

1. What Watson solution can answer common support questions typically handled by a live agent?

a) Conversation

b) Language translator

c) Natural language understanding

d) Tone analyzer

2. What information does the IBM Watson Natural Language Understanding service extract from html, text or web-based content when it analyzes entities?

a. topic keyword.

b. text and title information

c. people, companies, organization

d. subject-action-object relations

3. How can an IBM Watson Conversation agent be configured in a language other than English?

a. Use the available REST API to configure the language using ISO country code.

b. The only language offered for Watson Conversation is English due to limitation in compatibility with other IBM Watson service that can be integrated in to a Watson Conversation agent.

c. Upon creating a workspace for the Watson Conversation agent. Select the language of the conversational agent in the language drop-down.

d. In the conversation workspace, check the box next to the supported language within the panel in the Dialog tab

4. What is the underlying algorithm of the IBM Watson Tradeoff Analytics service?

a. Native Bayes algorithm

b. Gradient descent algorithm

c. Cumulative Square Root or Frequency algorithm

d. Pareto optimization technique

5. Which two statements are applicable to the IBM Watson Tone Analyzer service?

a. The results of the service can provide only sentiments analysis.

b. The results of the service can be used to automatically post messages to social media sites.

c. Images and videos can be the input into the service for analyzing writing style based on visual clues.

d. The results of the service can be used to adjust the tone of the content to change how people will perceive your online identity

e. The results of the service can be used to adjust the tone of the content in order to increase the effectiveness of the communication

6. How does a developer obtain all of the information needed to connect to an IBM Watson service?

a. All needed information is published in the service's online reference

b. From the service instance, using the IBM Bluemix GUI or the command line interface (CLI), or programmatically using the Bluemix environment variables.

c. From the Watson Developer Cloud service broker or programmatically using the IBM Bluemix registry

d. Connection information is found in the Watson Developer dashboard

7. Which three cognitive capabilities are applicable to analyze data insights for Twitter?

- a. Keyword extraction**
- b. speech recognition
- c. entity extraction**
- d. taxonomy
- e. OCR technology
- f. text classification**

8. What combination of three cognitive capabilities is applicable for a self-service based customer call center?

- a. keyword extraction**
- b. speech recognition**
- c. image classification
- d. structured data analytics
- e. natural OCR
- f. text-to-speech**

9. Which two IBM Watson service combined would be applicable for an agent-assisted, email-based call center?

- a. Conversation**
- b. Tradeoff Analytics
- c. Discovery**
- d. Speech to Text
- e. Visual Recognition

10. What IBM Watson service could be used to identify a short-tailed response?

- a. Discovery
- b. Natural Language Understanding
- c. Personality Insights
- d. Conversation**

11. The IBM Watson Visual Recognition service is designed to work best with which types of images?

- a. x-rays
- b. drawing
- c. photos**
- d. graphics

12. What is an approach for integrating a database into an IBM Watson solution?

- a. Use the Discovery service to search through candidate queries and surface the ones most relevant to the user input**
- b. Use the Document Conversation service to search the database for the entries with the strongest relationship to the user input
- c. Use the intent from the Natural Language Classifier as part of a query

d. Use the concepts from Natural Language Understanding to search the database for the most relevant documents

13. A large retailer wants to improve the product search on their website to allow users to search based on their queries that include statement on use commands rather than just keyword based searches to pull up relevant products.

Which IBM Watson service would meet this requirement?

a. Natural Language Understanding services Semantic Roles API

b. Natural Language Understanding service Concepts API

c. Natural Language Understanding service Sentiments API

d. Discovery

14. What license is the IBM Watson SDK licensed under?

a. GNU General Public License

b. IBM Public License

c. Apache 2.0

License

d. BSD License

15. Which IBM Watson service can be used for text analytics that detects both sentiment and emotion from people's digital footprints?

a. Facial Recognition

b. Natural Language Understanding

c. Personality Insights

d. Natural Language Classifier

16. When creating a new IBM Watson Visual Recognition classifier, what is the recommended minimum number of images that needs to be provided (for both the positives and negative example sets) in order to obtain the best results?

a. 1000-2000

b. 15-30

c. 150-200

d. 500-1000

17. Which IBM Watson solution is used for creating a machine trained natural language annotator?

a. Watson Knowledge Studio

b. Watson Natural Language Classifier

c. Watson Retrieve and Rank

d. Watson Explorer Application builder

18. Which three file types can be ingested by the IBM Watson Discovery service?

a. PPT

b. JSON

c. DOC

d. PDF

e. XLS

f. CSV

<https://developer.ibm.com/code/2017/08/04/bring-your-own-data-to-watson-discovery-service/>

19. Which is an example of unstructured data?

- a. A set of complaint emails sent to a large toy manufacturer about a particular toy that keeps malfunctioning.**
- b. A stock database containing items for sale in large toy shop.
- c. A time accounting form for employees in a toy factory with fields for the names of employees and the hours they each work.
- e. Spreadsheet listing historical stock price for a large toy manufacturer over the last 18 months

20. A cognitive solution is implemented to detect what the user want to do. The user mentions that he wants to buy a ski jacket for an upcoming vacation in Colorado.

What design pattern is appropriate for this use case?

a. Conversational pattern designed with Conversation service, Natural Language Understanding and Entity Extraction

- b. Empathy Analysis pattern designed with Personality Insights and conversation
- c. Audio Analysis pattern with Speech to Text and Tone Analysis
- d. Speech to Speech pattern designed with Speech to Text, Relationship Extraction and Text to Speech.

21. What connectivity protocols are supported by IBM Watson services?

- a. REST style using either XML/HTTP and JSON/HTTP**
- b. SOAP/HTTP and JSON/HTTP
- c. JSON/HTTP or JSON/RTP
- d. REST style using JSON/HTTP only

22. What are two of the main endpoints of the IBM Watson Text To Speech REST API?

- a. accent
- b. synthesis**
- c. vocalization
- d. intonation
- e. voices**

23. There are two programming models for HTTP communications between an IBM Watson service and the client application. Which two statements are true regarding these two models?

- a. Both models offer generally equivalent functionality, but with different security and performance characteristics**
- b. Both models offer generally equivalent communication latency characteristics
- c. Both models use HTTP basic authentication in all communication interactions**
- d. Neither model provides for direct communication between the application and the service
- e. The application must manage a security token in one model but not in the other.

<https://console.bluemix.net/docs/services/watson/getting-started-develop.html#programming-models-for-watson-services>

24. A cognitive FAQ widget on a company's support portal allows users to ask questions related to the company and its products.

What design pattern can be applied in this scenario using IBM Watson services?

- a. Question and Answer pattern built upon Tone Analyzer and Personality Insights services
- b. Question and Answer pattern built upon Conversation and Discovery services**
- c. Question and Answer pattern built upon Tone Analyzer and Natural Language Understanding services
- d. Conversation pattern built upon Conversation and Personality Insight services.

25. What best describes the process of how classification is done with the IBM Watson Natural Language Classifier?

- a. Train the system to map utterances or questions to specific intents or classes.**
- b. Train the system with as many documents as possible
- c. Read in user's questions or utterances and map them to classes.
- d. Automatically detect the intent of the user based upon statistical analysis.

26. Which IBM Watson image service allows training based on custom images and concepts?

- a. Similarity Recognition.
- b. Face Recognition.
- c. Image Recognition.
- d. Visual Recognition.**

27. How can a developer prevent IBM Bluemix from logging data in an API request to an IBM Watson service?

- a. Disable training from in the IBM Bluemix dashboard.
- b. Set a header parameter called X-Stop-Training-Watson to true in the HTTP request.
- c. Pass a parameter called DisableTraining=false in the API request
- d. Set a header parameter X-Watson-Learning-Opt-Out with the value true in the HTTP request.**

28. What is the purpose of the IBM Watson Natural Language Classifier service?

- a. Group a set of objects in such a way that objects in the same group are more similar to each other than to those in other groups.
- b. Interpret the intent behind text and returns a corresponding classification with associated confidence levels.**
- c. Translate a natural language sentence into a syntactic representation such as a parse tree.
- d. Reduce the number of random utterance under consideration by obtaining a set of uncorrelated utterances.

29. Which IBM Watson Natural Language Understanding service is used to identify Subject-Action-Object triples in unstructured text?

- a. Categories
- b. Semantic Roles**
- c. Linked Data support
- d. Keywords

30. In order to minimize the error, Which method helps to find the derivative of the error with respect to each weight and subtracting this value from the weight value?

- a. Back Propagation**
- b. Cognitive Propagation
- c. Forward Propagation
- d. Answer Propagation

31. At what point in the process can private documents to upload to IBM Watson Discovery service?

- a. after creating a custom configuration
- b. after uploading sample documents
- c. after creating the environment
- d. after creating the collection**

32. What is a common use case for the IBM Watson Natural Language classifier service?

- a. Find the right person for a specific job or project based on classifications found in a person's resume.
- b. Enable back and forth natural language conversations with a user for clarifying questions or helping a user take an action.
- c. Organize tweets into a set of categories, such as events, news, or opinions.**
- d. Design marketing material and provide product recommendations that is more personal and relevant.

33. What are two advantages gained by using IBM Bluemix as the application platform for an application using Watson services?

- a. Bluemix is built on proprietary API's which provide competitive advantages
- b. The developer avoids lock-in to proprietary technologies because Bluemix is built on open technologies**
- c. The Bluemix application developer can choose among multiple release versions of the Cloud Foundry frameworks.
- d. Bluemix promotes 12-factor methodology since Bluemix is deployed exclusively as a public cloud model.
- e. Bluemix provides services for securely integrating on premises and off premises application.**

34. A journal would like to analyze four short sentences captured and transcribed from verbal sound-bites from a political candidate. Is the IBM Watson Personality Insights service an appropriate technology to accomplish this goal?

- a. Yes, because the journalist will combine the Personality Insights with Speech to Text service to accomplish this goal.
- b. No, there is not enough text for the Personality Insights service to analyze and provide reliable results.**
- c. Yes, the Personality Insights service will provide details about the personality of this political candidate.
- d. No, the Personality Insights service provide only information about the emotional state of the candidate.

35. What is the name of the node connected together by synapses as illustrated with "?" in the neural network diagram?

- a. Corpus
- b. Cerebrum
- c. Nucleus**
- d. Neuron

36. Which query is specific to a search parameters versus structure parameters in IBM Watson Discovery service?

- a. count
- b. return
- c. offset
- d. aggregation**

37. A system with a pair of image classifiers is trained to recognize photos of cats and dogs. It labels 90% of cats correctly but labels 75% of dogs incorrectly as cats. Which statement is true?

- a. The system has low precision and low recall for cats.
- b. The system has high recall and high precision for cats.
- c. The system has high precision and low recall for cats.
- d. The system has high recall and low precision for cats.**

38. Which IBM Watson Natural Language Understanding service API can be used to extract the author of the webpage, the page title and the publication data from URL?

- a. Concepts
- b. Entities
- c. Metadata**
- d. Keywords

39. Which statement is a recommended practice when creating an IBM Watson cognitive virtual agent?

- a. When searching for article related to an entity or keyword from the Watson Discovery News service, use the relevance parameter to improve the accuracy of the search.
- b. Increase the amount of the transcribed text to improve the quality and confidence of the extracted concepts.
- c. When using the Conversation service, define different opening sentence in the dialog flow to prevent repetitive conversation where the dialog always asks the same questions.**
- d. When constructing a query for the Watson Discovery News service, the developer should specify the return parameter to control what the query should return.

40. Which two statements describe why more than one collection would needed to be created in IBM Watson Discovery service?

- a. To keep similar file types in their respective collections.
- b. The data may be so different that it doesn't make sense for it all to be queried at once.**
- c. It is better to have multiple small collections than one big collection.
- d. The first collection uses default configuration for testing and additional collections are needed for custom configuration.
- e. In order to separate results for different audience.**

41. For an IBM Watson cognitive virtual agent which is the general rule for how many examples of training instances per class are required to train the IBM Watson Conversation service?

- a. at least 2
- b. a minimum of 20
- c. a minimum of 5-10**
- d. a minimum of 1000

42. A cognitive solution is implemented to detect what the user wants to do. The user mentions that he wants to buy a ski jacket for an upcoming vacation in Colorado.

How can the entities be derived from the conversation using IBM Watson services?

- a. Upload training data to the Discovery service and use the Discovery API to query the results.
- b. Pass the utterance from the user to the Natural Language Understanding service Entites API**
- c. Pass the utterance from the user through Speech to Text then apply Tradeoff Analytics.
- d. Use the Tone Analayer service to retrieve the level of openness in the utterance.

43. What occurs when a workspace is updated with new JSON data by the POST/V1/workspaces/[workspace_id] method?

- a. After the update of the JSON you can diff [former_workspace_JSON] [update_workspace_JSON] to see how this update impacted the conversation workspace.
- b. Any elements included in the new JSON will completely replace the equivalent of existing elements.**
- c. The elements of the JSON payload would be merged into the existing elements in the workspace definition.
- d. An error will occur stating that the workspace cannot be updated.

44. What type of machine learning approach in clustering?

- a. Cognitive learning
- b. supervised learning
- c. unsupervised learning**
- d. reinforcement learning

45. Which statement is true about relationship in Watson Knowledge Studio type system?

- a. Relationships can occur more than two entities
- b. Relationships must be between only two entities**
- c. Relationship can be implied as long as there is sufficient statistical probability to warrant the inference.
- d. Relationship can occur in more than one direction between entities.

46. What is the purpose of the maximum alternatives parameter in the IBM Watson Speech to Text service?

- a. Accepts a Boolean value that tells the service wheather to provide confidence measures for the words of the transcription.
- b. Accepts an integer value that tells the service to return the n-best alternatives hypotheses.**
- c. Represents the intermediate hypotheses of a transcription that are likely to change before the service returns the final result.

e. Reports hypotheses for acoustically similar alternatives for words of the input audio.

47. A developer is using machine learning techniques to train a cognitive system, which will identify fraudulent insurance claims. What would be best suited for training data?

a. A set of known legitimate claims mixed in with random claim samples.

b. Samples of known fraudulent and legitimate claims

c. A new set of unknown claims

d. A set of known fraudulent claims mixed in with random claim samples

48. What is the formula for calculating the accuracy of a classification system?

a. $(\text{False Negatives} + \text{False Positives}) / (\text{True Positives} + \text{True Negatives} + \text{False Positives} + \text{False Negatives})$

b. $(\text{True Positives} + \text{False Positives}) / (\text{True Positives} + \text{True Negatives} + \text{False Positives} + \text{False Negatives})$

c. $(\text{False Negatives} + \text{True Negatives}) / (\text{True Positives} + \text{True Negatives} + \text{False Positives} + \text{False Negatives})$

d. $(\text{True Positives} + \text{True Negatives}) / (\text{True Positives} + \text{True Negatives} + \text{False Positives} + \text{False Negatives})$

49. How is a training data set constructed from user questions for the IBM Watson Natural Language Classifier?

a. Group the questions into classes.

b. Upload documents with similar questions

c. Use an XML formatted data set.

d. Create an intents index in a spreadsheet

50. What Watson solution can answer common supported questions typically handled by a live agent?

a. Conversation

b. Language Translator

c. Natural Language Understanding

d. Tone Analyzer

51. Should user stray outside the domain of the dialog in the IBM Watson conversation, which action should be used?

a) Use the speech to text service to better capture what the user is saying

b) Use the anything else node as a means of redirecting the conversation to the original topic

c) Use more wild card characters to capture the intent of the user

d) Upon error, consider including that the irrelevant topic within your Conversation

52. Which statement is true for all IBM Watson Natural Language Understanding service?

a. Both SSL and TLS protocols are supported for security purpose

b. They are available for over 40 languages.

c. REST API endpoints are available.

d. Response formats are JSON and XML only.

53. A researcher is looking for a system than can help analyze recorded presentations, extract major concepts and provide recommendations for related content. Which two IBM Watson services can be combined to help achieve this task?

- a. Tradeoff Analytics
- b. Tone Analyzer
- c. Personality Insights
- d. Discovery**
- e. Speech to Text**

54. It is the beginning of the year and earning is about to start. Company financial advisors would like to send communication out to the share holders and make sure that it will have a positive impact. Which IBM Watson service could improve the effectiveness of how this communication will be received?

- a. Concept Expansion
- b. Concept Analytics
- c. Tone Analyzer**
- d. Relationship Extraction

55. What are the three main endpoints of the IBM Watson Concept Insights REST API?

- a. corpora**
- b. realtionships
- c. concepts**
- d.accounts
- e. graphs**
- f. insights

<https://console.bluemix.net/docs/services/ConceptInsights/index.html>

56. What is a leading factor that impacts the accuracy of a supervised machine learning system?

- a. the language of the training data
- b. signal to noise ratio in the training data**
- c.too many iterations of training the system
- d. not enough data redundancy

57. Which statement best describes the supervised learning process in building a question answering system?

- a. The cognitive system Ingest a corpus and asks a human supervisor for clarification in natural language when it encounters a subject it does not understand.
- b. The system is presented with a set of questions and their respective answers and it incrementally learns by example**
- c. A human supervisor monitors the progress of the learning, evaluates the answers and incrementally improves the results.
- d. The system ingests the corpus and is able to answer questions after ingestion.

58. Which statements is true about the IBM Watson SDKs?

- a. It allows developers to discover cognitive services

- b. It allows UI designers to identify cognitive relations in their prototypes
- c. It allows developers to add cognitive services to their applications**
- d. It allows end users to provide cognitive use cases and requirements.

59. Which IBM Watson service has an Application Starter Kit that can help a user find the best home for them to live in?

- a. Tradeoff Analytics**
- b. Personalty Insights
- c. Discovery
- d. Conversation

60. What does normalizing data in the IBM Watson Discovery service entail?

- a. The same heading size and font settings can be used across all documents.
- b. Preparing various file types to be converted to JSON for find indexing
- c. Fields can be moved,merged,copied or removed**
- d. Curating and sanitizing documents from various file types.

61. A developer is training a cognitive system to perform classification of unstructured content. What is the purpose of a validation data set in the training process?

- a. Validation data sets are exactly the same as test data sets and are used to test the limits of the cognitive model.
- b. Validation data sets are known to belong to specific classed and are used to fine tune the accuracy of the training model.**
- c. Validation data sets are only used if test data is unavailable
- d. Validation data sets would never be used in classification system as only training and test data are required.

62. As a developer begins to construct a conversational agent using IBM Watson Conversation service, which activities would they start with?

- a. Add new content based on user activity.
- b. Gather representative questions.**
- c. Design the dialog flow.
- d. Deploy it on the local machine before deploying it live.

63. What are some of the steps for viewing deployment or runtime logs from the Bluemix dashboard?

- a. Logging information is persisted a minimum of 90 days from time of the logged event.
- b. In the Logging Warehouse console, you can view historical logs for your application.
- c. After logging into Bluemix, click the tile for the application then locate the logs link in the left navigation bar of the details page.**
- d. In the Logs console, both historical and recent logs for an application can be viewed.

64. A developer has been asked to build a question and answer system using the IBM Watson Conversation service for a retail bank to handle questions from customers on the banking website. From which group of users should the developer target to collect representative questions?

- a. executive sponsor and decision makers at the bank
- b. a sample set of members from IT team managing the website
- c. call center agents who routinely handle such customer calls**
- d. sample set of end user application