

O. P. JINDAL SCHOOL, SAVITRINAGAR, TAMNAR

Annual Syllabus Break-up for the session 2023-2024

Subject: Informatics Practices Class: XII

Sl.	Month	No. of Instructional days	No. of periods	Chapters to be taught	Subject enrichment activities	Values to be imparted	Extra content to be taught
1	April	21	25	Unit 2: Database query using SQL	Prepare a list and charts of all the functions according to their categories. Prepare Power point presentation on above topic.	MySQL, SQL revision tour, functions, querying using SQL, Aggregate functions etc.	Database Management Techniques using MySQL

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2	June	11	14	Unit 2: Database query using SQL	Prepare a list and charts of all the functions according to their categories.	MySQL, SQL revision tour, functions, querying using SQL, Aggregate functions etc.	Database Management Techniques using MySQL

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3	July	23	27	<p>Unit 3: Introduction to Computer Networks.</p> <p>Unit 4: Society, Law and Ethics</p>	<p>Create a team of students : for creating a network design to connect different Labs , Offices in the school.</p> <p>Make a list of websites by categorizing them in static and dynamic categories.</p> <p>Make a list of usable add-ons, plugins and extensions in education domain for different browsers.</p> <p>Divide students in group to make a video by each group on different topics of the unit like – different types of cyber crime, netiquette, plagiarism etc.</p>	<p>Network devices, topologies, website, webbrowsers, internet and web services etc.</p> <p>Digital footprints, Intellectual property rights, plagiarism, digital rights management etc.</p> <p>Privacy laws, fraud; cybercrime etc. Technology and society etc.</p>	<p>Thin Client Server Network etc.</p> <p>Cyber Security Techniques</p>

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4	August	23	27	Unit 4: Society, Law and Ethics	Divide students in group to make a video by each group on different topics of the unit like – different types of cyber crime, netiquette, plagiarism etc.	E-waste management etc. Identity theft, unique ids, and biometrics etc. Gender and disability issues while teaching and using computers etc. Issues with the internet: internet as an echo chamber, net neutrality, internet addiction etc. Case studies - Arab Spring, WikiLeaks, Bit coin etc.	Cyber Security Techniques

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5	September	12	16	Unit 1: Data Handling (Pandas-I) Revision and Assessment Half Yearly Examination	How create a Pandas Series. Make a charts to represent the main benefits of Pandas.	Python Pandas, Advanced operations on Data Frames etc. Create a histogram, and quantiles etc. Function application etc. Numpy 1D array, 2D array	Different functions / methods of create dictionary and lists.

						Arrays: slices, joins, and subsets etc.	
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6	October	20	24	Unit 1: Data Handling and Data Visualization (Pandas-2)	Make a charts to represent the tips for Data Visualization Design in Pandas.	Arithmetic operations on 2D arrays Covariance, correlation and linear regression Plotting with Pyplot Plot bar graphs, histograms, frequency polygons, box plots, and scatter plots etc.	Different functions / methods of plotting data in Python Plot

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7	November	13	17	Unit 1: Data Handling and Data Visualization on (Pandas-2)	Make a charts to represent the power of Data Visualization Design in Pandas.	Arithmetic operations on 2D arrays Covariance, correlation and linear regression Plotting with Pyplot Plot bar graphs, histograms, frequency polygons, box plots, and scatter plots etc.	Different functions / methods of plotting data in Python Plot

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8	December	19	18	Revision / Assessment /Preboard Examination Project, Practical and Revision		Revision / Assessment / Preboard Examination Project, Practical and Revision	

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9	January	22		Revision / Assessment /Preboard Examination Project, Practical and Revision		Revision / Assessment / Preboard Examination Project, Practical and Revision	

Sl.	Month	No. of Instructional days	No. of periods	Chapters to be taught	Subject enrichment activities	Values to be imparted	Extra content to be taught
10	February	15		Annual Examination		Annual Examination	

SYLLABUS FOR EXAMINATION

SN	EXAMINATION	EXAMINATION'S MONTHS	MAX MARKS	Max Time	SYLLABUS FOR EXAMINATION
1	TEST – 1	July	20	1 Hr	Unit 2: Database query using SQL Unit 3: Introduction to Computer Networks.
2	Half Yearly Examination	September	70	3 Hrs	Unit 2: Database query using SQL Unit 3: Introduction to Computer Networks. Unit 4: Society, Law and Ethics Unit 1: Data Handling(Pandas-I)
3	TEST – 2	November	20	1 Hr	Unit 1: Data Handling and Data Visualization (Pandas-2)
4	Board Examination	February	70	3 Hrs	Complete Syllabus