| Name: <br> Enrolment No: |  |  |  |
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| UNIVERSITY OF PETROLEUM AND ENERGY STUDIES End semester Examination, Dec 2022 |  |  |  |
| Course: Data Environment <br> Program: BBA (ABD) <br> Course Code: DSQT 2003 <br> Instructions: Attempt all sections |  | Semester : IIITime $: 03 \mathrm{hrs}$.Max. Marks: 100 |  |
| $\begin{gathered} \text { SECTION A } \\ \text { 10Q×2M=20Marks } \\ \hline \end{gathered}$ |  |  |  |
| S. No. |  | Marks | CO |
| Q 1 | Attempt all Questions in this section |  |  |
| a. | Charts that are helpful in making comparisons are: <br> i. Bar charts <br> ii. column charts <br> iii. Pie charts <br> iv. Both Bar \& Column Charts | 2 | CO1 |
| b. | What is secondary data? <br> i. Data that isn't as good <br> ii. Data that is collected first-hand <br> iii. Data expressed through interpretive analysis. <br> iv. Data that already exists | 2 | CO1 |
| c. | What is data visualization? <br> i. It is the graphical representation of information and data <br> ii. It is the numerical representation of information and data <br> iii. It is the character representation of information and data <br> iv. None of the above | 2 | CO1 |
| d. | Which of the following is not true? <br> i. SAN is more costly as compared to NAS. <br> ii. NAS gives high performance in environment which requires high speed traffic. <br> iii. SAN does not depend on LAN and uses high speed network. <br> iv. SAN and NAS are methods of managing data storage. | 2 | CO1 |
| e. | What is DBMS? <br> i. DBMS is a collection of queries <br> ii. DBMS is a high-level language <br> iii. DBMS is a programming language <br> iv. DBMS stores, modifies and retrieves data | 2 | CO1 |
| f. | The data that represents the number of tickets sold at a movie theater on any given night is: <br> i. Nominal data <br> ii. Ordinal data | 2 | CO1 |


|  | iii. Interval data <br> iv. Ratio data |  |  |
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| g . | The statistical data are of two types. These types are : <br> i. technical data and presentation data <br> ii. Primary data and secondary data <br> iii. Primary data and personal data <br> iv. none of the above | 2 | CO1 |
| h. | A graph that uses vertical bars to represent data is called as <br> i. Line graph <br> ii. Bar graph <br> iii. Scatterplot <br> iv. Vertical graph | 2 | CO1 |
| i. | What of the following statements is true? <br> i. In the case of a "closed-ended" question, the respondent has to format the judgment to fit the response categories. <br> ii. Closed-ended questions are structured questions. <br> iii. The closed-ended questionnaires are generally cheaper and more reliable. <br> iv. All of the above | 2 | CO1 |
| j. | $\qquad$ are used when you want to visually examine the relationship between two quantitative variables. <br> i. Bar graph <br> ii. pie graph <br> iii. line graph <br> iv. Scatterplot | 2 | CO1 |
| $\begin{gathered} \text { SECTION B } \\ \text { 4Qx5M=20 Marks } \end{gathered}$ |  |  |  |
|  | Attempt all four Questions in this section |  |  |
| Q.2. | What do you understand by comparative and non-comparative scales? Explain with examples. | 5 | CO1 |
| Q.3. | What is the difference between a leading and the loaded question? Explain with examples | 5 | CO2 |
| Q.4. | What is the difference between primary and secondary key? | 5 | CO1 |
| Q.5. | Explain data independence with examples | 5 | CO2 |
| $\begin{gathered} \text { SECTION-C } \\ \text { 3Qx10M=30 Marks } \end{gathered}$ |  |  |  |
|  | Attempt all three Questions in this section |  |  |
| Q.6. | What is a questionnaire? Explain the Construction phase in the process of questionnaire design. | 10 | CO2 |
| Q.7. | What are the different Data Models? What are the constraints of a Relational Data Model? | 10 | CO2 |
| Q.8. | Give a detailed comparison of different types of data measurement scales with examples. | 10 | CO2 |


| $\begin{gathered} \text { SECTION-D } \\ \text { 2Qx15M=30 Marks } \end{gathered}$ |  |  |  |
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|  | Attempt both the Questions in this section |  |  |
| Q.9. | Design an E-R diagram for keeping track of the information for all teams in a league. You should store the matches played, the scores in each match, the players in each match and individual player statistics for each match. Summary statistics should be modeled as derived attribute. Note that a player can stay in only one team during a season. Document all your assumptions. | 15 | CO 3 |
| Q.10. | Shown below are side-by-side Excel pie charts displaying both oil and coal energy consumption figures by country. Give your expert opinions as a data analyst. | 15 | CO 3 |

