1. What is the name of the feature responsible for generating Regex objects?

Ans=>

import re is used

2. Why do raw strings often appear in Regex objects?

Ans =>because of their properties

3. What is the return value of the search() method?

Ans=>it returns object with match attribute

4. From a Match item, how do you get the actual strings that match the pattern?

Ans => we can use finditer

5. In the regex which created from the r'(\d\d\d)-(\d\d\d-\d\d\d\d)', what does group zero cover? Group 2? Group 1?

Ans =>group zero => full string

Group1=> first string

Group 2=> remaining string after group1

6. In standard expression syntax, parentheses and intervals have distinct meanings. How can you tell a regex that you want it to fit real parentheses and periods?

Ans => \( isn't enough to match a parenthesis

7. The findall() method returns a string list or a list of string tuples. What causes it to return one of the two options?

Ans =>it return string list

8. In standard expressions, what does the | character mean?

Ans=>it is used for OR purpose

9. In regular expressions, what does the character stand for?

Ans => characters are used for matching them in particular string.

10.In regular expressions, what is the difference between the + and \* characters?

Ans=> if you use a + there must be at least one instance of the pattern, if you use \* it will still match if there are no instances of it.

11. What is the difference between {4} and {4,5} in regular expression?

Ans=> {4} means minimum 4 and {4,5} number between 4 and 5

12. What do you mean by the \d, \w, and \s shorthand character classes signify in regular expressions?

Ans=>\d (digit) matches any single digit

\w -- (lowercase w) matches a "word" character

\s -- (lowercase s) matches a single whitespace character -- space

13. What do means by \D, \W, and \S shorthand character classes signify in regular expressions?

Ans => it is same as 12 question

14. What is the difference between .\*? and .\*?

Ans=>both are same

15. What is the syntax for matching both numbers and lowercase letters with a character class?

Ans => '^[a-zA-Z0-9\_]\*$'

16. What is the procedure for making a normal expression in regax case insensitive?

Ans =>

re.search('test', 'TeSt', re.IGNORECASE)

re.match('test', 'TeSt', re.IGNORECASE)

re.sub('test', 'xxxx', 'Testing', flags=re.IGNORECASE)

17. What does the . character normally match? What does it match if re.DOTALL is passed as 2nd argument in re.compile()?

Ans =>

the string could never contain line breaks, so the dot could never match them,

The ‘.’ special character in Python matches with any character excluding the new line

18. If numReg = re.compile(r'\d+'), what will numRegex.sub('X', '11 drummers, 10 pipers, five rings, 4 hen') return?

Ans=>

X drummers, X pipers, five rings, X hen

19. What does passing re.VERBOSE as the 2nd argument to re.compile() allow to do?

Ans =>

This flag allows you to write regular expressions that look nicer and are more readable by allowing you to visually separate logical sections of the pattern and add comments

20. How would you write a regex that match a number with comma for every three digits? It must match the given following:

'42'

'1,234'

'6,368,745'

but not the following:

'12,34,567' (which has only two digits between the commas)

'1234' (which lacks commas)

Ans => ^\d{1,3}(?:,\d{3})\*$

21. How would you write a regex that matches the full name of someone whose last name is Watanabe? You can assume that the first name that comes before it will always be one word that begins with a capital letter. The regex must match the following:

'Haruto Watanabe'

'Alice Watanabe'

'RoboCop Watanabe'

but not the following:

'haruto Watanabe' (where the first name is not capitalized)

'Mr. Watanabe' (where the preceding word has a nonletter character)

'Watanabe' (which has no first name)

'Haruto watanabe' (where Watanabe is not capitalized)

Ans => x = re.search(*r*'\bWatanabe\b',strs)

22. How would you write a regex that matches a sentence where the first word is either Alice, Bob, or Carol; the second word is either eats, pets, or throws; the third word is apples, cats, or baseballs; and the sentence ends with a period? This regex should be case-insensitive. It must match the following:

'Alice eats apples.'

'Bob pets cats.'

'Carol throws baseballs.'

'Alice throws Apples.'

'BOB EATS CATS.'

but not the following:

'RoboCop eats apples.'

'ALICE THROWS FOOTBALLS.'

'Carol eats 7 cats.'

Ans =>(?<=^|\s)[^.\s]+\.[^.\s]+(?=@)