

PGDDA Sem.-2 Examination

DA-103

DA-SPSS

May-2025

Time : 1-30 Hours]

[Max. Marks : 70

- Instructions :** (1) This paper contains **Thirty Five** questions.
 (2) Each Question is of 2 Marks.
 (3) Each Question is of multiple choices.
 (4) All questions are compulsory.

NO.	QUESTION	Marks
Q.1	Which variable type is used to represent textual data? a) Numeric b) Date c) String d) Dollar	2
Q.2	To sort data in SPSS, use: a) Analyze → Descriptive Statistics b) Data → Sort Cases c) Transform → Recode d) View → Variables	2
Q.3	To filter specific cases in SPSS, you use: a) Recode b) Select Cases c) Weight Cases d) Compute Variable	2
Q.4	Which menu lets you create new variables using calculations? a) Analyze b) Transform → Compute Variable c) Data → Define Variables d) View	2
Q.5	Which test is used for comparing the means of two groups? a) ANOVA b) Regression c) t-test d) Chi-square	2
Q.6	One-way ANOVA is used to compare: a) Two groups b) More than two groups c) Paired samples d) Correlation	2
Q.7	The p-value represents: a) Sample size b) Significance level c) Mean d) Median	2
Q.8	Correlation analysis is used to: a) Compare groups b) Predict outcomes	2

- c) Assess relationship
d) Calculate averages
- Q.9** Which analysis predicts a continuous dependent variable? 2
a) Logistic Regression
b) Linear Regression
c) Chi-square
d) Factor Analysis
- Q.10** What does a p-value < 0.05 generally indicate? 2
a) Hypothesis is true
b) Result is not significant
c) Result is statistically significant
d) Test failed
- Q.11** In correlation output, an r value of 0.9 indicates: 2
a) Weak correlation
b) No correlation
c) Strong positive correlation
d) Strong negative correlation
- Q.12** In regression, R² indicates: 2
a) Sample size
b) Explained variance
c) Standard error
d) Test statistic
- Q.13** Which test is appropriate for testing association between categorical variables? 2
a) ANOVA
b) t-test
c) Chi-square
d) Regression
- Q.14** Which graph is best for continuous variables? 2
a) Bar chart
b) Histogram
c) Pie chart
d) Cross-tab
- Q.15** A boxplot is used to display: 2
a) Mean and standard deviation
b) Frequency distribution
c) Median, quartiles, and outliers
d) Skewness
- Q.16** Which menu allows you to create graphs in SPSS? 2
a) Analyze
b) Graphs
c) Utilities
d) View
- Q.17** Which SPSS procedure reduces variables into factors? 2
a) ANOVA
b) Regression
c) Factor Analysis
d) Crosstabs
- Q.18** What does Cronbach's Alpha test? 2
a) Normality
b) Correlation
c) Reliability
d) Regression

- Q.19** $R^2 = .64$. What does this mean? 2
- 64% of the variance is explained by the model
 - 64% of the sample is significant
 - The data is correlated
 - 64% chance of error
- Q.20** The coefficient (B) for predictor X is 0.43, with $p = 0.01$. What does this mean? 2
- X significantly predicts the dependent variable
 - X has no effect
 - X is negatively correlated
 - The model is invalid
- Q.21** Standardized beta = 0.78. What does this tell you? 2
- Strong predictor
 - Weak predictor
 - Not statistically significant
 - The predictor is a constant
- Q.22** Chi-square (χ^2) = 9.75, $df = 2$, $p = .008$. What do you conclude? 2
- No association
 - Significant association
 - Equal proportions
 - The test is invalid
- Q.23** Cronbach's Alpha = 0.89. Interpretation? 2
- Poor reliability
 - Moderate reliability
 - Excellent reliability
 - No correlation
- Q.24** What value of Cronbach's Alpha indicates unacceptable internal consistency? 2
- Above 0.9
 - Below 0.5
 - Between 0.6 and 0.7
 - 1.0
- Q.25** Kolmogorov-Smirnov test: $p = 0.07$. Interpretation? 2
- Data is significantly non-normal
 - Data is approximately normal
 - Test failed
 - Skewness is high
- Q.26** A KMO value of 0.85 indicates: 2
- Poor sampling adequacy
 - Acceptable sampling adequacy
 - Excellent sampling adequacy
 - Inadequate sample size
- Q.27** Which rotation method in SPSS simplifies the factor structure? 2
- Varimax
 - Eigenvalue
 - Scree
 - Pearson
- Q.28** According to the Kaiser criterion, how many factors should be retained? 2
- Factors with eigenvalue < 1
 - All factors
 - Factors with eigenvalue > 1
 - None

- Q.29** A scree plot is used to: 2
- a) Check normality
 - b) Identify outliers
 - c) Determine number of factors
 - d) Compare groups
- Q.30** Which statistic is most commonly used to detect multicollinearity in SPSS? 2
- a) R^2
 - b) Tolerance and VIF (Variance Inflation Factor)
 - c) Beta
 - d) Durbin-Watson
- Q.31** If a variable has a VIF of 12, what should you consider doing? 2
- a) Keep it, it's fine
 - b) Remove or combine the variable with others
 - c) Run ANOVA
 - d) Apply Chi-square
- Q.32** Parametric tests assume? 2
- a) Data is non-normally distributed
 - b) Data is nominal
 - c) Normal distribution and homogeneity of variance
 - d) No relationship between variables
- Q.33** Which of the following p-values indicates a statistically significant result at a 95% confidence level? 2
- a) 0.10
 - b) 0.06
 - c) 0.05
 - d) 0.01
- Q.34** Which of these is an example of a ratio variable? 2
- a) Temperature in Celsius
 - b) Height in centimeters
 - c) Birth month
 - d) Letter grades (A, B, C, D)
- Q.35** Binning is used for: 2
- a) Converting categorical variables into numeric
 - b) Reducing the number of distinct values in a dataset
 - c) Creating summary tables
 - d) Changing the measurement scale
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