



Department of Higher Education

U.P. Government, Lucknow

National Education Policy-2020

Common Minimum Syllabus for all U.P. State Universities

**Co-curricular course: Semester-5**

**Course Title: Analytic Ability and Digital Awareness**

Name	Designation	Affiliation
<b>Steering Committee</b>		
Mrs. Monika S. Garg, (I.A.S.), Chairperson Steering Committee	Additional Chief Secretary	Dept. of Higher Education U.P., Lucknow
Prof. Poonam Tandan	Professor, Dept. of Physics	Lucknow University, U.P.
Prof. Hare Krishna	Professor, Dept. of Statistics	CCS University Meerut, U.P.
Dr. Dinesh C. Sharma	Associate Professor	K.M. Govt. Girls P.G. College Badalpur, G.B. Nagar, U.P.

**Syllabus Developed by:**

S. N.	Name	Designation	Department	College/ University
1	Dr. Raj Kumar	Head	Mathematics, Faculty of Engg. & Technology	Veer Bahadur Singh Purvanchal Univ. Jaunpur- 222003 UP
2	Prof. Ashutosh Gupta	Director/ Professor	School of Science	U.P.Rajarshi Tandon Open University, Prayagraj
3	Prof. Manu Pratap Singh	Professor	Dept. of Computer Science	Dr. B. R. Ambedkar University, Agra
4	Dr. Brajesh Kumar	Associate Professor	Dept. of CS & IT	MJP Rohilkhand University, Bareilly

**Co-Curricular Course name: Analytic Ability and Digital Awareness**

Programme/Class: <b>Bachelor of Science</b>	Year: <b>Third</b>	Semester: <b>Fifth</b>
Subject: <u>Co-Curricular Course</u>		
Course Code: Z050501	Course Title: <b>Analytic Ability and Digital Awareness</b>	

**Course outcomes (Analytic Ability):**

**CO 1:** Familiarize with analogy, number system, set theory and its applications, number system and puzzles.

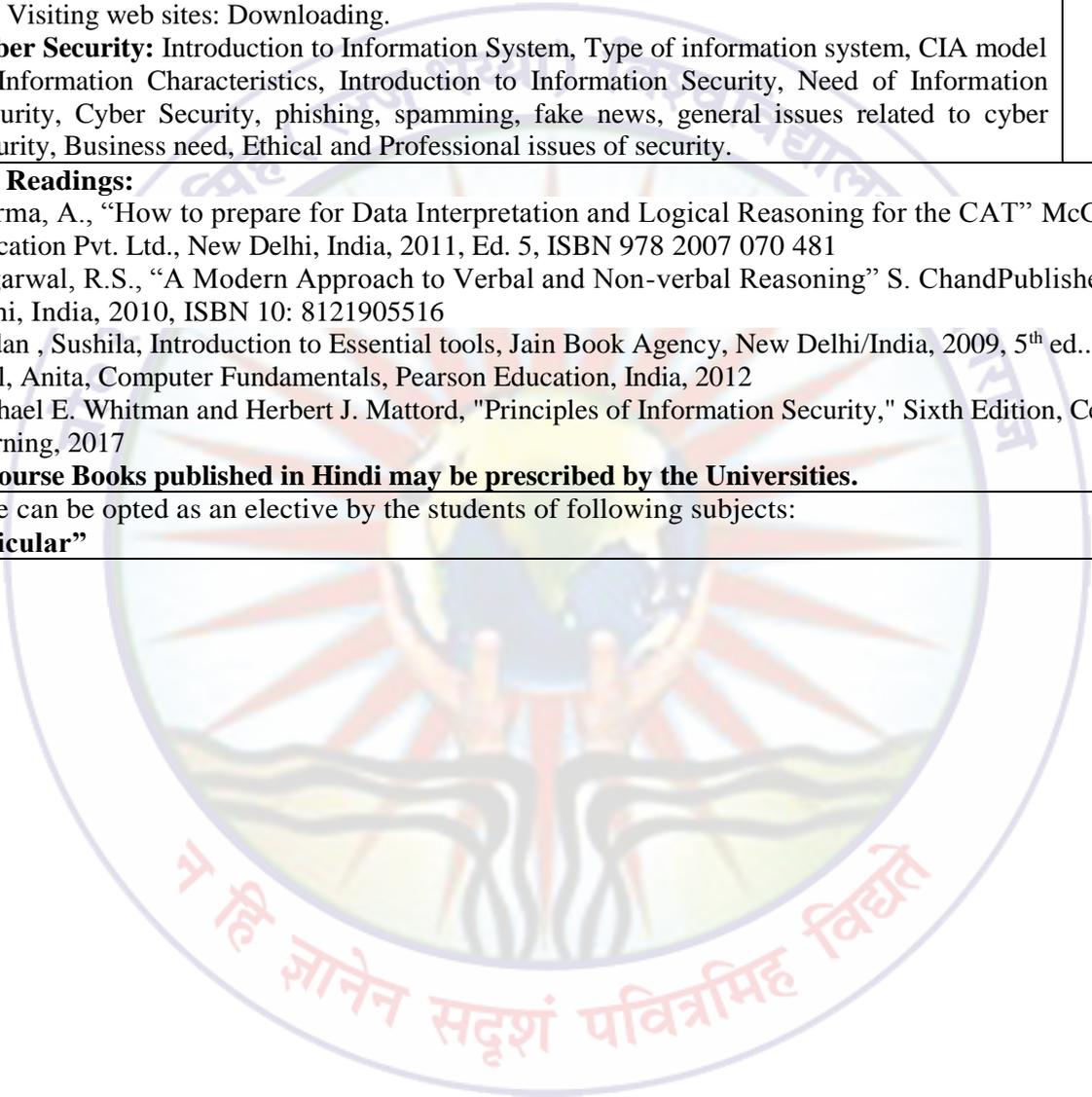
**CO 2:** To understand the basics of Syllogism, figure problems, critical and analytical reasoning.

**CO 3:** Familiarize with word processing application and worksheet .

**CO 4:** To understand the basics of web surfing and cyber security.

Credits: <b>Qualifying</b>	<b>Co-Curricular</b>
Max. Marks: <b>100</b>	Min. Passing Marks: 35
Total No. of Lectures-Tutorials-Practical (in hours per week): <b>0-0-0</b>	

Unit	Topic
<b>I</b>	Alphabet test, Analogy, Arithmetic Reasoning, Blood relations, Coding and Decoding, Inequalities, Logical Venn diagram, Seating Arrangements, Puzzles and Missing numbers
<b>II</b>	Syllogism, Pattern completion and figure series, Embedded Figure and counting of figures, Cube & Dice, Paper cutting and folding, Data sufficiency, Course of Action, Critical Reasoning, Analytical and decision making
<b>III</b>	<b>Computer Basics:</b> Block diagram of Digital Computer, Classification of Computers, Memory System, Primary storage, Auxiliary memory, Cache memory, Computer Software (System/Application Software), <b>MS Word Basics:</b> The word screen, Getting to word documents, typing and Revising text, Finding and Replacing, Editing and Proofing tools, Formatting text characters, Formatting Paragraph, Document templates., Page set up, tables, Mail Merge, Macros, protecting documents, printing a document.

	<p><b>MS-Excel</b> Introduction, Worksheet basics, Creating worksheet, Heading information, Data &amp; Text, Date &amp; Time, Alphanumeric values, Saving &amp; quitting worksheet, Opening and moving around in an existing worksheet, Toolbars and Menus, Excel shortcut and function keys, Working with single and multiple workbook, Working with formulae &amp; cell referencing, Auto sum, coping formulae, Absolute &amp; relative addressing, Worksheet with ranges, Formatting of worksheet, Previewing &amp; Printing worksheet, Graphs and charts, Database, Creating and using macros, Multiple worksheets- concepts <b>Introduction of Open Source Applications:</b> LibreOffice, OpenOffice and Google Docs etc.</p>	
<p><b>IV</b></p>	<p><b>Web Surfing:</b> An Overview: working of Internet, Browsing the Internet, E-Mail, Components of E-Mail, Address Book, Troubleshooting in E-Mail, Browsers: Netscape Navigator, Microsoft Internet Explorer, Google Chrome, Mozilla Firefox, Tor, Search Engines lik Google, DuckDuckGo etc, Visiting web sites: Downloading. <b>Cyber Security:</b> Introduction to Information System, Type of information system, CIA model of Information Characteristics, Introduction to Information Security, Need of Information Security, Cyber Security, phishing, spamming, fake news, general issues related to cyber security, Business need, Ethical and Professional issues of security.</p>	
<p><b>Suggested Readings:</b></p> <ol style="list-style-type: none"> <li>1. Sharma, A., "How to prepare for Data Interpretation and Logical Reasoning for the CAT" McGraw Hill Education Pvt. Ltd., New Delhi, India, 2011, Ed. 5, ISBN 978 2007 070 481</li> <li>2. Aggarwal, R.S., "A Modern Approach to Verbal and Non-verbal Reasoning" S. ChandPublishers New Delhi, India, 2010, ISBN 10: 8121905516</li> <li>3. Madan , Sushila, Introduction to Essential tools, Jain Book Agency, New Delhi/India, 2009, 5<sup>th</sup> ed..</li> <li>4. Goel, Anita, Computer Fundamentals, Pearson Education, India, 2012</li> <li>5. Michael E. Whitman and Herbert J. Mattord, "Principles of Information Security," Sixth Edition, Cengage Learning, 2017</li> </ol> <p><b>Note: Course Books published in Hindi may be prescribed by the Universities.</b></p>		
<p>This course can be opted as an elective by the students of following subjects: <b>"Co-Curricular"</b></p>		
		
<p><b>Course prerequisites:None</b></p>		
<p>Suggested equivalent online courses:</p>		
<p>Further Suggestions: None</p>		