1. \*\*What does the regex pattern `\d` match in C#?\*\*

- A) Any digit

- B) Any non-digit character

- C) A whitespace character

- D) Any word character

\*\*Answer:\*\* A) Any digit

2. \*\*Which regex pattern matches any whitespace character?\*\*

- A) `\w`

- B) `\s`

- C) `\d`

- D) `\S`

\*\*Answer:\*\* B) `\s`

3. \*\*What does the regex pattern `\w+` match?\*\*

- A) One or more word characters

- B) One or more whitespace characters

- C) One or more digits

- D) Any character except a word character

\*\*Answer:\*\* A) One or more word characters

4. \*\*Which of the following regex patterns will match an email address?\*\*

- A) `\w+@\w+\.\w+`

- B) `\d{2}-\d{2}-\d{4}`

- C) `\w+ \w+`

- D) `\d+`

\*\*Answer:\*\* A) `\w+@\w+\.\w+`

5. \*\*What is the purpose of the regex pattern `^` in C#?\*\*

- A) Matches the end of a string

- B) Matches the start of a string

- C) Matches any single character

- D) Matches zero or more of the preceding element

\*\*Answer:\*\* B) Matches the start of a string

6. \*\*What does the regex pattern `$` signify in C#?\*\*

- A) Matches the end of a string

- B) Matches the start of a string

- C) Matches any single character

- D) Matches zero or more of the preceding element

\*\*Answer:\*\* A) Matches the end of a string

7. \*\*Which regex pattern matches any character except a newline?\*\*

- A) `\s`

- B) `\d`

- C) `.`

- D) `\W`

\*\*Answer:\*\* C) `.`

8. \*\*What does the regex pattern `\D` match?\*\*

- A) Any digit

- B) Any non-digit character

- C) Any whitespace character

- D) Any non-whitespace character

\*\*Answer:\*\* B) Any non-digit character

9. \*\*In regex, what does the pattern `[a-zA-Z]` match?\*\*

- A) Any single letter, uppercase or lowercase

- B) Any single digit

- C) Any whitespace character

- D) Any single punctuation mark

\*\*Answer:\*\* A) Any single letter, uppercase or lowercase

10. \*\*What is the function of the regex pattern `\*`?\*\*

- A) Matches zero or more of the preceding element

- B) Matches exactly one of the preceding element

- C) Matches one or more of the preceding element

- D) Matches zero or one of the preceding element

\*\*Answer:\*\* A) Matches zero or more of the preceding element

11. \*\*Which regex pattern matches exactly three digits?\*\*

- A) `\d{3}`

- B) `\d+`

- C) `\d{2,4}`

- D) `\d\*`

\*\*Answer:\*\* A) `\d{3}`

12. \*\*What does the regex pattern `[^a-z]` match?\*\*

- A) Any lowercase letter

- B) Any character that is not a lowercase letter

- C) Any digit

- D) Any whitespace character

\*\*Answer:\*\* B) Any character that is not a lowercase letter

13. \*\*Which regex pattern matches a phone number in the format (123) 456-7890?\*\*

- A) `\(\d{3}\) \d{3}-\d{4}`

- B) `\d{3}-\d{3}-\d{4}`

- C) `\d{10}`

- D) `\(\d{3}\) \d{4}-\d{4}`

\*\*Answer:\*\* A) `\(\d{3}\) \d{3}-\d{4}`

14. \*\*In regex, what does the `|` symbol represent?\*\*

- A) Zero or more of the preceding element

- B) One or more of the preceding element

- C) The end of a string

- D) A logical OR between patterns

\*\*Answer:\*\* D) A logical OR between patterns

15. \*\*Which regex pattern will match a date in the format YYYY-MM-DD?\*\*

- A) `\d{4}-\d{2}-\d{2}`

- B) `\d{2}/\d{2}/\d{4}`

- C) `\d{2}-\d{2}-\d{4}`

- D) `\d{2}\.\d{2}\.\d{4}`

\*\*Answer:\*\* A) `\d{4}-\d{2}-\d{2}`

16. \*\*What does the regex pattern `\bword\b` do?\*\*

- A) Matches "word" as a part of other words

- B) Matches the string "word" anywhere in the text

- C) Matches the string "word" only if it is a whole word

- D) Matches the string "word" only if it is at the start or end of the text

\*\*Answer:\*\* C) Matches the string "word" only if it is a whole word

17. \*\*Which regex pattern matches a URL?\*\*

- A) `http(s)?://[a-zA-Z0-9.-]+`

- B) `\bhttps?://\S+\b`

- C) `https?://[a-zA-Z0-9]+\.[a-zA-Z]{2,}`

- D) `http://[a-zA-Z0-9/]+`

\*\*Answer:\*\* B) `\bhttps?://\S+\b`

18. \*\*In C#, how do you use a regex pattern to replace text in a string?\*\*

- A) `Regex.Match()`

- B) `Regex.Replace()`

- C) `Regex.Find()`

- D) `Regex.Substitute()`

\*\*Answer:\*\* B) `Regex.Replace()`

19. \*\*What does the `\Q...\E` pattern do in regex?\*\*

- A) Matches any literal characters inside `\Q` and `\E`

- B) Matches any single character inside `\Q` and `\E`

- C) Escapes all characters inside `\Q` and `\E`

- D) Matches the start and end of the string

\*\*Answer:\*\* A) Matches any literal characters inside `\Q` and `\E`

20. \*\*Which regex pattern matches a string that starts with "abc" and ends with "xyz"?\*\*

- A) `^abc.\*xyz$`

- B) `abc.\*xyz`

- C) `^abc.\*xyz`

- D) `abc.\*xyz$`

\*\*Answer:\*\* A) `^abc.\*xyz$`