#### **Descriptive Questions**

Q1. Name the three components used for the accessibility of the website.

Ans. The components used for the accessibility of the website are as follows: indexable content spiderable link structures XML sitemaps

Q2. What are spiderable link structures? Discuss with a suitable example.

Ans. Search engines use hyperlinks present on Web pages for discovering other Web pages and websites. Therefore, it is recommended that one should take time for building an internal linking structure that can be easily crawled by spiders. Generally, websites commit serious error by not displaying or complicating the ways of navigation that restrict the accessibility of spider, thus impacting the capability to retrieve pages listed in the index of the search engine. Suppose Google's spider has accessed Web page X and views links for accessing Web pages Y and Z. Web pages P and Q are more significant Web pages on the website compared to Web pages Y and Z, but the spider has no way to access the Web pages P and Q as no direct, crawlable links that point to these Web pages are available. The availability of good content, efficient targeting of keyword and best marketing are not useful if the spiders are not capable of accessing such pages.

Q3. Provide any five reasons why Web pages are not accessible to search engines.

Ans. The five reasons why Web pages are not accessible to search engines are as follows: Links provided in simple forms: Search engine spiders do not access basic forms such as login form, feedback form etc. There are many types of content or links on these forms which are invisible for search engines. Therefore, it is recommended that you should not provide any significant content or links on these Web pages.

<u>Links in hard-to-parse JavaScript</u>: If you are using JavaScript for links, then the search engines either do not crawl or provide very little weightage to the embedded links.

<u>Links in Flash, Java, or other plug-ins</u>: Links that are embedded in Java and plug-ins are not visible to the search engines. However, search engines are inching toward detecting links inside Flash, but do not depend too much on this.

<u>Links in PowerPoint and Portable Document Format (PDF) files</u>: Similar to Flash, Java, and plug-ins, the search engines are not able to access links present in PowerPoint and PDF files.

<u>Links pointing to blocked web pages</u>: Sometimes websites uses robots.txt file for restricting search engine spiders to access web pages of your website. You can also use the NoFollow attribute to restrict the accessibility of the link.

Q4. What are XML sitemaps? Name some different types of sitemaps.

Ans. XML sitemaps are protocols with the help of which you can provide list of all Web pages that you would like them to crawl and index. This protocol is supported by all the popular search engines such as Google, Yahoo!, and Bing. In the year 2005, Google started support of this protocol, and then, in the year 2006, Yahoo! and MSN Search has also decided to support this protocol. It is not necessary that any added URL in a Sitemap file will be crawled or indexed. The different types of sitemaps are as follows:

<u>Mobile sitemaps</u>: Mobile sitemaps are used for content targeted for mobile devices. Mobile information is stored in a single Sitemap file that does not include any information about non-mobile URLs.

<u>Video sitemaps</u>: Video sitemaps include information about your videos in your Sitemap file, thus increasing the chances of discovering the video by the search engines. Google supports the various video formats such as .mpg, .mpeg, .mp4, .m4v, .mov, .wmv, .asf, .avi, .ra, .ram, .rm, .flv, and .swf.

<u>Image sitemaps</u>: You can also enhance the visibility for your images by specifying them in your sitemap file. For each URL that you include in your Sitemap file, you can also enlist the images that are displayed on that Web page. You can enlist 1,000 images per page. Particular image tags are related with the URL.

Listing of images in the Sitemap file increases the probabilities of those images being indexed. If you provide some images on a Web page and left others, then this indicates that the left out images are less important.

# Q5. What are the main benefits of using XML sitemaps?

Ans. The main benefits of using Sitemaps are as follows: The sitemaps allow you to provide metadata to search engines that regularly visit your Web pages. The metadata may include date of last modification of content and frequency of accessibility of Web page. The search engines can utilize this metadata for improving their search process. The sitemaps provide additional URLs to search engines for the Web pages that are not known to sitemaps in order to increase their crawl coverage. XML Sitemaps data is used by the search engines for choosing a recognized version for the URLs that may have duplicates. Authentication or registration of XML Sitemaps signifies positive trust or authority signals. The crawling or inclusion advantages of sitemaps include improvement in ranking or greater internal link popularity.

Q6. List some rules of creating a search friendly website.

Ans. The process for creating search-friendly website is not difficult if you follow the following simple rules:

- 1. Create a list of all the required content pages.
- 2. Create top-level navigation that can easily contain the unique information on the website.
- 3. Avoid the top-down approach by beginning with the illustrative information and create an organizational structure that is able to hold each Web page.
- 4. Create a sensible subnavigational structure for connecting top-level Web pages with detailed content. In case of small websites, this type of structure is not needed for this level, whereas in case of large websites, more than one level of subnavigation (two or three) may be needed.
- 5. You must include secondary web pages which provide other comparatively non-essential information.
- 6. Create a graphical hierarchy that displays each Web page on the website.

#### Q7. What is the difference between Taxonomy and Ontology?

Ans. Taxonomy can be defined as a two-dimensional hierarchical model of the website's architecture. Ontology can be defined as mapping in the manner similar to mind of a human

being thinking about a specific subject. It's complexity is higher in comparison to taxonomy due to the involvement of a larger number of types of relationships.

# Q8. What is pagination? What are its limitations?

Ans. Pagination can be referred to as the method of creating an arrangement of pages for breaking the long lists of elements or articles. For example, ecommerce websites use pagination for displaying the catalogs of their product. However, sometimes, pagination gets challenging due to the following reasons: Pagination does not provide any topical relevance Pagination can potentially increase redundancy or duplicate content problem Pagination may provide spider traps due to which extra and poor quality Web pages in large numbers are provided in searching.

Q9. What do you understand by site auditing? Ans. In a website audit, an auditor analyses your website and determines all the possible methods using which your website will be able to transform visitors of the website into customers for increasing sales and revenue. After making audit, a professional website auditor suggests a list of modifications that you can make for attracting more qualified visitors, enhance conversion rates, and convert your site into a resource of marketing and sales.

### Q10. What is card sorting?

Ans. Card sorting is an efficient technique embedded with ontology. In this technique, the groups of related items are created for organizing your website as intuitively as possible. Card sorting allows you to identify sensible paths in your website. Using the card sorting technique, major concepts can be written on a group of large cards to allow reading, manipulating, and organizing by the participants.

# Q11. Discuss flat architecture with the help of a figure.

Ans. The websites created using the flat site architecture need a minimum clicks for accessing a particular web page. The following figure shows a flat architecture of a website: The large websites such as websites having thousands of web pages, each web page in such websites can be accessed in five to six clicks if structuring of link and navigations are properly implemented. More number of clicks is needed if the website is not created on flat architecture. The main benefit of flat architecture is that it enables users and search engines to retrieve the required information in few number of clicks.

#### Q12. Discuss deep architecture with the help of a figure.

Ans. On the other hand, websites created using the deep site architecture include long paths of links needed for accessing detailed content. The websites having Web pages up to 10,000 can be accessed with a maximum number of three clicks from the homepage. The following figure shows deep architecture of a website: A deep architecture with content structured by topics allows the search engines to understand the structure and hierarchy of your website. The deep architecture allows the grouping of your content in sections, and therefore, you will have an improved understanding of how each section functions and determines critical technical issues.

Moreover, the deep architecture also provides you the capability to drill down across categories and content paths to learn how users are interacting with the website at a micro-level.

Q13. What do you understand by Web analytics?

Ans. Web analytics refers to the process of measuring, collecting, analyzing, and reporting the data available on the Web for the purpose of understanding and optimizing that data. Web analytics can not only be used for measuring the Web traffic, but can also be regarded as a tool used for business and market research. It is also used for assessing and improving the usefulness of a website. Web analytics software or applications allow companies to know the results of advertising campaigns conducted for promoting the website.

Q14. What are the aspects that are examined while auditing the website?

Ans. Some of the primary aspects that a website auditor examines while auditing the website are as follows: The website auditor performs comparison of your website with the websites of your competitors. The website auditor reviews your call to action elements. The website auditor checks the usability issues and interface design of the website. The website auditor reviews your SEO of your website. The website auditor determines the current brand equity of your website.

Q15. Define off-site and onsite web analytics. Ans. Off-site Web analytics can be regarded as Web measurement and analysis irrespective of whether you are the owner of a website or maintaining a website. This analytics also includes the measurement of potential audience of a website, visibility, and comments that are provided on the Internet as a whole. On-site Web analytics measures the behavior of a visitor on your website once. It also includes the conversion of that visitor into sales and measures the degree how various landing pages are related with online sales. Basically, the on-site Web analytics measures your website's performance in a commercial context.

Q16. List any five major index designing factors that are used in the architecture of search engine.

Ans. The five major index designing factors that are used in the architecture of search engine are as follows: Merge factors, Storage techniques, Index size, Lookup speed and Maintenance.

Q17. What are the different types of metadata? Ans. The different types of metadata are as follows:

<u>Title metadata</u>: It is responsible for the Web page titles and is shown at the top of your browser window.

**Description metadata**: It can be regarded as the textual description that is used by a browser while returning Web page in response to your search.

**Keyword metadata**: It can be defined as the search phrase that visitors enter in the search engine in order to find relevant Web pages.

Q18. What is SWOT analysis?

Ans. SWOT analysis refers to a technique used for determining strengths and weaknesses and identifying both the opportunities available for you and the threats existing for you. This analysis can be conducted for both business and personal context. In case of business context, it allows you to maintain a sustainable position of your company in the market. On the other hand, when this analysis is conducted in personal context, it helps in developing your career and also guides you on how you can best utilize your talents, skills, and opportunities.

Q19. List some factors that determine strengths in SWOT analysis.

Ans. Some of the factors that determine strengths are as follows:

- What are the advantages does your organization have?
- What do you do to perform better than others?
- What are the unique or lowest-cost resources that you can utilize which cannot?
- What are your strengths that appreciated by others in the market?
- What are the factors that signifies that you get the sale?

Q20. List some factors that determines the weaknesses in SWOT analysis.

Ans. Some factors that determine the weaknesses of your organization are: What are the areas of improvement? What should you be avoided in future projects? What are factors of reduction in revenue? What type of content is driving low levels of search or visitor traffic at present? What are the changes that were expected to provide positive consequences showing little or no value?