

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BSc DEGREE EXAMINATION MAY 2022
(Sixth Semester)

Branch – COMPUTER SCIENCE WITH DATA ANALYTICS

EXPLORATORY DATA ANALYTICS

Time: Three Hours

Maximum: 75 Marks

SECTION-A (10 Marks)

Answer ALL Questions

ALL Questions carry EQUAL Marks

(10 x 1=10)

1. _____ of the following is also referred to as overlaid 1D plot.
(i) lattice (ii) barplot
(iii) gplot (iv) densityplot
2. _____ of the following graph can be used for simple summarization of data.
(i) Scatterplot (ii) Overlaying
(iii) Barplot (iv) Densityplot
3. _____ is not a one dimension plot.
(i) Bar plots (ii) Density plots
(iii) Histograms (iv) Scatter plots
4. _____ function is a handy way to visualize matrix data.
(i) scatter() (ii) heatmap()
(iii) kmeans() (iv) subset()
5. _____ system split the difference between base and lattice in a number of ways.
(i) Base plotting (ii) ggplot2
(iii) Lattice (iv) Reactive
6. _____ plots can be used to simulate 3-D plots
(i) Wheel (ii) Ball
(iii) Spinning (iv) Ring
7. xyplot is in _____.
(i) base (ii) ggplot2
(iii) lattice (iv) gplot
8. SVG can be expanded as _____.
(i) Spinning Variable Graphics (ii) Spinning Vector Graphics
(iii) Scalable Variable Graphics (iv) Scalable Vector Graphics
9. Graphics devices created by users are available under _____ package.
(i) CRAN (ii) Screen
(iii) File (iv) PDF
10. _____ are a way to create multiple panels of plots.
(i) Smooth (ii) Facets
(iii) Geom (iv) Stats

Cont...

SECTION - B (25 Marks)

Answer ALL questions
ALL questions carry EQUAL Marks (5 x 5 = 25)

- 11 a Explain about common dplyr function properties.
OR
b Summarize on the exploratory data analysis checklist.
- 12 a Explain show causality and mechanism.
OR
b Outline the characteristics of exploratory graphs.
- 13 a State the process of making a plot.
OR
b Describe the any two simple base graphics.
- 14 a Explain about colorRamp() and colorRampPalette().
OR
b Outline on the summary of qplot().
- 15 a Summarize on the components of a ggplot2.
OR
b Describe about smooth and facets.

SECTION-C (40 Marks)

Answer ALL Questions
ALL Questions carry EQUAL Marks (5 x 8=40)

- 16 a Discuss the key verbs provided by dplyr package.
OR
b Summaries on how to formulate questions.
- 17 a Enumerate on how to show multivariate data.
OR
b Outline on bar plots.
- 18 a Discuss ggplot2 system.
OR
b Explain about base plotting functions.
- 19 a Elucidate about SmoothScatter() function.
OR
b Enumerate modifying aesthetics with example.
- 20 a What is geom? Explain the steps to modify geom properties.
OR
b Outline on the steps to load and process raw data with relevant examples.

Z-Z-Z

END