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

**Ans:** re.compile().

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

**Ans:** to include certain shorthand charcter class expression.

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

**Ans:** Match Object

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

**Ans:** Match\_item.group()

**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(0)/Group() in that reference covers entire expressions(regex) within quotes while group 1 covers expression within first set of parentheses and similarly Group 2 covers expression within 2nd set of parentheses.

**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:** \. , \( and \)

**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:** finall() method when called regex with no groups then it returns a sting list else it returns a list of string tuples.

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

**Ans:** Either or

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

**Ans:** The group that precedes ‘?’ matches optionally (zero or one) time.

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

**Ans:** The group that precedes ‘\*’ matches optionally (zero or more) time.

The group that precedes ‘+’ matches optionally (one or more) time.

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

**Ans:** {4}:strict 4 times repetition and {4,5}: minimum 4 times and maximum 5 times repetition of the group/expression that precedes it.

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

**Ans:** They signify \d(any numeric digit from 0 to 9), \w(any letter, numeric digit or underscore character), \s(space, tab or new line character)

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

**Ans:** They signify \D(any character that is not numeric), \W(any character that is not letter, numeric digit or underscore character), \S(any character that is not space, tab or new line character)

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

**Ans: .\*-greedy search and .\*?(non-greedy search)**

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

**Ans:** regex = [a-z0-9]+

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

**Ans:** By using re.I as 2nd argument in re.compile. regex =re.compile(exp, re.I).

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

**Ans:** . character normally matches every character except new line character. However, on passing re.DOTALL as 2nd argument in re.compile() it matches all including new line character.

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

**Ans:** It returns ‘X drummer, X pipers, five rings, X hen'

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

**Ans:** allows to separate logical section of the pattern and add comment.

**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:** regex = re.compile(r’^\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:** regex = re.compile (r'[A-Z][a-z]\*\s(Watanabe)$')

**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:** regex = re.compile (r’(Alice\ Bob\Carol)\s(eats\ pets\ throws)\s(apples\cats\ baseballs)\.’, re.I)