Q1. What is the benefit of regular expressions?

Ans : Regular expressions help in validation of text strings such as email id and mobile number validation.

And we can match, search a character in string

Q2. Describe the difference between the effects of "(ab)c+" and "a(bc)+." Which of these, if any, is the unqualified pattern "abc+"?

Ans:

Q3. How much do you need to use the following sentence while using regular expressions?

import re

Ans: Only one time. The above expression is used to import the regular expression library into our program.

The re will be prefix of ever expression

Q4. Which characters have special significance in square brackets when expressing a range, and under what circumstances?

Ans: Inside a character class, only the character class metacharacters (backslash, circumflex anchor and hyphen) have special meaning. You must use a backslash when you use character class metacharacters as literals inside a character class only.

Q5. How does compiling a regular-expression object benefit you?

Ans: In simple terms, We can compile a regular expression into a regex object to look for occurrences of the same pattern inside various target strings without rewriting it.

Q6. What are some examples of how to use the match object returned by re.match and re.search?

Ans : txt = "The rain in Spain"

x = re.search("^The.\*Spain$", txt)

Q7. What is the difference between using a vertical bar (|) as an alteration and using square brackets as a character set?

Ans: The vertical bar is a regex "or" means "a or b" Character class is a shorthand for "or". From this explanation. If you want to match an a or an e use [ae] You can also use hyphen to specify a range such as [0-9] or [a-e]

Q8. In regular-expression search patterns, why is it necessary to use the raw-string indicator (r)? In   replacement strings?

Ans: r means the string will be treated as raw string. See the official Python 2 Reference about "String literals": When an 'r' or 'R' prefix is present, a character following a backslash is included in the string without change, and all backslashes are left in the string.