BRAINWARE UNIVERSITY
Term End Examination 2020 - 21
Programme – Bachelor of Business Administration in Hospital Management
Course Name – Business Data Analytics
Course Code - GECS301
Semester / Year - Semester III

Time allotted : 75 Minutes

Full Marks : 60

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

Group-A

(Multiple Choice Type Question)   1 x 60=60

1.   *(Answer any Sixty)*

(i) The analysis based on study of price fluctuations, production of commodities and deposits in banks is classified as

   a) sample series analysis

   b) time series analysis

   c) numerical analysis

   d) experimental analysis

(ii) Study the following information carefully and answer the questions that follow: In a state, Government recruited 4000 teachers for teaching five different subjects viz. Science, Mathematics, Hindi, Social Science and English. Fifteen percent of the total number of teachers are recruited for teaching Science. Three tenth of the total number of teachers is recruited for teaching Mathematics. Teachers recruited for teaching Hindi are two-third of the number of teachers recruited for Mathematics. 12 percent of the remaining teachers are recruited for teaching Social Science. Rest of the teachers are recruited for teaching English. Number of teachers recruited for teaching Mathematics is approximately what percentage of the total number of teachers recruited for Hindi and Science together?

   a) 72

   b) 74

   c) 78

   d) 86

(iii) Study the following information carefully and answer the questions that follow: In a state, Government recruited 4000 teachers for teaching five different subjects viz. Science, Mathematics, Hindi, Social Science and English. Fifteen percent of the total number of teachers are recruited for

teaching Science. Three tenth of the total number of teachers is recruited for teaching Mathematics. Teachers recruited for teaching Hindi are two-third of the number of teachers recruited for Mathematics. 12 percent of the remaining teachers are recruited for teaching Social Science. Rest of the teachers are recruited for teaching English. What is the difference between the numbers of teachers recruited for teaching Social Science and the number of teachers recruited for teaching English?

a) 1144   b) 1064

c) 1024   d) 1124

(iv) Study the following information carefully and answer the questions that follow: In a state, Government recruited 4000 teachers for teaching five different subjects viz. Science, Mathematics, Hindi, Social Science and English. Fifteen percent of the total number of teachers are recruited for teaching Science. Three tenth of the total number of teachers is recruited for teaching Mathematics. Teachers recruited for teaching Hindi are two-third of the number of teachers recruited for Mathematics. 12 percent of the remaining teachers are recruited for teaching Social Science. Rest of the teachers are recruited for teaching English. If 42 percent of the total number of teachers recruited for teaching Science and Mathematics together is male. What is the total number of female teachers recruited for teaching Science and Mathematics together?

a) 1034   b) 1064

c) 1024   d) 1044

(v) Study the following information carefully and answer the questions that follow: In a state, Government recruited 4000 teachers for teaching five different subjects viz. Science, Mathematics, Hindi, Social Science and English. Fifteen percent of the total number of teachers are recruited for teaching Science. Three tenth of the total number of teachers is recruited for teaching Mathematics. Teachers recruited for teaching Hindi are two-third of the number of teachers recruited for Mathematics. 12 percent of the remaining teachers are recruited for teaching Social Science. Rest of the teachers are recruited for teaching English. What is the respective ratio between the number of teachers recruited for teaching Social Science and the number teachers

recruited for teaching of Mathematics?

a) 0.327083333333333   b) 0.159722222222222

c) 0.743055555555556   d) None of these

(vi) Which type of analytics, recommend decisions using optimization, simulation etc.

a) Predictive   b) Descriptive

c) Decisive   d) Prescriptive

(vii) What is to be used when faced with the decision of how to arrange furniture in a room

a) Mental model   b) Physical model

c) Visual model   d) Mathematical model

(viii) Which type of analytics, uses statistical and machine learning techniques

a) Descriptive   b) Decisive

c) Prescriptive   d) Predictive

(ix) What is the characteristic of best models

a) accurately reflect relevant characteristics of the real-world object or decision.

b) replicate all aspects of the real-world object or decision.

c) replicate the characteristics of a component in isolation from the rest of the system.

d) are mathematical models.

(x) Which type of analytics, supports human decisions with visual analytics the user models to reflect reasoning

a) Descriptive   b) Decisive

c) Prescriptive   d) Predictive

(xi) The essence of decision analysis is

a) choosing the best course of action among

b) thinking ahead to avoid negative

alternatives.

consequences.

c) finding the root cause of why something has gone wrong.

d) breaking down complex situations into manageable elements.

(xii)

The first step in the business analytic process is

a)	b)
Determine the needs of the business	Collect the data
c)	d)
Analyze the data	Predict the outcome

(xiii)

Which is the function of business data classification?

a)	b)
Brings out the cause and effect relationship	Prepare the data for tabulation
c)	d)
Condense the data	All of these

(xiv)

Which one is not nature of Variable for business data classification?

a)	b)
Quantitative data	Manifold Classification
c)	d)

Qualitative data   Discrete data

(xv)

Business analytics can be used for which of the following?

a)   b)

Finding patterns   Verifying previous decisions

c)   d)

Predicting results   All of these

(xvi)

Data mining is

a)   b)

The actual discovery phase of a knowledge discovery   The stage of selecting the right data for a KDD process
process

c)   d)

                                                    None of these

A subject-oriented integrated time variant non-volatile
collection of data in support of management.

(xvii)

Which is the following issue is considered before investing in Data Mining

a)

Functionality

b)

Vendor consideration

c)

Compatibility

d)

All of these

(xviii)

Which of the following approaches should be used to ask a Data Analysis question?

a)

Find only one solution for particular problem

b)

Find out the question which is to be answered

c)

Find out answer from dataset without asking question

d)

None of the mentioned

(xix) What is likely to be dependent events?

a) the size of your house and the size of your shoes

b) the weight of your car and its gas mileage

c) he colors of your car and its gas mileage

d) the weather and the number of books on your shelf

(xx) Which statement is valid if a fair coin is flipped 10 times

a) The probability of all heads is greater than the probability of all tails.

b) The probability of HHHHHHHHHH = the probability of HTHTHTHTHT.

c) The number of heads will equal the

d) The probability of HHHHHHHHHH <

number of tails.   the probability of HTHTHTHTHT.

(xxi)

Which of the following is characteristic of Processed Data?

a)   b)

Data is not ready for analysis   All steps should be noted

c)   d)

Hard to use for data analysis   None of the mentioned

(xxii) What does measure of variability indicates
a) If the high and low extreme scores cancel b) how well the measure of central
each other out.   tendency represents the entire set of scores.
c) whether or not to compute percentiles. d) If the mean is greater than the mode.

(xxiii) What is the range for the following data -- [12 23 34 54 21 8 9 67]
a) 8   b) 55
c) 59   d) 56

(xxiv) What is the median for the following data -- [2 4 3 6 1 8 9 2 5 7]
a) 10.0   b) 4.7
c) 2.0   d) 4.5

(xxv) What is the disadvantage of using the sum of squared deviations for
measuring variability
a) it uses the mean in its calculation.   b) it cannot be used in any other statistical
                                            analyses.
c) it can only be used with ratio data.   d) it does not take N into account.

(xxvi) What is the characteristic of measures of central tendency?

a) descriptive statistics that identify the best single value for representing a set of data.

b) inferential statistics that identify the spread of the scores in a data set.

c) inferential statistics that identify the best single value for representing a set of data.

d) descriptive statistics that identify the spread of the scores in a data set.

(xxvii) If most repeated observations recorded are outliers of data, then mode is considered as

a) poor measure

b) intended measure

c) percentage measure

d) best measure

(xxviii) What define the mean

a) the statistical or arithmetic average.

b) the best representation for every set of data.

c) the middlemost score.

d) the most frequently occurring score.

(xxix) What does the distribution which shows cumulative figure of all observations placed below upper limit of classes in distribution considered as?

a) class distribution

b) cumulative frequency distribution

c) upper limit distribution

d) cumulative class distribution

(xxx) Three dimensional diagrams are named as so because they consider both

a) breadth and depth

b) depth and length

c) length and breadth

d) depth, length and breadth

(xxxi) While using a pivot table in Excel, you drop the fields of information that you want in the interior of the pivot table in which of the following areas

a) Column Labels

b) Row Labels

c) Values

d) Report Filter

(xxxii)

Choose from the following that are Decision Tree nodes?

a)   b)

Decision Nodes   End Nodes

c)   d)

Chance Nodes   All of these

(xxxiii) Data classification which is based on variables such as production, cost, height and weight is considered as

a) quantitative classification   b) time series classification

c) open end classification   d) qualitative classification

(xxxiv) Using the F11 shortcut key to create a chart on chart sheet in MS-Excel creates _____.

a) A 3-dimensional line chart   b) A default chart

c) A 2-dimensional bar chart   d) A 2-dimensional column chart

(xxxv) What are the frequencies of all specific values of x and y variables with total calculated frequencies classified as

a) marginal frequencies   b) unconditional frequencies

c) variate frequencies   d) conditional frequencies

(xxxvi) A MS-Excel function inside another function is called a _____ function.

a) Round   b) Sum

c) Nested   d) Text

(xxxvii) What is the characteristic of a variable being termed independent

a) The variable is described as an output of the spreadsheet model.   b) The variables have no relationship to one another.

c) The decision maker has no control over them.   d) The function value depends upon their values

(xxxviii)

Which ONE of these is an example of processed data

a)

Number of visitors to a store

b)

CCTV recordings of shopper visits

c)

Tables from surveys

d)

Customer comments

(xxxix) What is the keyboard shortcut (button or buttons to be pressed) in MS-Excel for creating a chart from the selected cells

a) F3

b) F5

c) F7

d) F11

(xl) Graphics objects on a chart in MS-Excel are used to _____.

a) Help explain the chart data

b) Add interest to a chart

c) Add emphasis to chart data

d) all of these

(xli) How do you classify the data table which is presented in tabular form on basis of two or more simultaneous characteristics?

a) interval table

b) complex table

c) percentage table

d) simple table

(xlii) If in two units of company, unit one employees are 650 and monthly salary is $2750, employees in unit two are 700 and monthly salary is $2500 then what is their combined arithmetic mean?

a) 2320

b) 2620

c) 2420

d) 2520

(xliii) What represent a known value for the population variance?

a) sigma

b) rho

c) (sigma)2   d) (rho)2

(xliv) Criteria of selecting point estimator must include information of
    a) efficiency   b) consistency
    c) unbiasedness   d) all of these

(xlv) While using a pivot table in Excel, when you drop information into the "Values" area in the lower-right corner, the default summarization is by summation. Which of the following tools will you use to change the default summarization?
    a) What-If Analysis   b) Value Field Settings
    c) Column Labels   d) PivotTable Field List

(xlvi) Considering sample statistic, if mean of sampling distribution is equal to population mean then what does sample statistic is classified as?
    a) hypothesis estimator   b) interval estimator
    c) unbiased estimator   d) biased estimator

(xlvii) Diagrams such as cubes and cylinders are classified as
    a) three dimensional diagrams   b) dispersion diagrams
    c) one dimension diagrams   d) two dimension diagram

(xlviii) What does the value which is added or subtracted from point estimate to develop interval estimate of any parameter of population is classified as?
    a) margin of biasedness   b) margin of efficiency
    c) margin of consistency   d) margin of error

(xlix) Term used to describe frequency curve is
    a) relative frequency curve   b) symmetry and kurtosis
    c) symmetrical distribution   d) kurtosis of distribution

(l) What is the difference between the value of parameter of population and value of unbiased estimator point classified as

    a) population error   b) marginal error

    c) confidence error   d) sampling error

(li) The data is stored, retrieved & updated in _____.

    a) FTP   b) SMTP

    c) OLAP   d) OLTP

(lii) Dimensionality reduction reduces the data set size by removing_____.

    a) derived attributes   b) composite attributes

    c) irrelevant attributes   d) relevant attributes

(liii) Which of the following is not an operational system?

    a) Accounts Payable   b) General Ledgers

    c) Order Processing   d) None of these

(liv) The biggest drawback of the level indicator in the classic star-schema is that it limits_____.

    a) ability   b) quantify

    c) qualify   d) flexibility

(lv) Which systems does data integrity usually relate to?

    a) Discrete   b) Executive

    c) Strategic   d) Operational

(lvi) Data redundancy between the environments results in less than _____percent.

    a) one   b) three

    c) two   d) four

(lvii) What defines the mean?

    a) the statistical or arithmetic average.   b) deviation from average

    c) the middlemost score   d) the most frequently occurring score

(lviii) Find the time in years if the compound interest on Rs. 30,000 at 7% per annum is Rs. 4347.

    a) 5/2   b) 4.0

    c) 2.0   d) 3.0

(lix) Calculate the CI on Rs. 25000 compounded for 3 years at 12% per anum.

    a) 10483.2   b) 9720.0

    c) 10123.2   d) 9000.299999999999

(lx) What is meant by the term 'data quality'?

    a) The inherent quality of data as characterized by accuracy, precision, bias, level of error etc.   b) The resolution of the data

    c) The generalization present in the source data.   d) The lineage of the data.