**Q1. What is the benefit of regular expressions?**

Answer: It helps with lesser and cleaner code.

Avoids multiple use of IF and ELSE Code.

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

Answer : Both are valid pattern

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

**import re**

Answer : Always has to be imported before using regular expression.

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

Answer : the characters ., \*, ?, ^ or () have special significance when used in square brackets. They need not be escacped by '\' as in case of patterns texts in raw string.

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

Answer : We can combine a regular expression pattern into pattern objects, which can be used for pattern matching. It also helps to search a pattern again without rewriting it.

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

Answer : re.search() searches for the whole string even if the string contains multi-lines and tries to find a match of the substring in all the lines of string. It returns the first occurrence or match of search substring

re.match() searches only from the beginning of the string and return match object if found.But if a match of substring is found somewhere in the middle of the string, it returns none.It also returns a first occurrence or match of search substring.

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

Answer : When (|) is used the pattern searches for 'or' option i.e <str1>|<str2> means it searches for as <str1> or <str2>. When both <str1> and <str2> occur in the searched string, the first occurrence of matching text will be returned as the Match object.

Using character set in square brackets is used, it searches for all the character set in the square bracket and if match found

it returns it

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

Answer : Raw strings are used in regular expression search patterns, so that backslashes do not have to be escaped.