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

**Solution:-** The re.compile() method is used for generating regex objects.

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

**Solution:-** because, backslashes do not have to be escaped.

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

**Solution:-** It returns Match objects.

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

**Solution:-** By using group( ) method.

**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?**

**Solution:-** Group zero covers entire match ,

Group 1 covers fist set of parentheses and

Group 2 covers second 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?**

**Solution:-** Parentheses and periods can be escaped with backslash like- \. And \( )

This will help to recognise real match regex.

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

**Solution:-** It depends on presence of groups. If the regex has no groups it will return a list of

String and if the regex have groups it will return a list of tuples of strings.

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

**Solution:-** the | (pipe) character means matching “ either, or ” between two groups.

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

**Solution:-** It can be used for optional matching also it can either mean ‘match zero or one of

The Preceding group’ or it can be used to signify non-greedy matching.

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

**Solution:-** there is the matching difference between two. + matches one or more while,

\* matches zero or more.

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

**Solution:-** The {4} matches exactly four instances of the preceding group while,

The {4,5} matches between four and five instances.

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

**expressions?**

**Solution:-** The shorthand character classes :

\d signifies matching of any single numeric digit 0 to 9

\w signifies a matching of any word characters &

\s signifies matching space characters .

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

**Solution:-** The shorthand character classes:

\D signifies matching of any character that is not a numeric digit from 0 to 9

\W signifies matching of any character that is not a word &

\S signifies matching of any character that is not a space

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

**Solution:-** The .\* performs a greedy match while, .\*? performs a non-greedy match.

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

**Solution:-** The syntax is either [ 0 – 9a – z ] or [ a – z0 – 9 ]

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

**Solution:-** By passing re.I or re.IGNORECASE as a second argument to re.compile( ).

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

**Solution:-** The .(dot or wildcard ) character normally matches any character except newline character. If re.DOTALL is passed as a second argument to re.compile( ) then it will also match newline characters.

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

**Solution:-** The sub( ) call will return the string ‘X drummers, X pipers, five rings, X hen’ .

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

**Solution:-** It will allow to add whitespace and comments to the string.

**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)**

**Solution:-** By calling re.compile( r ’^\d{1,3} ( , \d{3} ) \*$ ’ ) will get the expecting regex but the other regex strings can produce a similar regular expression.

**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)**

**Solution:-** re.compile( r ‘[A – Z ] [a – z ] \*\Watanabe’ ) it will create the expecting matching regex.

**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.’**

**Solution:-** The calling of re.compile( r ‘ ( Alice|Bob|Carol ) \ s ( eats|pets|throws ) \ s ( apples|cats|baseballs ) \ . ‘ , re.IGNORECASE) will give matching regex.