most powerful test

    (C)   Unbiased test

    (D)   Level of significance

48. The error of accepting null hypothesis when H0 is false is

    (A)   Type-I error

    (B)   No error

    (C)   Standard error

    (D)   Type-II error

49. An appropriate test available for sample size 250 is

    (A)   t-test

    (B)   Chi-square test

    (C)   F-test

    (D)   Normal test

50. One of the assumption of ANOVA is

    (A)   Ratio of two variances

    (B)   Observation taken is not a normal

    (C)   Means are all not equal

    (D)   The observations are independent

51. Vertical communication means exchange of communication between

    (A)   Two persons of head of the dept.

    (B)   Within department

    (C)   Superior to subordinates

    (D)   Company to company

52. Sensitivity training is also known by the name

    (A)   Laboratory training

    (B)   Apprenticeship training

    (C)   Vestibule training

    (D)   Job instruction training

53. The Leadership style which is based on consultations with this group is called

    (A)   Democratic style .   (B)   Autocratic style

    (C)   Authoritarian style   (D)   Free rein style

54. EBIT stands for

    (A)   Earnings Before Interest and Tax

    (B)   Earnings Before Income and Tax

    (C)   Earnings Before Investment and Tax

    (D)   Enabling Bio analytical and Imaging Technologies

55. _____ cost refers to the cost which has already been incurred in order to finance a particular project.

    (A)   Explicit   (B)   Implicit

    (C)   Historical   (D)   Average Cost

56. A _____ is an unfavourable condition in the organisation environment which may create risk or damage the organisation.

    (A)   Weakness   (B)   Strength

    (C)   Threat   (D)   Opportunity

57. Which one is not a component of information system?

(A) Computer hardware

(B) Computer software

(C) Data storage devices

(D) Astrology information.

58. DBMS stands for

(A) Database Managing System

(B) Database Management System

(C) Database Management Structure

(D) Document Based Management System

59. MIS and DSS are

(A) Same

(B) DSS is part of MIS

(C) MIS is part of DSS

(D) No relativity

60. A ——————— is the largest, fastest, most powerful and most expensive computer that can perform very complex computation involving hundreds of thousands of variable factors.

(A) Analog computers

(B) Digital computers

(C) Super computers

(D) Mainframe computers

61. Under ——————— the development of an information system starts from the Identification of organisational objectives, its environment and constraints under which it operates.

(A) Bottom-up approach

(B) Top-down approach

(C) Integrative approach

(D) Modular approach

62. Who said: "Administration is the organisation and direction of human and material resources to achieve desired ends"?

(A) Marx

(B) Woodrow Wilson

(C) J.M. Pfiffner

(D) L.D. White

63. Which of the following is not the work of Elton Mayo?

(A) The Social problems of an Industrial civilization

(B) The Human problems of an Industrial civilization

(C) The Economic problems of an Industrial civilization

(D) The Political problems of an Industrial civilization

64. The National Academy of Administration was established at Mussoorie in the year

(A) 1957   (B) 1958

(C) 1959   (D) 1960

65. The primary objective of judicial control over administration is

(A) To restrict the discretion and arbitrariness of administrative agencies

(B) To help in redressing the grievances of citizens

(C) To safeguard the rights and liberties of the citizens

(D) To contain and penalise the wrongful acts of government officials

66. Consider the following statements.

Assertion (A) : A civil Servant should act without fear and favour

Reason (R) : In no case, he should not usurp the powers of the political executive

(A) (A) and (R) are true, (R) is the correct explanation of (A)

(B) Both (A) and (R) are true, but (R) is not the explanation of (A)

(C) (A) is true (R) is false

(D) (A) is false (R) is true

67. Panchayati Raj is the three tier structure of the rural local government at

(A) The Village level

(B) The Taluka level

(C) The District level

(D) The Village, Taluka and District level

68. Which article of the Indian Constitution provides for a Finance Commission?

(A) Art. 270   (B) Art. 280

(C) Art. 290   (D) Art. 240

69. Which amendment act made major changes in the scheme of distribution of tax revenue between the centre and the state? It was also known as Alternative scheme of devolution.

(A) 69th Amendment Act
(B) 72nd Amendment Act
(C) 80th Amendment Act
(D) 86th Amendment Act

70. Which amendment act aimed at decentralising the responsibility for urban management by increasing the participation of the people and accountability in administration?

(A) The 72nd Amendment Act
(B) The 73rd Amendment Act
(C) The 74th Amendment Act
(D) The 75th Amendment Act

71. The method that starts with formulation of hypothesis and testing of hypothesis in sequential steps where deduction is applied to

(A) Inductive
(B) Deductive
(C) Applied
(D) Hypothetic-deductive

72. Who was the proponent of deductive method?

(A) Francis Bacon
(B) Christian Huygenes
(C) Aristotle
(D) Issac Newton

73. Which of the following type of research design provides describing the factual information for investigation?

(A) Diagnostic Research Design
(B) Experimental Research Design
(C) Exploratory Design
(D) Descriptive Research Design

74. ———— designs attempt to provide maximum control for threats to internal validity.

(A) Experimental
(B) Exploratory
(C) Diagnostic
(D) Descriptive

75. ———— is the summary description of a given variable in a population.

(A) Sampling frame
(B) Research design
(C) Sampling
(D) Parameter

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76. ——————— estimates both direct and indirect costs of a project to the society.

(A) Social Cost Benefit analysis

(B) Community impact assessment

(C) Demand analysis

(D) Vulnerability assessment

77. ——————— is a method of taking user needs into account when designing GIS project.

(A) Demand analysis   (B) Proto typing

(C) Problem tree   (D) Protocol design

78. A project manager is using weighted average duration estimates to perform schedule network analysis. Which type of mathematical analysis is being used?

(A) Critical path method   (B) PERT

(C) Monte Carlo   (D) Resource leveling

79. Which of the following, two activity times and two costs are specified?

(A) PERT   (B) CPM

(C) Monte Carlo   (D) PCMM

80. Which of the following is integral to the community impact assessment process?

(A) Media involvement   (B) Private involvement

(C) Public involvement   (D) Universal involvement

81. "Building a wall to avoid the floor water" is an example of which of the following?

(A) Sacred cow   (B) Competitive necessity

(C) Product line extension   (D) Operating necessity

82. Sociology is a science committed to

(A) Political reconstruction

(B) Social reconstruction

(C) Religious reconstruction

(D) Economic reconstruction

83. The belief that methods of natural sciences are applicable in the study of human behaviours is termed as

(A) Empiricism

(B) Symbolic Interactionism

(C) Positivism

(D) Functionalism

84. In what way, the tribal will benefit from the developmental programmes?

(A) Assimilation, Isolation and Integration

(B) Welfare measures, Tribal Panchasheela and committees for improvement

(C) Educational facility, medical facility and constitutional safeguards

(D) Research on problems of Tribals, Role of NGOs in the welfare of tribals and Role of the ministry of Home Affairs.

85. In a Matriarchal family system authority rests with

(A) Mother

(B) Maternal uncle

(C) Father

(D) Son

86. A worker who is not directly recruited by the employer and directly paid by the employer is called as

(A) Contract Labour

(B) Migrant Labour

(C) Bonded Labour

(D) Unpaid Labour

87. ———— reacted against the rapid invasion of western ideas and Christianity and wanted to revive Hinduism.

(A) Arya Samaj

(B) Prarthana Samaj

(C) Sufism

(D) Theosophical movement

88. A social movement which bring changes in the 'value system' and stating hierarchy with out necessarily changing the power relations is called as

(A) Revolutionary movement

(B) Utopian movement

(C) Reform movement

(D) Revivalistic movement

89. The first step to data preparation includes

    (A)   Displaying

    (B)   Editing and Coding

    (C)   Examining data

    (D)   Data mining

90. When social behaviour is studied and understood in a rational scientific manner, it is called

    (A)   Positivism   (B)   Dialectical Materialism

    (C)   Interactionism   (D)   Empiricism

91. Chalcolithic age is also known as

    (A)   Iron age   (B)   Stone age

    (C)   Neolithic age   (D)   Copper age

92. The Harappan people were using

    (A)   Dravidian language   (B)   Persian language

    (C)   Semitic language   (D)   Austric language

93. The other name for the Oraon tribe.

    (A)   Munda   (B)   Kurukh

    (C)   Savaka   (D)   Bhil

94. Match the following :

    I.   Todas   (a)   Mandelbaum

    II.   Kurumbas   (b)   Kamil Zvelebil

    III.   Irulas   (c)   Nurit Bird

    IV.   Kotas   (d)   W.H.R. Rivers

    (A)   I-d,   II-c,   III-b,   IV-a

    (B)   I-a,   II-b,   III-c,   IV-d

    (C)   I-b,   II-c,   III-d,   IV-a

    (D)   I-c,   II-a,   III-b,   IV-d

95. Multi-sited Ethnography refers to

(A) fieldwork in the village

(B) fieldwork in urban space

(C) multiple physical locations that a fieldworker goes to collect data

(D) literature on ethnography

96. Artifacts are

(A) the objects that people made and used

(B) the artistic facts and features of the people

(C) the prehistoric art forms

(D) non-portable objects created by humans

97. Among the following one is wrongly matched. Identify.

(A) Cultural Relativism — understanding another culture in terms of its own

(B) Culture shock — the initial confusion one feels when he encounters the other culture

(C) Ethnocentrism — the attitude that one's own culture is the best

(D) Acculturation — the process by which a person learns his culture

98. What is the correct order of process of cultural evolution?

(A) Savagery, Barbarism, Civilization

(B) Civilization, Savagery, Barbarism

(C) Barbarism, Civilization, Savagery

(D) Savagery, Civilization, Barbarism

99. Sororate

(A) A marriage practice in which the brother of a deceased man is expected to marry his brother's widow

(B) A marriage practice in which the brother marries his elder sister's daughter

(C) A marriage practice in which a woman is expected to marry the husband of her sister in the event of the married sister's death

(D) A marriage practice in which a woman is expected to marry the husband of her father's sister

100. Which one of the following is primary source of data?

    (A) Census   (B) Govt. publications

    (C) Personal Records   (D) Questionnaire

101. If the significance level is 5 percent and the probability of its rejection area is 0.05 equally splitted on a normal curve as 0.025, then the test is

    (A) one-tailed test   (B) two-tailed test

    (C) three-tailed test   (D) four-tailed test

102. The nature of enquiry in Direct Personal Observation is

    (A) Intensive   (B) Extensive

    (C) Casual   (D) Easy

103. When the informant is reluctant to supply information, the right type of Data collection is

    (A) Mailed questionnaire method   (B) Direct interview method

    (C) Indirect oral interview method   (D) Census method

104. The Questionnaire method is employed where the respondents are

    (A) Scattered over wide area   (B) Concentrated in one area

    (C) Illiterate   (D) Very young

105. Which of the following is not a published source?

    (A) RBI Bulletin   (B) IMF Development Report

    (C) Reports of Commissions   (D) Personal Diary

106. Published records are the dependable and reliable source of data. Which one of the following is not a published record?

    (A) Film   (B) Personal life history

    (C) Television   (D) Radio

107. A detailed report of a specialist to the participating member of the research team is called

    (A) Popular report   (B) Report for the administrator

    (C) Technical report   (D) Written report

108. The genealogical method in Anthropology was invented by

(A) W.H.R. Rivers

(B) Henry Morgan

(C) E.B. Tylor

(D) Franz Boas

109. The Golden Quadrilateral connects

(A) Delhi, Mumbai, Chennai, Kolkatta

(B) East West North South

(C) Kanyakumari and Kashmir

(D) Delhi and Mumbai

110. The major objectives of the "National Investment Fund" (2007) are

(A) To invest the proceeds in social sectors and finance the capital projects in potentially profitable PSUs

(B) To uplift the sick-units of PSU and build new PSUs

(C) None of the above

(D) Option (A) and (B)

111. Match the following schemes with its aim and pick the correct response.

(a) Marginal farmers and agricultural labourers

(b) Small farmers development agency

(c) Agro-service centres

(d) Area development schemes

1. Credit for the use of latest technology

2. Development of adequate infrastructural facilities

3. Credit support for agricultural and subsidiary occupations

4. Credit for self employment of diploma holders

	(a)	(b)	(c)	(d)
(A)	2	4	3	1
(B)	1	3	2	4
(C)	3	1	4	2
(D)	3	2	1	4

112. Co-efficient of correlation
   (i)   cannot be less than zero
   (ii) can be more than one
   (iii) can vary between −1 and +1
   (iv) is not restricted by value, can take any value

   (A) (i) only   (B) (i) and (ii) only
   (C) (iii) only   (D) (ii) and (iv) only

113. Choose the correct match with List I and List II :

   List I   List II
   (a) Exclusion of important variable   1. Lag correlation of a given series with itself
   (b) Serial correlation   2. Lag correlation between two different series
   (c) Auto correlation   3. Supply reacts to price change with a lag of
                                              time period
   (d) Cobbweb phenomenon   4. Specification bias

         (a)   (b)   (c)   (d)
   (A)   4   2   1   3
   (B)   4   3   1   2
   (C)   4   2   3   1
   (D)   2   3   4   1

114. What could be the consequence for the OLS estimation if autocorrelation is present in a regression model but ignored?
   (i)   It will be biased
   (ii)   It will be inconsistent
   (iii) It will be inefficient

   (A) (i), (ii) and (iii)   (B) (iii) only
   (C) (i) and (ii) only   (D) (ii) and (iii) only

115. In time series analysis both trends and seasonal variations are studied because they
   (A) Describe past patterns
   (B) Allow projections into the future
   (C) Allow the elimination of the component from the series
   (D) Trend

116. Which of the following is true concerning a standard regression model?

(A) For an adequate model, the residual will be zero for all sample data points

(B) The stochastic error term is not correlated with the independent variables

(C) The stochastic error term has heteroscedastic variance

(D) The stochastic error has no autocorrelation

117. For a regression model $\hat{Y} = \alpha + \beta X$, $\Sigma x_i^2 = 50$, $\Sigma x_i y_i = 25$ is computed for a sample of size 25. The lower case $x_i = X_i - \overline{X}$ and $y_i = Y_i - \overline{Y}$ indicate the deviation values. The OLS estimate of β is

(A) 2

(B) $\dfrac{1}{2}$

(C) 1

(D) cannot be found

118. Presume that for the following linear regression model all the OLS assumptions are confirmed. Which of the following is true?

$$\hat{Y}_t = \underset{(1.22)}{6.682} - \underset{(1.333)}{4.318 X_t} \Bigg| R^2 = 0.98$$

The standard error of the respective parameters are given in brackets.

(A) At 5% level, only intercept is significant

(B) At 5% level, only slope co-efficient is significant

(C) At 5% level, both slope coefficient and intercept are significant

(D) At 5% level, neither of the estimates are significant

119. The fundamental weakness of Linear Probability model is that

(A) it assumes error term in binomial distribution

(B) it assumes that the probability of something happening increases linearly with the level of regressor

(C) it assumes that probability of happening non-linear

(D) it assumes that regress and as binary

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120. A good with an income elasticity less than one and which claims declining proportion of consumer's income as he becomes richer is called as

   (A)   necessity   (B)   comfort

   (C)   luxury   (D)   inferior good

121. Under ——————— act RBI empowers to issue directives to the banking companies regarding their advances

   (A)   Banking regulation act 1952, section 21

   (B)   Banking regulation act 1949, section 21

   (C)   Banking regulation act 1949, section 22

   (D)   Banking regulation act 1952, section 22

122. Given the statement and reason, select correct answer :

   Statement :   Demand curve facing a monopolist is downward sloping and has a steep slope

   Reason :   The expansion and contraction in output of the product by a monopolist will considerably affect the price of the product

   (A)   Statement is true, Reason is wrong

   (B)   Statement is wrong, Reason is true

   (C)   Statement and Reason are wrong

   (D)   Statement and Reason are true

123. ——————— prices are announced by the Government of India for different agricultural crops before the start of the sowing season of the crop.

   (A)   minimum support price   (B)   procurement price

   (C)   issue price   (D)   statutory price

124. The objective of fifth five year plan is

   (A)   establishment of self reliant and self generating economy

   (B)   progressive achievement of self reliance

   (C)   growth with stability

   (D)   removal of poverty and attainment of self reliance

125. According to UN report, India ranks ———————— place in a list of 180 countries for its poor water availability.

    (A)   130th   (B)   131st

    (C)   133rd   (D)   132nd

126. According to Comte, the intellectual evolution is the most important aspect for

    (A)   human progress

    (B)   social system progress

    (C)   economic system progress

    (D)   political system progress

127. 'Tragedy of commons' was described by

    (A)   Garret Hardin   (B) Adam Smith

    (C)   Ricardo   (D) Marshall

128. The following one is a correct answer.

    (A)   Waste disposal cost = Pollution prevention cost + Welfare damage cost

    (B)   Waste disposal cost = Pollution cost + Welfare damage cost

    (C)   Waste disposal cost = Pollution cost + Pollution avoidance cost

    (D)   Waste disposal cost = Pollution prevention cost + Pollution cost

129. Net barter terms of trade is the ratio between the

    (A)   Price of a country's export goods and import goods

    (B)   Quantities of a country's imports and exports goods

    (C)   Price of a country's export and quantities of export

    (D)   Price of a country's import and quantities of import

130. If a, b, c are real numbers such that $a > 0$ and $a\lambda^2 + 2b\lambda + c \geq 0$ for all real numbers λ, then

(A) $b^2 \leq ac$

(B) $b^2 < 2ac$

(C) $b^2 > 2ac$

(D) $b^2 \geq ac$

131. The homomorphism ϕ of a ring R into R' is an isomorphism if and only if $I(\phi) =$

(A) (e)

(B) R

(C) (0)

(D) All multiples of n

132. If ϕ is a homomorphism of a ring R into a ring R', then

(A) $\phi(0) = 0'$, where 0 is the zero element of the ring R and $0'$ is the zero element of R'

(B) $\phi(a) = \phi(-a)$ for every $a \in R$

(C) $\phi(-a) = -\phi(a)$ for every $a \in R$

(D) both (A) and (C) are true

133. The equation $(1-x^2)z_{xx} - 2xy\, z_{xy} + (1-y^2)z_{yy} + xz_x + 3x^2 y z_y - 2z = 0$ is classified in the region $x^2 + y^2 > 1$ as
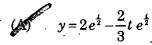
(A) Hyperbolic

(B) Elliptic

(C) Parabolic

(D) Homogeneous

134. The complete integral of $p^2 = zq$ is

(A) $Z = b\, e^{ax + a^2 y}$

(B) $Z = b\, e^{ax - a^2 y}$

(C) $Z = b\, e^{ax + a^2 y^2}$

(D) $Z = b\, e^{ax^2 + a^2 y}$

135. The solution of the initial value problem $y'' - y' + 0.25\, y = 0$, $y(0) = 2$, $y'(0) = 1/3$ is

(A) $y = 2e^{\frac{t}{2}} - \frac{2}{3}t\, e^{\frac{t}{2}}$

(B) $y = 2te^{\frac{t}{2}} - \frac{2}{3}e^{\frac{t}{2}}$

(C) $y = 2e^{\frac{t}{2}} + \frac{3}{2}t\, e^{\frac{t}{2}}$

(D) $y = -2\, e^{\frac{t}{2}} + \frac{2}{3}t\, e^{\frac{t}{2}}$

136. If $f(z)$ is analytic in the whole plane and if $z^{-1}\,\mathrm{Re}(f(z)) \to 0$ when $z \to \infty$, then f is

(A) zero

(B) a constant

(C) infinity

(D) harmonic

137. Every normed linear space is a metric space with respect to the induced metric defined by $d(x,y) =$

(A) $\|x + y\|$

(B) $\left\|\dfrac{x + y}{2}\right\|$

(C) $\|x - y\|$

(D) $\|x\|\,\|y\|$

138. On the set R, we can define

(A) exactly one metric

(B) exactly two metrics

(C) finite number of metrics

(D) infinitely many metrics

139. The one-point sets are the only connected subspaces of

(A) Two-point space X in the indiscrete topology

(B) $\mathbb{Q}$

(C) $\mathbb{R}$

(D) $\mathbb{R}^2$

140. $\mathrm{cov}\left(\dfrac{X - \overline{X}}{\sigma_X}, \dfrac{Y - \overline{Y}}{\sigma_Y}\right) =$

(A) $\mathrm{cov}(X,Y)$

(B) $\dfrac{1}{\sigma_X \sigma_Y}\,\mathrm{cov}(X,Y)$

(C) $\dfrac{1}{\sigma_X^2 \sigma_Y^2}\,\mathrm{cov}(X - \overline{X}, Y - \overline{Y})$

(D) $\dfrac{1}{\sigma_X^2 \sigma_Y^2}\,\mathrm{cov}(X,Y)$

141. The number of basic solutions to the linear programming problem
Maximize $z = 3x_1 + 4x_2$
Subject to
$$x_1 + x_2 \le 450$$
$$2x_1 + x_2 \le 600$$
where $x_1, x_2 \ge 0$ is

(A) 2

(B) 4

(C) 6

(D) 8

142. Let $X_1, X_2 .. X_n$ be a sequence of random variables and $\mu_1, \mu_2, .. \mu_n$ be their respective expectations and let $B_n = Var(X_1 + .. + X_n) < \infty$ if for all $n > no$, where $\in$ and η are arbitrary small positive numbers, provided $\underset{n \to \infty}{lt} \dfrac{B_n}{n^2} \to 0$, then

(A) $P\left\{ \left| \dfrac{X_1 + .. + X_n}{n} + \dfrac{\mu_1 + \mu_2 + .. + \mu_n}{n} \right| < \in \right\} \geq 1 - \eta$

(B) $P\left\{ \left| \dfrac{X_1 + .. + X_n}{n} - \dfrac{\mu_1 + \mu_2 + .. + \mu_n}{n} \right| > \in \right\} \geq 1 - \eta$

(C) $P\left\{ \left| \dfrac{X_1 + X_2 + .. + X_n}{n} - \dfrac{\mu_1 + \mu_2 + .. \mu_n}{n} \right| < \in \right\} \geq 1 - \eta$

(D) $P\left\{ \left| \dfrac{X_1 + .. + X_n}{n} + \dfrac{\mu_1 + .. \mu_n}{n} \right| > \in \right\} \geq 1 - \eta$

143. If $X \sim \chi^2_{(n_1)d.f}$ and $Y \sim \chi^2_{(n_2)d.f}$ are independent chi-square variates then, $\dfrac{X}{Y}$ follows

(A) $\beta_2 \left(\dfrac{n_1}{2}, \dfrac{n_2}{2} \right)$

(B) $\beta_1 \left(\dfrac{n_1}{2}, \dfrac{n_2}{2} \right)$

(C) $\beta_1 (n_1, n_2)$

(D) $\beta_2 (n_1, n_2)$

144. Recurrence relation for the probabilities of Binomial distribution is

(A) $\left(\dfrac{n + x}{x - 1} \times \dfrac{p}{q} \right) p(x)$

(B) $\left(\dfrac{x - n}{x - 1} \times \dfrac{q}{p} \right) p(x)$

(C) $\binom{n}{x} p^x q^{n-x}$

(D) $\left(\dfrac{n - x}{x + 1} \times \dfrac{p}{q} \right) p(x)$

145. Area of the normal probability curve under 2σ limit is

(A) 0.9973

(B) 0.6826

(C) 0.9544

(D) 0.9512

146. The number of independent variates which make up the statistic is known as

(A) $P(A \cap B) = P(A) \times P(B)$

(B) Mutually exclusive

(C) Parameter

(D) Degrees of freedom

147. The variation within the classes is due to

(A) Sampling error   (B) Non-sampling error

(C) Assignable causes   (D) Chance causes

148. To use Excel worksheet it provides

(A) Tools for symbols

(B) Commands only for mathematical symbols

(C) Status message is not provided

(D) Status message

149. The chart wizard is used to

(A) Add existing data to our chart

(B) Edit the data series

(C) Add a new data series to our chart

(D) Draw a chart

150. ―――――― is concerned with the task of synchronizing or unifying the activities of a business for the purpose of achieving the common goal.

(A) Controlling   (B) Communication

(C) Committee   (D) Co-ordination

151. ―――――― one complex in nature and are always taken after deep deliberation.

(A) Strategic or basic decision

(B) Routine or repetitive decision

(C) Operating decision

(D) Personal decision

152. Who has propounded theory X and theory Y of motivation?

(A) VRoom   (B) Mc Gregor

(C) Herzberg   (D) Maslow

153. The most popular four celled matrix developed by

    (A)   Boston Consulting Group

    (B)   Hofer and Schendel

    (C)   McKinsey's and Matrix Company

    (D)   General Electric Company

154. Which operations are not involved in data processing?

    (A)   Recording   (B)   Classifying

    (C)   Editing   (D)   Discriminating

155. ————— refers to the process of assigning numerals or other symbols to answers so that responses can be put into a limited number of categories or classes.

    (A)   Editing   (B)   Coding

    (C)   Classification   (D)   Tabulation

156. Chi-square test is

    (A)   not for special test

    (B)   not for expected frequency only

    (C)   to study the divergence of actual and expected frequencies

    (D)   to draw inference

157. Correlation coefficient is the ————— between the regression co-efficient.

    (A)   Arithmetic Mean

    (B)   Harmonic Mean

    (C)   Geometric Mean

    (D)   Weighted Arithmetic Mean

158. The Regression equation of Y on X is given by

    (A) $Y - \overline{Y} = byx(X - \overline{X})$ (B) $X - \overline{X} = bxy(Y - \overline{Y})$

    (C) $Y - \overline{Y} = bxy(X - \overline{X})$ (D) $X - \overline{X} = byx(Y - \overline{Y})$

159. Which system of administration was designed by Riggs which adopted both modern industrialised system of administration, guided by the traditional pattern of behaviour and role relationships?

(A)   The Bureaucratic system

(B)   The sala system

(C)   The information energy model

(D)   The agrarian – industrial model

160. The process of transfer of administrative authority from lower level to a higher level of government is called

(A)   Centralization

(B)   Decentralisation

(C)   Dispersion

(D)   Disintegration

161. Which one of the following is not a function of staff agency?

(A)   Planning

(B)   Advising

(C)   Consultation

(D)   Achieving goals

162. The ingredients of supervision are:

1.   Measuring and rating performance

2.   Rewarding for good work

3.   Teaching the person how to do work

4.   Fitting each person harmoniously into a working group

5.   Selecting the right person for each job

(A)   1, 2, 3 and 4

(B)   2, 4 and 5

(C)   1, 2 and 3

(D)   1, 2, 3, 4 and 5

163. The name of Max Weber is associated with bureaucracy because

1.   He coined the term bureaucracy

2.   He is the first person who made a systematic study of bureaucracy

3.   He included bureaucracy in the legal rational authority system

4.   His bureaucratic model is the most important paradigm in public Administration

Select the correct code:

(A)   1, 2 and 3

(B)   2 and 3

(C)   2, 3 and 4

(D)   2 only

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[Turn over

164. Which of the following committees/commissions recommended the establishment of Lok Pal and Lokayuktas?

    (A)   Balwant Rai Mehta Committee

    (B)   Administrative Reforms Commission

    (C)   Committee on Lok Adalat

    (D)   Rao Committee

165. Surcharges on taxes and duties referred to in

    (A)   Article – 268   (B)   Article – 269

    (C)   Article – 271   (D)   Article – 268 – A

166. The budget ———— is not directly concerned with the policy decisions and has little or no responsibility for them, although he must know about them

    (A)   Officer   (B)   Minister

    (C)   Secretary   (D)   None of the above

167. The economy cut – motion seeks to reduce the proposed expenditure of a demand for grant by

    (A)   Rupee one   (B)   Rupees one hundred

    (C)   A specified amount   (D)   An unspecified amount

168. The Administrative Reforms Commission (1966) recommended

    (A)   Establishment of an Inter–State Council under Art. 263 of the Constitution

    (B)   The word 'Union' in the constitution should be replaced by the word 'Federal'

    (C)   The National Development Council to be renamed as National Economic Development Council

    (D)   All India services should be abolished

169. Which of the following were the dominant themes during the first stage in the evolution of public administration as a discipline?

    1.   Separation between politics and administration

    2.   Principles of administration

    3.   Public Administration can become value - free

    4.   Efficiency and economy are the watch words of Pub. Admn.

    (A)   1, 3 and 4   (B)   1 and 2

    (C)   1 only   (D)   1 and 4

170. The ———— is the standard distance between elements selected in systematic sampling.

   (A) Sampling ratio   (B) Sampling frame
   (C) Sampling interval   (D) Sampling design

171. Which technique is used for soliciting a non directive, unbiased and a more complete answer to a question?

   (A) Participant observation   (B) Probing
   (C) Interviewing   (D) Flexibility

172. When a question is asked only to some respondents, depending on their response to some other question is called as

   (A) Contingency question   (B) Probing question
   (C) Leading question   (D) Open-ended question

173. It is an inductive qualitative research approach that attempts to generate theory from the constant comparing of unfolding observations is called as

   (A) Participatory Action Research   (B) Focus Group Discussion
   (C) Grounded theory   (D) Emic & Etic perspectives

174. Which one is trying to adopt the beliefs attitudes, and other points of view shared by the members of the culture when it is being studied?

   (A) Etic perspective
   (B) Paradigm perspective
   (C) Emic perspective
   (D) Participatory approach perspective

175. The project management process groups are initiating, planning, executing, controlling and

   (A) Evaluation   (B) Processing
   (C) Closeout   (D) Follow up

176. Which one of the following is used for carrying out a participatory needs analysis for development interventions that will impact the community?

   (A) Factor analysis   (B) Dimensional analysis
   (C) Impact assessment   (D) Holistic world view analysis

[Turn over

177. The schedule compression technique expedites a project into

(A) Crashing   (B) Fast-tracking

(C) Leading   (D) Blitzing

178. It is a process by which men are atomized cut off from one another and left without a sense of purpose it refers to

(A) Industrialization   (B) Alienation

(C) Anomic   (D) Automation

179. The social status fixed for an individual at birth is termed as

(A) Achieved status   (B) Birth status

(C) Ascribed status   (D) Fixed status

180. "Human society has been cradled in the rural group" who said this ·

(A) Bogardus   (B) Kropotkin

(C) A.R. Desai   (D) Andre Beteille

181. A form of social interaction where in two or more persons work to-gether to gain a common end is known as

(A) Accommodation   (B) Co-operation

(C) Assimilation   (D) Competition

182. Who is the author of the "The Communist Manifesto"

(A) Karl Mannheim   (B) Max Weber

(C) Karl Marx   (D) Auguste Comte

183. The unemployment caused by ups and downs in Trade and Business is known as

(A) Visible unemployment

(B) Seasonal unemployment

(C) Invisible unemployment

(D) Cyclical unemployment

184. Which of the following movements worked for transforming the untouchables into backward class and built temples for its people and opened it to other castes?

(A) S.N.D.P. movement (B) Satya Shodhek Samaj

(C) Self-respect movement (D) Bhakti movement

185. In India domestic violence was recognized as a criminal offence in

(A) 1983 (B) 1990

(C) 2004 (D) 2012

186. Honour killing means

(A) Death of a person due to dowry problem

(B) Acid attacks

(C) Wife battering

(D) Murdering of a member by another member because the victim has brought dishonour or shame to the family or group

187. The concept of social statics and social dynamics is the contribution of

(A) Durkheim (B) Saint Simon

(C) A. Green (D) A. Comte

188. A research which is trying to construct a much clear and comprehensive picture on the basis of an earlier explored study is known as

(A) Explanatory research (B) Descriptive research

(C) Ethnographic research (D) Comparative research

189. A sampling procedure which accords equal chances for inclusion in the sample for every item of the universe is known as

(A) Quota Sampling

(B) Non–Probability Sampling

(C) Judgement Sampling

(D) Probability Sampling

190. The smallest bit of meaningful sound in a language

   (A)   honorific   (B)   morpheme

   (C)   pragmatic   (D)   performative

191. According to Census of India 2011, the Scheduled Tribe population is

   (A)   8.6% of the total Indian population

   (B)   8.2% of the total Indian population

   (C)   7.4% of the total Indian population

   (D)   7.6% of the total Indian population

192. How many languages are presently included in the Eighth Schedule of the Indian
     Constitution?

   (A)   18   (B)   21

   (C)   22   (D)   20

193. Which among the following languages was the last to be included in the Eighth Schedule of
     the Indian Constitution?

   (A)   Assamese   (B)   Sindhi

   (C)   Manipuri   (D)   Bodo

194. According to 2001 Census of India which is the most populous Scheduled Tribe?

   (A)   Bhil   (B)   Gond

   (C)   Santal   (D)   Mina

195. Which among the following is not a Paleolithic site in India?

   (A)   Bhimbetka (MP)   (B)   Narmada valley

   (C)   Sohan (Punjab)   (D)   Chirand (Bihar)

196. Match the following :

I.   McKim Marriott   (a)   Great and little traditions
II. M.N. Srinivas   (b)   Dominant Caste
III. Andre Beteille   (c)   Dispersed inequalities
IV. Louis Dumont   (d)   Pure hierarchy

(A) I-b, II-c, III-d, IV-a
(B) I-c, II-d, III-a, IV-b
(C) I-d, II-a, III-b, IV-c
(D) I-a, II-b, III-c, IV-d

197. The introduction of 'participant observation' is associated with

(A) Bronislaw Malinowski
(B) W.H.R. Rivers
(C) Clifford Geertz
(D) E.B. Tylor

198. Which is the right sequence in the evolution of anthropological fieldwork?

(A) Armchair anthropology, verandah anthropology, participant observation
(B) Verandah anthropology, armchair anthropology, participant observation
(C) Participant observation, armchair anthropology, verandah anthropology
(D) Armchair anthropology, participant observation, verandah anthropology

199. Understanding a culture in terms of its own values and not by another culture is

(A) Enculturation   (B) Culture shock
(C) Cultural relativism   (D) Acculturation

200. The nuclear family in which you are a child is referred to as your

(A) Family of orientation
(B) Family of procreation
(C) Affinal family
(D) Joint family

[Turn over

SPACE FOR ROUGH WORK

SPACE FOR ROUGH WORK