

FYBMS SEM 1- Bus Statistics

MCQ

(Bold = Correct Answer)

1. Maximum value of correlation is _____
a) 2 (b) 1.5 (c) **1** (d) 0
2. Spearman's method is the method of calculating coefficient of correlation by
(a) Irvin Fischer (b) **Charles Spearman** (c) Lorenz (d) Karl Pearson
3. Graph of variables having linear relation will be
(a) Curved (b) Hyperbola (c) **Straight line** (d) Vertical line
4. Correlation between income and demand is
(a) Negative (b) **Positive** (c) Zero (d) 100
5. Minimum value of correlation is
(a) -2 (b) -1.5 (c) **-1** (d) 0
6. In case there is no relation between two variables, value of coefficient of correlation will be
(a) -2 (b) -1.5 (c) -1 (d) **0**
7. Independent variable is represented along
(a) **x-axis** (b) z-axis (c) y-axis (d) W-axis
8. Which is the most widely used method of calculating correlation?
(a) Scatter diagram (b) **Karl Pearson's** (c) Charles Spearman's (d) Shahid qureshi
9. Which one of the following is a relative measure of dispersion?
(a) Standard deviation (b) Variance (c) **Variance** (d) Shahid qureshi
10. Which of the following is correct for a multiplicative time series model?
a) $TX S+C+1$ b) $T-S+C-1$. c) **$TXC \times S \times 1$** d) $T \times S \times C-1$
11. Which of the following components is used for a short-term forecast?
a) trend b) cyclical c) seasonal d) **none of these**
12. When the individual years (X) are changed into coded time values such that $EX = 0$, then:
a) $a = \Sigma y/n$ $b = \Sigma xy/n$ b) $a = \Sigma x/n$ $b = \Sigma xy/x^2$ c) $a = \Sigma xy/n$ $b = \Sigma y/y^2$ d) **None of these**
13. When the time series comprises annual data, we can find out:
a) Seasonal variation b) Secular trend c) **Cyclical fluctuation** d) All of these

14. Laspeyre's index is based on:

- a) **Base year quantities** b) current year quantities c) both of them d) average of current and base year

15. A single value which is used to represent the entire mass of data is

- a) **Measure of central tendency** b) Statistics c) Measure of Dispersion d) Skewness

16. the empirical relationship between Mean, Median and Mode is given by

- a) $\text{Mode} = 3 \text{ Median} - \text{Mean}$ b) $\text{Mode} = 2 \text{ Mean} - \text{Median}$ c) **$\text{Mode} = 3 \text{ Median} - 2 \text{ Mean}$** d) $\text{Mode} = \text{Mean} - \text{Median}$

17. The statistical data that can be classified according to the time of its occurrence is:

- a) Geographical b) **Chronological** c) Quantitative d) Qualitative

18. for the given data 7, 8, 9, 9 and 17

- a) **Mean is greater than Median** b) Median greater than Mode c) Mode is greater than Mean d) None of these

19. Two distributions with 30 and 40 items have mean 158 and 162 respectively. The combined mean of two distributions will be:

- a) 162 b) 160.28 c) **160.29** d) 157.99

20. in a moderately symmetrical distribution, the mode is 40 and Median is 44, the value of mean will be:

- a) 43 b) **46** c) 57.3 d) 58.0

21. In case of stage decision making problem, a decision is to be chosen the process from the given list of well defined alternatives.

- (a) **only once at the beginning of** (b) many times in (C) never in. (d) not necessarily at the beginning

22. In the problem of decision making all possible situations are

- (a) sometimes known (b) never known (c) **always known** (d) rarely known

23. Decision maker has over the occurrence of situation.

- (a) always control (b) **no control** (c) sometime control (d) rarely control

24. The possible situation in decision making are all known, there is of exact situation that will occur in future at the time of decision making.

- (a) some knowledge (b) complete knowledge (c) partial knowledge (d) **no knowledge**

25. Chances of occurrence of situations are. known at the time of decision making under certainty.

- (a) never (b) rarely (c) sometimes (d) **always**

26. Decision maker defines effectiveness measure which is combination of

- (a) decision and probability (b) situation and pay off (c) **situation and decision** (d) situation and probability

27. The nature of views of decision maker is

(a) maximisation type (b) minimisation type **(c) optimistic, pessimistic and normal** (d) stationary type

28. In case of pay-off table available maximax criterion can be considered as

(a) optimistic view (b) pessimistic view (c) normal view (d) sedistic view

29. In case of pay-off matrix being available for decision making then maximum criterion can be considered as

(a) optimistic view (b) pessimistic view (c) normal view **(d) absurd**

30. Decision makers views may be classified as

(a) pessimistic type **(b) maximisation type** (c) minimisation type (d) none of these

31. In case of pay-off matrix available for decision making then maximise average can be considered as

(a) optimistic view **(b) pessimistic view** (c) normal view (d) absurd

32. In case of opportunity loss matrix being available for decision making then minimum criterion is considered as

(a) optimistic view (b) pessimistic view **(c) normal view** (d) absurd

33. A numerical value used as a summary measure for a sample, such as a sample mean, is known as a

A) Population Parameter B) Sample Parameter **C) Sample Statistic** D) Population Mean

34. Statistics branches include

A) Applied Statistics B) Mathematical Statistics C) Industry Statistics **D) Both A and B**

35. To enhance a procedure the control charts and procedures of descriptive statistics are classified into

A) Behavioural Tools B) Serial Tools C) Industry Statistics D) Statistical Tools

36. Sample statistics are also represented as

A) Lower Case Greek Letter B) Roman Letters C) Associated Roman Alphabets D) Upper Case Greek Letter

37. Individual respondents, focus groups, and panels of respondents are categorised as

A) Primary Data Sources B) Secondary Data Sources C) Itemized Data Sources D) Pointed Data Sources

38. The variables whose calculation is done according to the height, length and weight are categorised as

A) Discrete Variables B) Flowchart Variables C) Measuring Variables D) Continuous Variables

39. A method used to examine inflation rate anticipation, unemployment rate and capacity utilization to produce products is classified as

A) Data Exporting Technique B) Data Importing Technique **C) Forecasting Technique** D) Data Supplying Technique

40. Graphical and numerical methods are specialized processes utilised in

A) Education Statistics **B) Descriptive Statistics** C) Business Statistics D) Social Statistics

41. The scale applied in statistics which imparts a difference of magnitude and proportions is considered as

A) Exponential Scale B) Goodness Scale **C) Ratio Scale** D) Satisfactory Scale

42. Review of performance appraisal, labour turnover rates, planning of incentives and training programs and are examples of

43. Quantitative data is the data that possess_____

- (a) Ratio Scale (b) Exponential Scale (c) Statistics in Production **(d) numerical properties.**

44. _____ is a scientific tool used in research and making an intelligent judgment

- (a) Goodness Scale **(b) Statistics** (c) numerical properties. (d) Satisfactory Scale

45. _____ is used, when the population under study is infinite

- (a) random method (b) numerical method **(c) Sample method** (d) All

46. The difference between upper-class limit and lower-class limit is called_____

- (a) Exponential Scale **(b) width of class-interval** (c) interview (d) Statistics in Marketing

47 Weight is a _____ variable.

- (a) Continuous,** (b) numerical (c) Ratio (d) Production

48. If X takes values 2.5.7.9 then X is called_____variable

- (a) numerical **(b) Discrete** (c) interview (d) Scale

49 _____ is always equidistant between third quartile and first quartile.

- (a) Mean (b) Mode (c) Mix **(d) Median**

50. Mean. Median and Mode are equal in a _____

- (a)Continuous (b) unsymmetrical distribution **(c) symmetrical distribution** (d) None