

Question Booklet No. :

RAPG/2022

Register  
Number

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2022

**COMPRISING TEN SUBJECTS  
(P.G. Degree Standard)**

Duration : Three Hours]

[Total Marks : 300

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

**IMPORTANT INSTRUCTIONS**

1. You will be supplied with this question booklet 15 minutes prior to the commencement of the examination.
2. This question booklet contains 200 questions. Before answering the questions, you shall to check whether all the questions are printed serially and ensure that there are no blank pages in the question booklet. **If any defect is noticed in the question booklet, it shall be reported to the invigilator within the first 10 minutes and get it replaced with a complete question booklet. If the defect is reported after the commencement of the examination, it will not be replaced.**
3. Answer all the questions. All the 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 room invigilator to shade the answers. Instructions regarding filling of answers etc., which are to be followed mandatorily, are provided in the answer sheet and in the memorandum of admission (Hall Ticket).
6. You shall write and shade your question booklet number in the space provided on page one of the answer sheet with **BLACK INK BALL POINT PEN**. If you do not shade correctly or fail to shade the question booklet number, your answer sheet will be invalidated.
7. Each question comprises of five responses (answers) : i.e. (A), (B), (C), (D) and (E). You have to select **ONLY ONE** correct answer from (A) or (B) or (C) or (D) and shade the same in your answer sheet. If you feel that there are more than one correct answer, shade the one which you consider the best. **If you do not know the answer, you have to mandatorily shade (E).** In any case, choose **ONLY ONE** answer for each question. If you shade more than one answer for a question, it will be treated as a wrong answer even if one of the given answers happens to be correct.
8. 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 room during the time of the examination. After the examination, 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.
9. **You should not make any marking in the question booklet except in the sheets before the last page of the question booklet, which can be used for rough work. This should be strictly adhered to.**
10. Failure to comply with any of the above instructions will render you liable for such action as the Commission may decide at their discretion.

SEAL



**SPACE FOR ROUGH WORK**





1. Consider  $X = \{1, 2, 3, 4\}$   $Y = \{5, 6, 7, 8\}$   $T_1 = \{\phi, \{1\}, \{2\}, \{1, 2\}, \{1, 2, 3\}, X\}$  and  $T_2 = \{\{5\}, \{6\}, \{5, 6\}, \{6, 7, 8\}, Y\}$ . Then  $f: X \rightarrow Y$  defined by  $f(\{1\}) = \{6\}$ ,  $f(\{2, 4\}) = \{7\}$   $f(\{3\}) = \{8\}$  is
- (A) not a function  
 (B)  continuous function  
 (C) one-to-one function  
 (D) onto function  
 (E) Answer not known
2. The product of any non-empty class of connected spaces is
- (A) disconnected space  
 (B)  connected space  
 (C) an empty set  
 (D) a discrete two-point space  
 (E) Answer not known
3. The spectral radius formula is
- (A)  $r_\sigma(A) = \sup_{n=1,2,\dots} \|A^n\|^{\frac{1}{n}} = \lim_{n \rightarrow \infty} \|A^n\|^{\frac{1}{n}}$   
 (B)   $r_\sigma(A) = \inf_{n=1,2,\dots} \|A^n\|^{\frac{1}{n}} = \lim_{n \rightarrow \infty} \|A^n\|^{\frac{1}{n}}$   
 (C)  $r_\sigma(A) = \inf_{n=1,2,\dots} \|A^{\frac{1}{n}}\| = \lim_{n \rightarrow \infty} \|A^{\frac{1}{n}}\|$   
 (D)  $r_\sigma(A) = \inf_{n=1,2,\dots} \|A\|^n = \lim_{n \rightarrow \infty} \|A\|^n$   
 (E) Answer not known
4. A subset of a metric space is a set of the first category if it is the
- (A) Intersection of a sequence of dense sets  
 (B) Union of a sequence of dense sets  
 (C) Intersection of a sequence of nowhere dense sets  
 (D)  Union of a sequence of nowhere dense sets  
 (E) Answer not known

5.  $\sum_{n=1}^{\infty} \left(\frac{1}{n}\right)$  is
- (A) Convergent (B)  Uniformly convergent  
 (C) Absolutely convergent (D) Divergent  
 (E) Answer not known
6. In the differential equation  $2x(x-2)^2 y'' + 3xy' + (x-2)y = 0$
- (A)  $x = 0$  is the regular singular point  
 $x = 2$  is the irregular singular point  
 (B)   $x = 0$  and  $x = 2$  are the irregular singular points  
 (C)  $x = 0$  and  $x = 2$  are the regular singular point  
 (D)  $x = 2$  is the regular singular point  
 $x = 0$  is the irregular singular point  
 (E) Answer not known
7. Solution of  $yp = 2yx + \log q$  is
- (A)   $az = ax^2 + a^2x + e^{ay} + ab$  (B)  $z = x^2 + x + e^{ay} + ab$   
 (C)  $z = x^2 + e^{-ay} + ab$  (D)  $az = ax^2 + a^2x + ab$   
 (E) Answer not known
8. Given two equations  $x \frac{\partial z}{\partial x} + y \frac{\partial z}{\partial y} = z^2 + x^2$  and  $x \frac{dz}{dx} = z^2 + x^2$  which of the following is correct.
- (A)  Both are linear  
 (B) Former is linear and the latter is not linear  
 (C) Former is not linear and the latter is linear  
 (D) None of them is linear  
 (E) Answer not known
9. The linear Independent vectors in  $\mathbb{R}^3$  is
- (A)   $(1, 2, 1), (2, 1, 0), (1, -1, 2)$  (B)  $(1, 1, 2), (1, 2, 5), (5, 3, 4)$   
 (C)  $(1, 1, 0), (2, 1, 1), (3, 0, 3)$  (D)  $(1, -1, 2), (-1, 2, -4), (-1, -1, 2)$   
 (E) Answer not known



10. Which of the following does not come under project cost management?
- (A)  Quality planning
  - (B) Resource planning
  - (C) Cost budgeting
  - (D) Cost control
  - (E) Answer not known
11. Evaluation in project appraisal targets
- (A) improvement within organisation
  - (B)  outcome of the policy or programme by policy makers programme managers
  - (C) understanding of activities of programme managers
  - (D) provide learning to the evaluators
  - (E) Answer not known
12. Evaluation of quality and quantity of production, the operating costs in production
- (A) Economic Audit
  - (B)  Technical Audit
  - (C) Product Audit
  - (D) Financial Audit
  - (E) Answer not known
13. In a project life cycle, forecast comes under
- (A) Planning
  - (B) Defining
  - (C)  Executing
  - (D) Closing
  - (E) Answer not known
14. 'Time line' the commonly used method to explore the temporal dimension from a historical perspective is a
- (A) Logical frame analysis method
  - (B)  PRA method
  - (C) Social mapping method
  - (D) Transect
  - (E) Answer not known



15. If the investigator collects both quantitative and qualitative data at the same time during the study and then integrates the information in the interpretation of the overall results. Then this procedure is known as
- (A) Sequential procedure (B) Transformatic procedure  
(C)  Concurrent procedure (D) Triangulation  
(E) Answer not known
16. Identify the type of sampling involves grouping the population and then selecting the groups rather than individual elements for inclusion in sample
- (A) Stratified sampling (B) Quota sampling  
(C)  Cluster sampling (D) Systematic sampling  
(E) Answer not known
17. Selecting every  $K^{\text{th}}$  item in a list as a method of sampling technique is called
- (A) Quota sampling (B) Stratified sampling  
(C)  Systematic sampling (D) Purposive sampling  
(E) Answer not known
18. Due of the important characteristic of a good research design is
- (A) To use control variable  
(B)  To minimize the influence or effect of extraneous variable  
(C) To restrain experimental condition  
(D) To avoid experimental error  
(E) Answer not known
19. Which of the following statement is correct
- (A)  The design is flexible in exploratory study  
(B) Probability sampling method can only be used in formulative study  
(C) No pre-planned design for analysis is made in descriptive study  
(D) Rigid design should be used in formulative study  
(E) Answer not known
20. Researchers reject or disprove the \_\_\_\_\_ to set the stage for further experimentation or research that explains the position of interest
- (A)  Null hypothesis (B) Statistical hypothesis  
(C) Relational hypothesis (D) Complex hypothesis  
(E) Answer not known



21. Jawaharlal Nehru National Urban Renewal Mission (JANNURAM) was inaugurated by whom in New Delhi
- (A)  Dr. Manmohan Singh (B) Dr. Pranab Mukerjee  
 (C) Mr. Narendra Modi (D) Mrs. Sonia Gandhi  
 (E) Answer not known
22. In which year the Tamil Nadu State Human Rights commission was constituted under the section 21 of the protective of Human Rights Act, 1993
- (A)  1997 (B) 2007  
 (C) 2017 (D) 2005  
 (E) Answer not known
23. Assertion [A] : The new emphasise on regulation illustrates the emerging style in Government organization. Which need a mixer of legislative, administrative and judicial functions
- Reason [R] : The Privatization of previously nationalized industries requires judicial review to make regulator decision
- (A) [A] is true and [R] is false  
 (B)  Both [A] and [R] are true and [R] is the correct explanation of [A]  
 (C) [A] is false, [R] is true  
 (D) Both [A] and [R] are true, but [R] is not the correct explanation of [A]  
 (E) Answer not known
24. Which of the following are not correctly matched?
- (i) Max Weber – German sociologist  
 (ii) Woodrow Wilson – The Art of cutting metals  
 (iii) F.W. Taylor – Unity of command  
 (iv) M.P. Follett – Creative experience
- (A) (i) and (ii) only (B)  (ii) and (iii) only  
 (C) (i) and (iv) only (D) (i), (ii), (iii) and (iv)  
 (E) Answer not known
25. Who defined the “Organisation is the form of every human association for the attainment of a common purpose”?
- (A) L.D. White (B)  John D. Mooney  
 (C) Frederick W. Taylor (D) Luther Gulick  
 (E) Answer not known



26. The conditions to find the point of inflexion of the normal curve is
- (A)  $f''(x)=0$  and  $f'''(x)\geq 0$  (B)  $f''(x)=0$  and  $f'''(x)\leq 0$   
 (C)   $f''(x)=0$  and  $f'''(x)\neq 0$  (D)  $f''(x)=0$  and  $f'''(x)=0$   
 (E) Answer not known
27. M.G.F of Poisson distribution is
- (A)   $e^{\lambda(e^t-1)}$  (B)  $e^{\lambda(1-e^t)}$   
 (C)  $e^{-\lambda(e^t-1)}$  (D)  $e^{-\lambda(1-e^t)}$   
 (E) Answer not known
28. If both central limit theorem and the weak law of large numbers hold for a finite sequence  $\{x_n\}$  with finite mean  $\mu$  and variance  $\sigma^2$ , then the random variables are
- (A) Independently distributed  
 (B) Identically distributed  
 (C) Dependent  
 (D)  Independent and identically distributed  
 (E) Answer not known
29. If  $F_n \xrightarrow{w} F$  then for every pair  $a < b$ , points of continuity of F then  $\int_a^b g dF_n$  equal to
- (A)  $\int_0^1 g I(a, b) dF$  (B)  $\int_0^\infty g I(a, b) dF$   
 (C)   $\int_{-\infty}^\infty g I(a, b) dF$  (D)  $\int_{-\infty}^1 g I(a, b) dF$   
 (E) Answer not known
30. The distribution function of the two-dimensional random variable  $(X, Y)$  is  $F(x, y) =$
- (A)  $P(X \geq x, Y \geq y)$  (B)   $P(X \leq x, Y \leq y)$   
 (C)  $P(X \leq x)$  (D)  $P(Y \leq y)$   
 (E) Answer not known



31. For a symmetrical distribution  $Md \pm QD$  (Median  $\pm$  Quartile deviation) converse
- (A) 25% of the observations  
 (B) 75% of the observations  
 (C)  50% of the observations  
 (D) 100% of the observations  
 (E) Answer not known
32. In case,  $K$  variate values  $X_1, X_2, \dots, X_K$  have known weights  $W_1, W_2, \dots, W_K$  respectively, then the weighted mean is
- (A)  $\frac{1}{N^2} \sum_i X_i W_i^2$  (B)  $\sum_i W_i X_i$   
 (C)   $\frac{1}{W} \sum_i W_i X_i$  (D)  $\frac{1}{W} \sum W_i^2 X_i^2$   
 (E) Answer not known
33. When all the observations are same, then the relation between AM, GM and HM is
- (A) A.M. < H.M. < G.M. (B) A.M. < G.M. < H.M.  
 (C)  A.M. = G.M. = H.M. (D) A.M. > G.M. > H.M.  
 (E) Answer not known
34. Column headings in the table are called as
- (A) stub (B) body  
 (C) footnote (D)  caption  
 (E) Answer not known
35. If a perpendicular on the  $x$ -axis drawn from the point of intersection of both the ogives we get
- (A) Mode  
 (B) Mean  
 (C) Geometric mean  
 (D)  Median  
 (E) Answer not known



36. If the Durbin-Watson  $d$ -test is equal to 0, then the
- (A) First order Autocorrelation is zero
  - (B) First order Autocorrelation is perfectly negative
  - (C)  First order Autocorrelation is perfectly positive
  - (D) First order Autocorrelation is imperfectly negative
  - (E) Answer not known
37. The consequence of heteroscedasticity on OLS estimators is that they will be
- (A) Biased
  - (B) Inconsistent
  - (C)  Inefficient
  - (D) Highly efficient
  - (E) Answer not known
38. Goldfeld-Quandt Test is used to detect the problem of
- (A) Multicollinearity
  - (B)  Heteroscedasticity
  - (C) Autocorrelation
  - (D) None of the above
  - (E) Answer not known
39. In a simple linear regression model such as  $Y = \beta_0 + \beta_1 X + u$ , if the estimated value of the coefficient  $\beta_1$  is 15.11 and standard error of  $\hat{\beta}_1$  is 6.5, what will be the value of  $t$ -statistic for  $\hat{\beta}_1$ ?
- (A) 21.61
  - (B)  2.32
  - (C) 98.22
  - (D) 8.61
  - (E) Answer not known
40. The dependent variable in regression analysis is assumed to be
- (A) Non-stochastic
  - (B) Constant
  - (C)  Stochastic
  - (D) Known values
  - (E) Answer not known



41. In research study an alphabetical list of all source material to which reference has been made is
- (A)  Bibliography
  - (B) Documentation
  - (C) Phonography
  - (D) Report
  - (E) Answer not known
42. A brief statement of the essential findings of a research is
- (A)  Conclusion
  - (B) Findings
  - (C) Format
  - (D) Applications
  - (E) Answer not known
43. The formulae of co-variance is
- (A)   $\frac{\sigma}{\bar{X}} \times 100$
  - (B)  $\frac{\sigma}{M} \times 100$
  - (C)  $\frac{\sigma}{Z} \times 100$
  - (D)  $\frac{\sigma}{SE} \times 100$
  - (E) Answer not known
44. The true difference between the mean sample and the mean of population is nil; the least difference found is unimportant (or) due to sampling error is called
- (A) testing of hypothesis
  - (B) alternative hypothesis
  - (C)  null hypothesis
  - (D) significance of difference
  - (E) Answer not known







50. In the time series data, Deseasonalisation of data, the Additive model the observed value is expressed as
- (A) ✓  $Y = (T + S + C + I) - S$
- (B)  $Y = S + T + C + I$
- (C)  $Y = \frac{TCSI}{S}$
- (D)  $Y = C + I + G$
- (E) Answer not known
51. In India the Fertility Rate among young married women rising gradually, due to following reasons
- (i) Improvement in nutrition and health of couples
- (ii) Improvement in Education and awareness
- (iii) Duration of breast feeding in infants by mothers has been reduced
- (iv) Traditional social checks on fertility have been reduced
- (A) (i), (ii) and (iii)                      (B) (ii), (iii) and (iv)
- (C) ✓ (i), (iii) and (iv)                      (D) (i), (ii) and (iv)
- (E) Answer not known
52. The major objective of educational planning in India is
- (A) Increase in employment
- (B) Reduction in poverty
- (C) ✓ Reduction in regional disparities
- (D) Gender identity
- (E) Answer not known
53. 38.2% of the foreign investment is in the nature of
- (A) Human Capital Investment              (B) Technological Investment
- (C) Autonomous Investment              (D) ✓ Financial Investment
- (E) Answer not known



54. The present epoch in the Earth's age is known as  
(A) ✓ Holocene  
(B) Miocene  
(C) Pleistocene  
(D) Pliocene  
(E) Answer not known
55. Hand axe traditions and flake traditions are the tool making traditions of the  
(A) Upper Palaeolithic  
(B) Middle Palaeolithic  
(C) ✓ Lower Palaeolithic  
(D) None of the above  
(E) Answer not known
56. Who found the first ever Palaeolithic artifact in India?  
(A) H.D. Sankalia  
(B) D.K. Battacharya  
(C) C.J. Thomson  
(D) ✓ Robert Bruce Foote  
(E) Answer not known
57. Who among the following was/were the part of Cambridge expedition to Torres straits?  
(A) A.C. Hadden  
(B) Rivers  
(C) Seligman  
(D) ✓ All of the above  
(E) Answer not known
58. Which among the following is defined as a descriptive account of the way of life of a people living at a time in a particular society?  
(A) ✓ Ethnography  
(B) Ethnology  
(C) Ecology  
(D) Entomology  
(E) Answer not known



59. In the absence of law, defined in terms of central authority, courts and constables, which of the following help in maintaining order in simple societies?
- (A) Folkways (B) Mores  
(C) Customary rules (D)  All of the above  
(E) Answer not known
60. Family is rooted in
- (A) Human nature (B)  Human biological weaknesses  
(C) Human wisdom (D) Sub humans trends  
(E) Answer not known
61. The communities which belong to one of the four varnas are called
- (A) castes (B) jatis  
(C) avarna (D)  svarna  
(E) Answer not known
62. The process by which culture is passed from one generation to the next
- (A) Trans culturalism (B) Cultural relativism  
(C) Ethno centrism (D)  En cultururation  
(E) Answer not known
63. Political Anthropology is
- (A) A branch of New political science  
(B) An independent branch of anthropology  
(C)  A specialized area of study in social-cultural anthropology  
(D) Is a branch of applied anthropology  
(E) Answer not known
64. The simplest form of true political organization
- (A) Chiefdom (B) Panchayat  
(C) Tribe (D)  Band  
(E) Answer not known



65. The Four main Operations of information system are

1. Entering data into the IS
2. Storing data and Information
3. Getting Information out of IS
4. Changing and Manipulating data in the IS

(A) ✓ (1), (4), (3), (2)

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

(C) (1), (2), (3), (4)

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

(E) Answer not known

66. In a negatively skewed distribution.

(A) Median > Mode > Mean

(B) Median = Mode = Mean

(C) ✓ Mode > Median > mean

(D) Mode < Median < Mean

(E) Answer not known

67. Arrange the chronological order:

The research process involves the following sequence:

1. Review the literature
2. Formulate the hypotheses
3. Interpret and report
4. Define the research problem
5. Analysing data
6. Collect data
7. Design research

(A) (1), (3), (2), (7), (6), (4), (5)

(B) (1), (4), (2), (7), (6), (5), (3)

(C) ✓ (4), (1), (2), (7), (6), (5), (3)

(D) (2), (1), (7), (6), (4), (5), (3)

(E) Answer not known





72. Complete the sentences :  
Break Even Analysis is also called as
- (A) Total profit analysis
  - (B) Total revenue analysis
  - (C)  Profit contribution analysis
  - (D) Revenue analysis
  - (E) Answer not known
73. The functions which constitute the managerial activity are often classified as follows
- (A)  Planning, organising, staffing, directing and controlling
  - (B) Organising, planning, directing, staffing and controlling
  - (C) Planning, directing, organising, controlling and staffing
  - (D) Controlling, staffing, organising, directing and planning
  - (E) Answer not known
74. The concept of Management By Objectives (MBO) in the field of performance appraisal was first gives by the following
- (i) Peter F. Drucker
  - (ii) Frederick W. Taylor
  - (iii) Elton Mayo
  - (iv) Edwards Deming
- (A) (ii)
  - (B) (iii)
  - (C) (iv)
  - (D)  (i)
  - (E) Answer not known
75. In \_\_\_\_\_ emphasis is given on practical aspects and policy implications.
- (A) Technical Report
  - (B)  Popular Report
  - (C) Monograph
  - (D) Research Report
  - (E) Answer not known
76. The \_\_\_\_\_ is the only indicator of central tendency that can be used with nominal data.
- (A) mean
  - (B) median
  - (C)  mode
  - (D) average
  - (E) Answer not known

77. Identify the programme which provides employment to adult members in rural household?
- (A) Sampoorna Grameen Rozgar Yojana
  - (B) National Food for Work Programme
  - (C) Swarna Jayanthi Shahari Rozgar Yojana
  - (D)  National Rural Employment Guarantee Scheme
  - (E) Answer not known
78. Which programme aims to establish large number of industries through bank credit and subsidy and bring assisted families above the poverty line in 3 years?
- (A) JGSY
  - (B) PMRY
  - (C)  SGSY
  - (D) DDP
  - (E) Answer not known
79. Arrange the following program in chronological order
- (1) Swachh Bharat Mission
  - (2) Total Sanitation Campaign
  - (3) Central Rural Sanitation Program
  - (4) National Rural Health Mission
- (A) (1), (2), (3), (4)
  - (B)  (3), (2), (4), (1)
  - (C) (4), (3), (2), (1)
  - (D) (1), (4), (3), (2)
  - (E) Answer not known
80. According to whom inter-caste marriages can remove casteism?
- (A) Irawati Karve
  - (B) P.N. Prabhu
  - (C) A.R. Desai
  - (D)  G.S. Ghurye
  - (E) Answer not known



81. Which of the following is not the demerits of joint family system?
- (A) Limits social mobility
  - (B) Denies privacy
  - (C)  Provides leisure
  - (D) Promotes idleness
  - (E) Answer not known
82. A person may accept the goal but not the means. He may create his own means for achieving the goals and in this sense, he becomes a deviant. This type of deviance is called
- (A)  Innovation
  - (B) Ritualism
  - (C) Retreatism
  - (D) Rebellion
  - (E) Answer not known
83. Which of the following is not a characteristics of competition?
- (A) Scarcity as a condition of conflict
  - (B) Competition as continuous
  - (C)  Cultural competition
  - (D) Competition-A cause of social change
  - (E) Answer not known
84. \_\_\_\_\_ said that "The best history is in fact sociology : the sociology of the past"?
- (A) Robert Bierstedt
  - (B)  Peter Worsley
  - (C) T.B. Bottomore
  - (D) G.E. Howard
  - (E) Answer not known
85. Which of the following statements are true with the nature of sociology?
- (I) Sociology is not a normative discipline
  - (II) Sociology is not a general science
  - (III) Sociology is not a particularising science.
  - (IV) Sociology is not a concrete science
- (A) (I), (II) and (III)
  - (B) (I), (II) and (IV)
  - (C)  (I), (III) and (IV)
  - (D) (II), (III) and (IV)
  - (E) Answer not known





91. An example for merchant middlemen is  
(A) Broker (B) Processor  
(C) Commission agent (D)  Wholesaler  
(E) Answer not known
92. The National Institute of Agricultural Marketing is located at  
(A)  Jaipur (B) Hyderabad  
(C) Cochin (D) Bangalore  
(E) Answer not known
93. The feature of the kinked demand curve falls under the market structure called as  
(A) Duopoly (B)  Oligopoly  
(C) Monopoly (D) Monopsony  
(E) Answer not known
94. Fiscal policy refers to  
(A) Cash liquidity ratio (B)  Government's spending activity  
(C) Cash reserve ratio (D) Private expenditure  
(E) Answer not known
95. Liquidity trap implies  
(A) Speculation  
(B) Infinity  
(C) Perfectly inelastic demand for money  
(D)  Perfectly elastic demand for money  
(E) Answer not known
96. The situation in which price of the commodity increases is followed by an extension of demand is called as  
(A) Law of demand (B)  Giffen paradox  
(C) Cross demand (D) Derived demand  
(E) Answer not known



97. A coin is tossed 400 times and it turns up head 216 times. The hypothesis that the coin is unbiased can be tested by :
- (A)  $\chi^2$  test (B)  $z$  test  
 (C)  Both (A) and (B) (D)  $F$  test  
 (E) Answer not known
98. A test which maximizes the power of the test for fixed  $\alpha$  is known as :
- (A)  Optimum test (B) Randomized test  
 (C) Bayes test (D) Likelihood ratio test  
 (E) Answer not known
99. For estimating the population mean  $T$ , let  $T_1$  be the sample mean under SRSWOR and  $T_2$  under SRSWR then :
- (A)  $V(T_1) = V(T_2)$  (B)  $V(T_1) = \frac{1}{V(T_2)}$   
 (C)  $V(T_1) < V(T_2)$  (D)   $V(T_1) \geq V(T_2)$   
 (E) Answer not known
100. With usual notations, population mean square of the  $i^{\text{th}}$  stratum is
- (A)   $S_i^2 = \frac{1}{N_i - 1} \sum_{j=1}^{N_i} (Y_{ij} - \bar{Y}_N)^2; (i = 1, 2, \dots, k)$   
 (B)  $S_i^2 = N^2 \sum_{j=1}^{N_i} (\bar{Y}_N - \bar{Y}_{ij})^2; (i = 1, 2, \dots, k)$   
 (C)  $S_i^2 = \frac{1}{N^{n-1}} \sum_{j=1}^{N_i} (Y_{ij} - \bar{Y}_N)^2; (i = 1, 2, \dots, k)$   
 (D)  $S_i^2 = \frac{1}{N_i^2} \sum_{j=1}^{N_i} (Y_{ij} - \bar{Y}_n)^2; (i = 1, 2, \dots, k)$   
 (E) Answer not known
101. Variance of  $\bar{X}_{st}$  under random sampling proportional allocation and optimum allocation hold the correct inequality as :
- (A)   $V_{ran}(\bar{X}_{st}) \geq V_{prop}(\bar{X}_{st}) \geq V_{opt}(\bar{X}_{st})$  (B)  $V_{ran}(\bar{X}_{st}) \leq V_{prop}(\bar{X}_{st}) \leq V_{opt}(\bar{X}_{st})$   
 (C)  $V_{prop}(\bar{X}_{st}) > V_{ran}(\bar{X}_{st}) < V_{opt}(\bar{X}_{st})$  (D)  $V_{opt}(\bar{X}_{st}) > V_{ran}(\bar{X}_{st}) < V_{prop}(\bar{X}_{st})$   
 (E) Answer not known

102. A bag contains 4 red and 3 blue balls. Two drawings of 2 balls are made. The chance that the first drawing gives 2 red balls and the second drawing 2 blue balls if the balls are not returned is
- (A)  $\frac{2}{7}$  (B)  $\frac{1}{7}$   
 (C)  $\frac{2}{49}$  (D)  $\frac{3}{35}$   
 (E) Answer not known
103. If the probability of a bad reaction from a certain injection is 0.001. What is the chance out 2000 individuals more than 2 will get bad reaction [ $e^{-2} = 0.136$ ]
- (A)  $0.32$  (B)  $0.23$   
 (C)  $0.33$  (D)  $0.34$   
 (E) Answer not known
104. If  $r$  is the correlation coefficient in a sample of  $n$  pairs of observations, its Standard Error is
- (A)  $\frac{1-r}{n}$  (B)  $\frac{1-r^2}{n}$   
 (C)  $\frac{r^2-1}{\sqrt{n}}$  (D)  $\frac{1-r^2}{\sqrt{n}}$   
 (E) Answer not known
105. The value of coefficient of correlation  $r$  is
- (A)  $-1 \leq r \leq +1$  (B)  $< 1$   
 (C)  $> 1$  (D)  $\neq 0$   
 (E) Answer not known
106. If  $T = \{X, \varnothing, \{1\}, \{2\}, \{1, 2\}, \{1, 4, 5\}, \{1, 2, 4, 5\}\}$  is a topology on  $X = \{1, 2, 3, 4, 5\}$  and  $A = \{1, 2, 3\} \subset X$ . Then the topology  $T_A = \{A, \varnothing, \{1\}, \{2\}, \{1, 2\}\}$  is a
- (A) upper limit topology (B) lower limit topology  
 (C) relative topology (D) not a topology  
 (E) Answer not known



107. If  $f$  is strictly increasing and continuous on  $[a, b]$  then  $f^{-1}$  is continuous and strictly increasing on
- (A)  $[a, f(b)]$  (B)  $[f(a), b]$   
 (C)  $[a, b]$  (D)  $[f(a), f(b)]$   
 (E) Answer not known
108. A conjugate harmonic of  $u(x, y) = e^x \sin y$  is
- (A)  $-e^x \cos y + C$  (B)  $e^x \cos y + C$   
 (C)  $e^y \cos x + C$  (D)  $-e^y \cos x + C$   
 (E) Answer not known
109. Under what condition  $u + iv$  and  $v + iu$  both are analytic
- (A)  $u$  is constant  
 (B)  $v$  is constant  
 (C) both  $u$  and  $v$  are constant  
 (D)  $u^2 + v^2$  is constant  
 (E) Answer not known
110. The function  $f(z) = \frac{1}{z^2 + 4}$  is
- (A) Analytic for all  $z$   
 (B) Analytic for  $z = -2$   
 (C) Not analytic at  $z = \pm 2i$   
 (D) Analytic only at  $z = 2i$   
 (E) Answer not known
111. A monotonically increasing sequence which is not bounded above is
- (A) convergent to 0  
 (B) divergent to  $+\infty$   
 (C) convergent to 1  
 (D) divergent to  $-\infty$   
 (E) Answer not known

112. The set  $z$  of integers is a subring of the ring  $Q$  of rational numbers. Then  $z$  is
- (A)  not an ideal of  $Q$
- (B) only a left ideal of  $Q$
- (C) only a right ideal of  $Q$
- (D) an ideal of  $Q$
- (E) Answer not known
113. Let  $G$  be the group of integers under addition and define automorphism  $\phi: G \rightarrow G$  by
- (A)   $\phi: x \rightarrow 2x$  for every  $x \in G$
- (B)  $\phi: x \rightarrow x^2$  for every  $x \in G$
- (C)  $\phi: x \rightarrow x^3$  for every  $x \in G$
- (D)  $\phi: x \rightarrow \sqrt{x}$  for every  $x \in G$
- (E) Answer not known
114. Let  $G$  be the set of all  $2 \times 2$  matrices  $\begin{pmatrix} a & b \\ c & d \end{pmatrix}$  where  $a, b, c, d$  are integers modules 2 such that  $ad - bc \neq 0$ . Under matrix multiplication  $G$  is a group and is of order.
- (A) 16
- (B) 10
- (C) 8
- (D)  6
- (E) Answer not known
115. A non empty subset  $H$  of the group  $G$  is a subgroup of  $G$  if and only if
- (A)   $ab^{-1} \in H$
- (B)  $a^{-1} \in H$
- (C)  $a + b \in H$
- (D)  $a \cdot b \in H$
- (E) Answer not known
116. A set of questions developed for one or more focus groups is called
- (A) Structured Interview Schedule
- (B) Open-ended Questionnaire
- (C) Mailed Questionnaire
- (D)  A Questioning route
- (E) Answer not known



117. Evaluation of a project from the point of view of national viability has to be done in
- (A) Social feasibility
  - (B) Impact assessment
  - (C) ✓ Cost benefit analysis
  - (D) Funds availability
  - (E) Answer not known
118. \_\_\_\_\_ is used for eliciting the opinions of a group of experts with the help of a mail survey
- (A) ✓ Delphi method
  - (B) Trend method
  - (C) Casual method
  - (D) Projection method
  - (E) Answer not known
119. Case study is the form of
- (A) Action Research
  - (B) ✓ Qualitative Research
  - (C) Quantitative Research
  - (D) Research Design
  - (E) Answer not known
120. In research, \_\_\_\_\_ provides a convenient means of establishing precise location of number of points
- (A) Surveying
  - (B) ✓ Triangulation
  - (C) Analysing
  - (D) Indexing
  - (E) Answer not known
121. In data collection for social research, which one of the following belong to secondary data?
- (A) Statistical Abstracts of States
  - (B) Report of Municipal Corporation
  - (C) Publication of Research Institutions
  - (D) ✓ All of the above
  - (E) Answer not known

122. Which of the following is not a level of measurement?
- (A) Nominal
  - (B)  Variable
  - (C) Ordinal
  - (D) Ratio
  - (E) Answer not known
123. Which one of the following is not an example of Quantitative research?
- (A) Census method
  - (B)  Focus group discussion
  - (C) Opinion polls
  - (D) Outcome evaluation
  - (E) Answer not known
124. Which of the following research design is a source of grounded theory?
- (A) Historical design
  - (B) Descriptive design
  - (C)  Exploratory design
  - (D) None of the above
  - (E) Answer not known
125. The norm of voluntary participation and \_\_\_\_\_ is important in conducting research with human subjects
- (A) Informed conduct
  - (B)  Informed consent
  - (C) Un-assumed consent
  - (D) Assumed conduct
  - (E) Answer not known
126. Which of the following is used by philosophers and thinkers to develop new concepts or to reinterpret existing ones
- (A)  Conceptual research
  - (B) Descriptive research
  - (C) Fundamental research
  - (D) Empirical research
  - (E) Answer not known



127. Assertion [A] : The systems approach gave raise to contingency management  
Reason [R] : It is also known as modern organisation theory
- (A) Both [A] and [R] are true and [R] is correct explanation of [A]
  - (B) Both [A] and [R] are true and [R] is not a correct explanation of [A]
  - (C) [A] is true but [R] is false
  - (D) [A] is false [R] is true
  - (E) Answer not known
128. \_\_\_\_\_ which concerns the question of how many items are to be observed and how the information and data gathered is to be analysed
- (A) The observational design
  - (B) The statistical design
  - (C) The operational design
  - (D) The sampling design
  - (E) Answer not known
129. The Third Minnow Brook conference was held in the year \_\_\_\_\_ at \_\_\_\_\_
- (A) 1968, Syracuse university
  - (B) 2008, Syracuse university
  - (C) 1988, Syracuse university
  - (D) 1960, Syracuse university
  - (E) Answer not known
130. Arrange the following drafts of Woodrow Wilson in chronological order
1. The study of Administration
  2. Notes on Administration
  3. The Art of Government
- (A) 2, 3, 1
  - (B) 1, 2, 3
  - (C) 3, 2, 1
  - (D) 3, 1, 2
  - (E) Answer not known

131. Given a probability density function

$$f(x) = \begin{cases} e^{-x}; & x \geq 0 \\ 0 & x < 0 \end{cases}$$

Find the probability of  $P(1 \leq X \leq 2)$

- (A)  $e^{-1} + e^{-2}$  (B)  $e^{-2}$   
(C)  $e^{-1}$  (D)   $e^{-1} - e^{-2}$   
(E) Answer not known

132. Let  $g(x, y)$  be the continuous joint probability density function, such that

$$g(x, y) = \left(x + \frac{1}{2}\right) \left(y + \frac{1}{2}\right); 0 \leq (x, y) \leq 1$$

The marginal probability density function of  $X$  is

- (A)   $x + \frac{1}{2}, 0 \leq x \leq 1$  (B)  $x - \frac{1}{2}, 0 \leq x \leq 1$   
(C)  $y + \frac{1}{2}, 0 \leq y \leq 1$  (D)  $y - \frac{1}{2}, 0 \leq y \leq 1$   
(E) Answer not known

133. For the conditional event  $A | B$ , the number of sample points of the event  $B$  is

- (A)  $n(S)$  (B)  $n(A \cap B)$   
(C)   $n(B)$  (D)  $n(A)$   
(E) Answer not known

134. If the first four central moments of a distribution are 0, 2.5, 0.7 and 18.75, then the Skewness and Kurtosis are

- (A)  $\beta_1 = 0.57; \beta_2 = 7$  (B)   $\beta_1 = 0.031; \beta_2 = 3$   
(C)  $\beta_1 = 0.73; \beta_2 = 10$  (D)  $\beta_1 = 0.85; \beta_2 = 4$   
(E) Answer not known

135. In case of positive skewed distribution, the relation between mean, median and mode that holds is

- (A) Mean = Median = Mode (B) Mean < Median < Mode  
(C) Median > Mean < Mode (D)  Mean > Median > Mode  
(E) Answer not known



136. Moving average method of fitting trend in a time series data removes the effect of
- (A) Irregular variations
  - (B) Cyclical variations
  - (C) Long term movements
  - (D) ✓ Short term movements
  - (E) Answer not known
137. In a binary logit model the measure of goodness of fit of the model is indicated by
- (A)  $R^2$
  - (B)  $F$ -test
  - (C) ✓ Pseudo  $R^2$
  - (D)  $Q$  statistic
  - (E) Answer not known
138. Chow-test without dummy variables does NOT tell us
- (A) That the two regression are different
  - (B) There is significant structural break in the data
  - (C) ✓ The source of difference between the two regressions
  - (D) The estimates of the two regression functions are statistically significant
  - (E) Answer not known
139. Which one is true when a time series is stationary?
- (A) Time varying mean
  - (B) Time varying variance
  - (C) Time varying mean and variance
  - (D) ✓ Time invariant mean and variance
  - (E) Answer not known
140. Dummy variable classify the data into
- (A) Inclusive categories
  - (B) ✓ Mutually exclusive categories
  - (C) Related categories
  - (D) Quantitative categories
  - (E) Answer not known

141. Regression analysis is concerned with estimating
- (A)  The mean value of the dependent variable
  - (B) The mean value of the explanatory variable
  - (C) The mean value of the correlation coefficient
  - (D) The mean value of the fixed variable
  - (E) Answer not known
142. Pearson's correlation coefficient " $r$ " ranges between
- (A)  $0 \leq r \leq 1$
  - (B)  $-\alpha \leq r \leq +\alpha$
  - (C)   $-1 \leq r \leq +1$
  - (D)  $2 \leq r \leq 4$
  - (E) Answer not known
143. Which one of the following does not fall into nominal scale of measurement?
- (A)  Age in years of a person
  - (B) Gender of a person
  - (C) Choice of a car by a person
  - (D) Marital status of a person
  - (E) Answer not known
144. The data on GDP, unemployment, household expenditure, are examples of
- (A) Experimental data
  - (B)  Non-Experimental data
  - (C) Cross section data
  - (D) Time series data
  - (E) Answer not known



145. \_\_\_\_\_ must be prepared and be given invariably in the report at the end.
- (A) Conclusion
  - (B) Bibliography
  - (C)  Index
  - (D) Technical appendices
  - (E) Answer not known
146. The sources of information can be classified into documentary source and field source who said?
- (A) Gorden Geoffery
  - (B)  Pauline V. Young
  - (C) F.N. Kerlinger
  - (D) L.L. Thurstone
  - (E) Answer not known
147. A universe containing persons (or) concrete objects is known as
- (A)  existent (or) real population
  - (B) finite (or) infinite population
  - (C) statistical (or) sampling population
  - (D) intensive (or) possible population
  - (E) Answer not known
148. Primary data can be collected by two methods
- (A) Enquiry and sampling
  - (B)  Census and sampling
  - (C) Sampling and enumeration
  - (D) Investigation and sampling
  - (E) Answer not known

149. Constructing a Consumer Price Index through aggregate expenditure method involves
- (A) Base Year prices as weights      (B)  Base year quantities as weights  
(C) Current year prices as weights      (D) Current year quantities as weights  
(E) Answer not known
150. The excess of aggregate demand over the available output on account of rising money incomes at the full employment level is referred to as
- (A) inflationary pressure      (B) poverty gap  
(C)  inflationary gap      (D) income gap  
(E) Answer not known
151. VAT is simply a \_\_\_\_\_ that exempts the purchase of intermediate goods and services from the tax base.
- (A) Single stage sales tax      (B)  Multi stage sales tax  
(C) Multi stage income tax      (D) Multi stage corporate tax  
(E) Answer not known
152. Which one is the instrument of fiscal policy?
- (A)  Taxation  
(B) Rate of interest  
(C) Open market operation  
(D) Bank rate  
(E) Answer not known
153. The planning Commission's estimates in the rural area, the poverty line on the basis of recommended nutritional requirements of
- (A)  2435 rounded as 2400 calories person per day in rural areas  
(B) 2095 rounded as 2100 calories person per day in rural areas  
(C) 2495 rounded as 2500 calories person per day in urban areas  
(D) 2195 rounded as 2200 calories person per day in urban areas  
(E) Answer not known



154. \_\_\_\_\_ is the source of supply of raw materials to our leading industries.
- (A)  Agriculture
  - (B) Industries
  - (C) Oceans
  - (D) Forests
  - (E) Answer not known
155. The National Co-operative Development Corporation (NCDC) was setup in
- (A) 1962
  - (B)  1963
  - (C) 1959
  - (D) 1965
  - (E) Answer not known
156. The term Scheduled Caste was coined by
- (A) Mandal Commission
  - (B) Kothari Commission
  - (C)  Simon Commission
  - (D) Constitutional Drafting Committee
  - (E) Answer not known
157. Which of the following tribe is found in Tamil Nadu?
- (A) Muria
  - (B)  Malayali
  - (C) Khasa
  - (D) Gond
  - (E) Answer not known
158. Post glacial / post pluvial Neothermal period has been referred as
- (A) The Recent
  - (B) Holocene period
  - (C)  Both (A) and (B)
  - (D) None of the above
  - (E) Answer not known

159. Founding member of Post-modern anthropology
- (A) Margery Wolf (B) Nancy Scheper-Hughes  
(C) ✓ Clifford Geertz (D) Stephen Tyler  
(E) Answer not known
160. A best example for a ritual of inversion
- (A) pilgrimage (B) ✓ carnival  
(C) life-cycle ceremony (D) a temple festival  
(E) Answer not known
161. A mode of exchange in which transactions take place between individuals who are symmetrically placed
- (A) barter (B) ✓ reciprocity  
(C) redistribution (D) market  
(E) Answer not known
162. Kinship was first studied by
- (A) E.B. Tylor (B) ✓ Lewis Henry Morgan  
(C) G.P. Murdock (D) Levi. Strauss  
(E) Answer not known
163. The marriage preference rule in which a widow marries her deceased husband's brother is called
- (A) Serial monogamy (B) Sororate  
(C) Ghost marriage (D) ✓ Levirate  
(E) Answer not known
164. Production is
- (A) ✓ the different ways of cultures organize the resources, labour and energy sources around them  
(B) found only in industrial societies  
(C) only involves men, as it's about economics and politics  
(D) all of the above is true of production  
(E) Answer not known



165. Choose the correct answer from the following:

Which of the following information systems are designed to provide accurate, timely and relevant information needed for effective decision making by managers in the organization?

- (i) Decision Support System (DSS)
  - (ii) Management Information System (MIS)
  - (iii) Transaction Processing Systems (TPS)
  - (iv) Executive Information Systems (EIS)
- (A) (iv) (B) (iii)  
(C) (i) (D)  (ii)  
(E) Answer not known

166. Choose the wrong answer among type

- (i) Judgement sampling is very helpful to make public policies
  - (ii) The estimates are accurate
  - (iii) It is very helpful to make public policies decisions etc.
  - (iv) It is most useful in qualitative research practices
- (A) (i) and (ii) are correct (B) (i) and (iii) are correct  
(C) (ii) and (iii) are correct (D)  (iii) and (iv) are correct  
(E) Answer not known

167. Types of reports is as under

- (i) Summary report
  - (ii) Nature of report
  - (iii) Technical report
  - (iv) Popular report
- (A) (i) and (ii) are correct (B) (i) and (iii) are correct  
(C) (ii) and (iv) are correct (D)  (iii) and (iv) are correct  
(E) Answer not known

168. The meaning of sampling error can be easily understood from the following equation

- (A) Sampling error = Frame error – response error – Chance error  
(B) Sampling error = Response error – Frame error + Chance error  
(C)  Sampling error = Frame error + chance error + response error  
(D) Sampling error = Chance error + frame error – response error  
(E) Answer not known

169. Choose the Right matches:

In bcg matrix

- (i) Stars – High industry growth rate and high relative market share
  - (ii) Cash cows – High industry growth rate and low relative market share
  - (iii) Question marks – Low industry growth rate and high relative market share
  - (iv) Dogs – Low industry growth rate and low relative market share
- (A) (ii) and (iii) are correct                      (B)  (i) and (iv) are correct  
(C) (i) and (ii) are correct                      (D) (iii) and (iv) are correct  
(E) Answer not known

170. Which are not relevant to forecasting human resources in an organization?

- (A) Managerial Judgement                      (B) Trend Analysis  
(C) Work study method                      (D)  Merger  
(E) Answer not known

171. Choose the right answer

Performance Appraisal methods BARS stands for

- (A) Behaviorally Attitude Rating System  
(B) Behaviorally Attitude Ranking System  
(C) Behaviorally Anchored Ranking System  
(D)  Behaviorally Anchored Rating System  
(E) Answer not known

172. Choose the wrong match type

Which of the following is incorrectly paired?

- (i) Psychological pricing – different customers pay different price for the same product  
(ii) Promotional pricing – Pricing product below list price.  
(iii) Zone pricing – Segmented pricing  
(iv) FOB-origin pricing – Product bundle pricing
- (A) (i) and (iii) are correct  
(B)  (iii) and (iv) are correct  
(C) (i) and (ii) are correct  
(D) (ii) and (iv) are correct  
(E) Answer not known



173. Choose the right matches among the following :

Japanese Term	Meaning in Japanese context
(a) SEIRI	1. Throw away all rubbish and unrelated materials in the work place
(b) SEITON	2. Practice "5S" daily. Make it a way of life. This is also means commitment
(c) SEISO	3. Standardizing the way of maintaining cleanliness
(d) SEIKETSU	4. Clean the work place, everything without fail
(e) SHIT SUKE	5. Set everything in proper place for quick retrieval and storage

- |       | (a)              | (b) | (c) | (d) | (e) |
|-------|------------------|-----|-----|-----|-----|
| (A)   | 1                | 4   | 3   | 5   | 2   |
| (B)   | 3                | 1   | 4   | 5   | 2   |
| (C) ✓ | 1                | 5   | 4   | 3   | 2   |
| (D)   | 2                | 3   | 5   | 1   | 4   |
| (E)   | Answer not known |     |     |     |     |

174. Choose the best option

- (i) Material handling is a service function
  - (ii) It is not an end in itself
  - (iii) Continuous movement is not efficient
  - (iv) It should reduce time and distance
- (A) ✓ (i), (ii) and (iv)  
(B) (i), (iii) and (iv)  
(C) (iii), (ii) and (iv)  
(D) (iv), (ii) and (iii)  
(E) Answer not known

175. Which of the following gives meaning of shareholders wealth maximization?

- (A) Maximizing value
- (B) Maximizing present value
- (C) Maximizing net present value
- (D) ✓ Maximizing the net present value of a course of action to shareholders
- (E) Answer not known

176. Identify the approaches to be developed by women to accept new roles in life.
- (A) Fearful and trauma
  - (B)  Assertive and hopeful approaches
  - (C) Threatened and social stigma
  - (D) Harassment and ill treatment
  - (E) Answer not known

177. \_\_\_\_\_ introduced the concept of Micro Finance.

- (A) Mohammed Iqbal of Pakistan
- (B)  Mohammed Yanus of Bangladesh
- (C) Mohammed Yazir of Afganistan
- (D) Peter K. Brown of America
- (E) Answer not known

178. Which of the following sentences are associated with social movements?

- I. A social movement is a deliberate collective endeavour
  - II. Social movement excludes violence, illegality and revolution
  - III. A social movement must evince a minimal degree of organisation
  - IV. A social movement is an effort to promote change
- (A) I, II and III
  - (B) II, III and IV
  - (C) I, III and IV
  - (D)  I, II, III and IV
  - (E) Answer not known

179. A movement stands for equalitarian values to gain self-respect and esteem

- (A)  Mahar movement
- (B) Self-Respect movement
- (C) Civil Rights movement
- (D) Social Reform movement
- (E) Answer not known



180. According to spencer \_\_\_\_\_ is a change from a state of relatively indefinite, incoherent homogeneity to a definite coherent heterogeneity.
- (A) Development
  - (B)  Evolution
  - (C) Progress
  - (D) Transformation
  - (E) Answer not known
181. The class of aristocratic land owners exploit the mass of peasants is known as
- (A) Capitalist stage
  - (B) Ancient stage
  - (C)  Feudal stage
  - (D) Primitive communist stage
  - (E) Answer not known
182. Choose the correct match from the following
- |                     |   |                   |
|---------------------|---|-------------------|
| (1) Karl Marx       | - | Immiseration      |
| (2) Herbert Spencer | - | Social Conflict   |
| (3) L.A. Coser      | - | Organic Analogy   |
| (4) Ralf Dahrendorf | - | Ethno methodology |
- (A)  (1)
  - (B) (2) and (3)
  - (C) (4)
  - (D) (1) and (3)
  - (E) Answer not known
183. \_\_\_\_\_ is when a woman is married to a husband of lower social status, rank or age.
- (A) Hypergyny
  - (B)  Hypogyny
  - (C) Strict monogamy
  - (D) Serial monogamy
  - (E) Answer not known

184. The existence of a perfect linear relationship among some or all explanatory variables of a regression model known as
- (A) Heteroscedasticity
  - (B)  Multicollinearity
  - (C) Auto correlation
  - (D) Spurious correlation
  - (E) Answer not known
185. If a Durbin Watson statistics takes a value close to zero what will be the value of first order auto correlation co-efficient?
- (A) Close to -1
  - (B)  Close to 1
  - (C) Close to 0
  - (D) Lies between -1 to 1
  - (E) Answer not known
186. In data cleaning, missing value of the data, may be replaced with
- (A) Positive value
  - (B) Negative value
  - (C)  Neutral value
  - (D) Zero value
  - (E) Answer not known
187. The method of data collection which is quite popular particularly for detailed enquiries is
- (A) Observation method
  - (B) Interview method
  - (C)  Questionnaire method
  - (D) Pantry audits
  - (E) Answer not known
188. Which one is called as non probability sampling?
- (A) Cluster sampling
  - (B)  Quota sampling
  - (C) Systematic sampling
  - (D) Stratified sampling
  - (E) Answer not known



189. One among these are not a Common Property Resources (CPR)
- (A) Culturable waste lands
  - (B)  Current Fallow
  - (C) Protected and unclassified forest lands
  - (D) Permanent pastures and grazing lands
  - (E) Answer not known
190. The main cause of acid rain is
- (A)  SO<sub>2</sub>
  - (B) H<sub>2</sub>O
  - (C) CO<sub>2</sub>
  - (D) O<sub>2</sub>
  - (E) Answer not known
191. In economics, \_\_\_\_\_ refers to a bundle of entitlements defining the owner's right, privileges, and limitations for use the resources.
- (A) Privileged rights
  - (B)  Property rights
  - (C) Personal rights
  - (D) Preferred rights
  - (E) Answer not known
192. District Credit plan is prepared by
- (A) NABARD
  - (B) DRDA
  - (C) Any Government Bank
  - (D)  Lead Bank
  - (E) Answer not known
193. Who suggested the use of agricultural labour price index as a more suitable deflator while estimating poverty based on income and prices?
- (A) P.D. Ohja
  - (B)  P.K. Bardhan
  - (C) B.S. Minhas
  - (D) V.M. Dandekar
  - (E) Answer not known
194. Agricultural price commission was renamed as CACP is in the year
- (A) 1980
  - (B)  1985
  - (C) 1990
  - (D) 1992
  - (E) Answer not known

195. In consumer's behaviour analysis, utility can be measured, by  
 (A) Keynesian approach (B)  Cardinal approach  
 (C) J.S. Mill's approach (D) Ordinal approach  
 (E) Answer not known
196. The capacity of a good to command other things in exchange known as  
 (A) Price (B)  Value  
 (C) Wealth (D) Utility  
 (E) Answer not known
197. Comments can be added to cells using  
 (A) Edit > Comments (B)  Insert > Comments  
 (C) File > Comments (D) View > Comments  
 (E) Answer not known
198. The analytical study of relationship between output commodity and its price is classified as :  
 (A)  demand analysis (B) supply analysis  
 (C) imports analysis (D) exports analysis  
 (E) Answer not known
199. This type chart is embedded within a single cell in the excel :  
 (A) Pie (B)  Line  
 (C) Column (D) Sparlines  
 (E) Answer not known
200. The value of statistic Chi-square for a contingency table

	B <sub>1</sub>	B <sub>2</sub>
A <sub>1</sub>	2	28
A <sub>2</sub>	13	7

after Yates' correction is

- (A) 625/28 (B)  4225/252  
 (C) 4240/2525 (D) 845/2520  
 (E) Answer not known



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