

SEO Exercise - Syllabus wise

From Unit-1	
1	Compare Top-5 Major Search engines.
2	Show the Paid Advertisement Result and Natural Search Result in Google
From Unit-2	
3	Show the layout (different parts) of any major Search engine.
4	<p>Perform and show the use of following Advance Search operators in Google.</p> <ul style="list-style-type: none"> a) AND b) OR c) “ ” d) + e) – f) Site: g) Cache: h) Info: i) Related: j) * k) ext (filetype:) l) ~ m) intext n) inanchor: / allinanchor: o) intitle: / allintitle: p) inuRL: / allinurl:
From Unit-4	
5	<p>As an SEO analyst, audit the elements listed below for the website of Saurashtra University. (Hint: Use any online free tool for study these elements)</p> <ul style="list-style-type: none"> a) Usability (pages viewed, bounce rate) b) Accessibility / spiderability c) Search engine health check (No. of unique pages) d) Duplicate content checks e) Title tag review (unique and descriptive, < 70 char. long) f) Meta tag review g) Sitemaps file and robots.txt file verification h) Page load time i) Image alt tags j) Slow response times <p>Note: You may use following tools and other free third party tools.</p> <ul style="list-style-type: none"> • http://www.alexa.com/
6	<p>Perform a Web Analytics of Saurashtra University website for the following.</p> <ul style="list-style-type: none"> a) How many unique visitors? (in given duration) b) Traffic up or down? (Compare with previous date/month/year) c) Popular search terms which people find? (list any 5-10 keywords) d) Popular pages on site? e) Crawl State f) Current Indexing status

	<p>g) Benchmarking Current Traffic Sources and Volume</p> <p>Note: You may use following tools and other third party tools.</p> <ul style="list-style-type: none"> • www.web.analytics.yahoo.com • www.google.com/analytics • http://www.alexa.com/
From Unit-5	
7	Gujarat Tourism Department of Government of Gujarat wants to develop a website from you. As a SEO analyst list the Keyword which you will research for such a site for getting most page view.
8	<p>Find the various data like Competition, Monthly search, Bid, Total Clicks, Impression, Average Ad, Cost, CTR, CPC etc.. for the Keyword which are researched by you in the problem no. 8</p> <p>Hint: Use Google's AdWords Keyword Tool.</p> <ul style="list-style-type: none"> • You may use any other free third party tool like Wordtracker, KeywordDiscovery, Hitwise or any others which you studied in theory.
9	Compare the current trends of various technologies like (PHP, Android, J2ME) using Google trends and list conclusions.
From Unit-6	
10	<p>Develop a complete an XML Sitemap for your website and upload/submit to Google.</p> <p>Hint: ROR Sitemap Generator</p> <p>https://www.xml-sitemaps.com/</p>
11	<p>The website referenced in problem no. 8, As an SEO analyst Design the Keywords for following.</p> <ul style="list-style-type: none"> • Title tag (in multiple pages) • Heading tag • Meta Description Tags • Image Filenames and alt Attributes
12	<p>Create a complete robots.txt file for your project.</p> <p>Note: Try to cover all the directive, functions or parameters.</p>
13	<p>Optional:</p> <p>It is requested that in this practical each student develop his/her own single website (Just HTML, not functionality and designing) in the concern of SEO and try to cover all of the above points. So student can get all ideas about how to SEO their project, ultimately that is what the IT Company actually wants.</p>

SEO Practical Guide

Practical Approach Objectives

Objective 1: Create a Blog/Website.

- Every student must create Blog or Website at the starting of the Semester.
- Throughout whole semester they must implement all SEO knowledge gathered during semester and improve SEO of this newly create Blog or Website.
- Student can take any subject for Blog or Website weather it is based on Syllabus or not.

Objective2: Professor who takes subject must create practical exercise. Example exercise attached at last in Appendix A

Objective 3: Create SEO Check Tool in any programming language.

- Create a tool like <http://seositecheckup.com>, <http://www.seocentro.com/tools/seo/seo-analyzer.html>, <http://www.seowebpageanalyzer.com/>.
- Student can create this tool in any programming language they like most.
- This object can improve two things Programming & SEO practice.

Objective 4: Practical work on SEO Tools

- Google Adwords (just for keyword planning)
 - Create a list of website and give it to student for keyword planning refer Exercise#1 in Appendix A.
- Google Web Master. (From starting of the Website)
 - Crawl (immediate crawl)
 - Index (immediate index)
 - Search Traffic Analysis
 - Search Apprearence
- Google Analytics. (From starting of the website)
 - Traffic Monitoring like Organic, Direct, Referral.
 - Audience traffic analysis by different criteria like Demographic, Interests, Geo, Technology, Behavior etc.
 - Real time traffic monitoring.
- Google Page Speed & GTMetrix (Now a days search engine also consider Responsiveness and Speed of the website to Rank higher)
 - Check the speed of your site on both tools.
 - Try to improve score of you website or blog with more than 90%.
 - By this exercise student must increase knowledge of Cache, Expire Header, CDN (content delivery network), Image Optimization, Minification, CSS/JS delivery etc.

Appendix A – Hands on Exercises

Exercise 1:

A person wants to create a website focusing on “**New IT Company in Gujarat**”. The website should describe typical services and solutions provided by this company, the history of company and its experience, and get outsource business through Website.

Come up with some ideas for search keywords and phrases for such a site. Analyze your ideas, using the Google Keyword Planner (<http://adwords.google.com/keywordplanner> - note that you might need to create a Google account, if you do not already have one). Remember, a good keyword should have:

- High relevance
- Low competition
- As high a volume as possible

Exercise 2:

Consider the three scenarios below and discuss how you would provide clarity and quality – that is, provide relevant and useful information – to each of the audience groups that are visiting the “Explore Gujarat” website for information:

- A resident of Rajkot planning a one-day backpacking trip near his/her home
- A father in Delhi planning a two-week vacation in Gujarat for a family of four people.
- An international visitor from Malaysia interested in cycling across the Gujarat state.

Exercise 3:

The **robots.txt** file allows you to control how search engines crawl through and index your website. For this exercise, take some time to learn more about creating robots.txt rules by visiting <http://www.robotstxt.org>.

- Create five pages and two subdirectory in your website or blog. (Private,Public)
- Out of two subdirectory allow only Public directory through any Crawler, don't allow any content from Private directory.
- Out of five pages don't allow any 1 page to be crawled by any Crawler.
- Create new directory called Google and allow it from Google Crawler only.

Exercise 4:

Microformats give us a special syntax to use to help search engines identify very specific types of content on your web pages. For this exercise, head over to <http://www.schema.org> and browse the various types of content that have supported microformats.

- Create one Article page on your website and apply microformats.
- Create one local business page on your website and apply all necessary microformats.
- Create one event page on your website and apply all necessary microformats.
- Create one product page on your website and apply all necessary microformats.

Exercise 5:

Try to use the any of the online tool to examine the back-links to the college two domains (www.atmiya.net and www.vsc.edu.in)

- What seems to be the most significant source for back-links for the two domains? Are there any significant differences with regards to e.g. geography?
- Try to do a similar search for (www.aip.edu.in), which is a considerably larger educational institution. Could our domain maybe use some of these results for inspiration?