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13-2-95

Suppl. I/C (S-II)

for the Entrance Examination for Admission to Ph. D. Programme, Winter Session
2022-23. onwards!

Received on 11/02/2023 for 2023-24

winter
Term.

for 2023-24 to 1/00

13.2.23

AS I

1. Techniques of Printing Processes
2. Technology of Typography and Typesetting
3. Printer's Science
4. Pre-Press Technology
5. Graphic Design
6. Design and Planning For Printing Production
7. Technology of Flexography
8. Printing and Packaging Materials
9. Methodology of Computer in Printing
10. Reproduction Technology
11. Technology of Gravure
12. Sheet fed Offset Technology
13. Printing Image Generation Technology
14. Print Media Ethics
15. Advertising and Multimedia
16. Printing Management
17. Print Finishing Techniques
18. Printing Substrates
19. Printing Ink Technology
20. Web Offset Technology
21. Entrepreneurship Development
22. Quality Control in Printing and Packaging
23. Colour Separation Techniques
24. Computer Graphics in Printing
25. Book Publishing Systems
26. Continuous Stationary and Security Printing
27. Packaging Technology
28. Printing Machinery Maintenance
29. Newspaper Technology
30. Printer's Costing and Estimating
31. Digital Printing Techniques
32. Printing Plant Layout
33. Computer Graphics in Printing and Packaging
34. Entrepreneurship Development
35. Creative Print Finishing and Converting
36. Advanced Printing Machines and Processes
37. Digital Imaging Techniques
38. Quality Control Systems
39. Technology Management for Printing
40. Advance Security Printing
41. Recent Development in Printing and Packaging

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Research Methodology

Syllabus for Ph.D. Entrance Exam 2025

Unit-I Research Aptitude

Research: Meaning, Types, and Characteristics, Positivism and Postpositivistic approach to research. Methods of Research: Experimental, Descriptive, Historical, Qualitative and Quantitative methods. Steps of Research. Thesis and Article writing: Format and styles of referencing. Research ethics.

Unit-II Mathematical Reasoning and Aptitude

Types of reasoning, Number series, Letter series, Codes and Relationships.

Mathematical Aptitude (Fraction, Time & Distance, Ratio, Proportion and Percentage, Profit and Loss, Interest and Discounting, Averages etc.).

Unit-III Logical Reasoning

Understanding the structure of arguments: argument forms, structure of categorical propositions, Mood and Figure, Formal and Informal fallacies,

Uses of language, Connotations and denotations of terms, Classical square of opposition. Evaluating and distinguishing deductive and inductive reasoning. Analogies. Venn diagram: Simple and multiple use for establishing validity of arguments.

Unit-IV Data Interpretation

Sources, acquisition and classification of Data. Quantitative and Qualitative Data. Graphical representation (Bar-chart, Histograms, Pie-chart, Table-chart and Line-chart) and mapping of Data. Data Interpretation. Data and Governance.

Unit-V Information and Communication Technology (ICT)

ICT: General abbreviations and terminology. Basics of Internet, Intranet, E-mail, Audio and Video-conferencing. Digital initiatives in research. ICT and Governance. Application of ICT in research.

Unit-VI People, Development and Environment

Development and environment: Millennium development and Sustainable development goals. Human and environment interaction: Anthropogenic activities and their impacts on environment.

Environmental issues: Local, Regional and Global; Air pollution, Water pollution, Soil pollution, Noise pollution, Waste (solid, liquid, biomedical, hazardous, electronic), Climate change and its Socio-Economic and Political dimensions. Impacts of pollutants on human health. Natural and energy resources: Solar, Wind, Soil, Hydro, Geothermal, Biomass, Nuclear and Forests. Natural hazards and disasters: Mitigation strategies.

Amritpal
17/2/25
(Chairperson (FT))

17/2/25
(Chair FET)

Chahar
17/2/25
(Chairman Mech Engg)

17/2/25
(Chairperson (CSE))

Chahar
17/2/25
(Chairperson)