## Practice Exam Questions





Certified Pega Data Scientist



# **Pegasystems**

### **Exam PEGACPDS88V1**

**Certified Pega Data Scientist 8.8** 

Version: 3.1

[ Total Questions: 140 ]

#### **Question No: 1**

To confirm the continuing accuracy of your adaptive models, adaptive models must be regularly inspected. Which two tasks are part of a regular inspection? (Choose Two)

A. Update the models	
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- **B.** Check the performance and success rate of the models
- C. Adjust the advanced settings\_\_\_\_\_
- **D.** Check the performance of individual predictors
- **E.** Add the historical data collected since the last inspection

#### Answer: B,D

**Explanation:** To confirm the continuing accuracy of your adaptive models, two tasks that are part of a regular inspection are check the performance and success rate of the models and check the performance of individual predictors.

#### **Question No: 2**

Which two factors do you inspect to assess the general health of the adaptive models in Prediction Studio? (Choose Two)

- **A.** Model transparency
- **B.** Insights
- **C.** Performance of the models
- **D.** Number of decisions

#### Answer: C,D

**Explanation:** To assess the general health of the adaptive models in Prediction Studio, you can inspect the performance of the models and the number of decisions. The performance of the models shows how well they predict customer behavior over time. The number of decisions shows how much data is available for each model to learn from. References: https://academy.pega.com/module/predicting-customer-behavior-using-real-time-data-archived/topic/monitoring-adaptive-models

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What is the key difference between a predictive model and a human expert?

- **A.** Predictive models always outperform human experts.
- **B.** Humans are better at dealing with structured data and identifying patterns.
- **C.** Predictive models are more capable of detecting patterns in historical data.
- **D.** Humans make successful predictions on a large amount of data.

**Answer: B** 

#### **Question No: 4**

The adaptive model component in a decision strategy computes

- **A.** A single propensity value for all actions
- **B.** A unique accept rate for each action
- C. A single accept rate for all actions
- **D.** A propensity value for each action

#### **Answer: D**

**Explanation:** The adaptive model component in a decision strategy computes a propensity value for each action. Propensity is the likelihood of a positive response for a given action and predictor profile. It ranges from 0 to 100. References:

https://community.pega.com/sites/default/files/help\_v82/procomhelpmain.htm#rule-/rule-decision-/rule-decision-adaptivemodel/main.htm

#### **Question No:5**

U+ Insurance wants to use Pega Process Al<sup>™</sup> to detect fraud and assign suspicious claims to a fraud expert for closer inspection.

To meet this requirement, how does an application developer use the outcome of a predictive fraud model in the case type that processes the incoming claim?

- A. Use the prediction outcome in the condition of an assignment step.
- **B.** Use the model outcome in the condition of an assignment step.
- **C.** Use the prediction outcome in the condition of a decision step.
- **D.** Use the model outcome in the condition of a decision step.

#### **Answer: D**

**Explanation:** Pega Process Al<sup>™</sup> lets you bring your own predictive models to Pega and use predictions in case types to optimize the way your application processes work and

meet your business goals.

To use the outcome of a predictive fraud model in the case type that processes the incoming claim, you need to use the model outcome in the condition of a decision step2. This way, you can route suspicious claims to a fraud expert for closer inspection based on the model's prediction.

#### **Question No: 6**

U+ Telecom wants to engage in proactive retention to reduce churn. As a data scientist, you create a prediction that calculates the probability that a client is likely to cancel a subscription. What type of prediction do you create?

- A. Case management\_\_\_\_\_
- **B.** Customer Decision Hub
- C. Text analytics

#### **Answer: B**

**Explanation:** As a data scientist, you create a prediction that calculates the probability that a client is likely to cancel a subscription. The type of prediction you create is Customer Decision Hub.

#### **Question No:7**

As a data scientist, you are tasked with configuring two predictions that are driven by an adaptive model: one for an inbound channel and one for an outbound channel. To which setting do you need to pay extra attention?

- **A.** Response timeout
- **B.** Adaptive model
- C. Predictor fields
- **D.** Control group

#### **Answer: B**

**Explanation:** As a data scientist, if you are tasked with configuring two predictions that are driven by an adaptive model, you need to pay extra attention to adaptive model settings.

#### **Question No:8**

.Prediction Studio supports keyword-based topic detection, model-based topic detection, or a combination of both. When using a text prediction based on machine learning with keywords configured,\_\_\_\_\_\_.

- **A.** the Not keywords function as negative features
- **B.** the keywords are ignored
- **C.** the Must keywords are required to detect the topic
- **D.** keywords and training data have a similar impact on the model

#### **Answer: A**

**Explanation:** When using a text prediction based on machine learning with keywords configured, the Not keywords function as negative features, meaning that they reduce the probability of detecting the topic if they appear in the text. The Must keywords and May keywords do not have any impact on the machine learning model. References: https://academy.pega.com/module/text-analytics/topic/configuring-keywords

#### **Question No:9**

The purpose of model templates when using Pega machine learning is

- **A.** to set the model outcomes
- **B.** to set the model context
- **C.** to streamline model deployment
- **D.** to streamline model development

#### **Answer: D**

**Explanation:** The purpose of model templates when using Pega machine learning is to streamline model development.

#### **Question No: 10**

Adaptive models can start to learn without historical evidence. What is the starting propensity of every action?

- **A.** 50
- **B.** 0

**C.** 1

**D.** 0.5

#### **Answer: D**

**Explanation:** Adaptive models can start to learn without historical evidence. The starting propensity of every action is 0.5.

#### **Question No: 11**

For an Adaptive Model to react quickly to changes in customer behavior, the

- A. performance threshold should be set to a low number
- **B.** model must always evaluate all customer responses
- C. strategy must include the calculation for smooth propensity
- **D.** value of the memory setting should be set to a low number

**Answer: A** 

#### **Question No: 12**

Model transparency is becoming an important requirement for many businesses. In Prediction Studio, model transparency thresholds can be set for

- A. a model type
- **B.** a model
- C. a department
- D. a business issue

#### **Answer: B**

**Explanation:** In Prediction Studio, model transparency thresholds can be set for a model.

#### **Question No: 13**

Pega Decision Management enables organizations to make next-best-action decisions.

To which types of decisions can next-best-action be applied?

- A. Determining how to optimize the product portfolio to increase market share
- **B.** Determining why response rates for a campaign in one region are below average
- **C.** Determining the cause of a customer's problem
- **D.** Determining which banner to show on a web site to increase click rate

#### **Answer: D**

**Explanation:** Pega Process Al<sup>™</sup> lets you bring your own predictive models to Pega and use predictions in case types to optimize the way your application processes work and meet your business goals.

To use the outcome of a predictive fraud model in the case type that processes the incoming claim, you need to use the model outcome in the condition of a decision step2. This way, you can route suspicious claims to a fraud expert for closer inspection based on the model's prediction.

#### **Question No: 14**

The P\*C\*V\*L arbitration formula is used by the Customer Decision Hub to select the Next-Best-Action for each customer. Which factor in the arbitration formula is calculated using AI?

- A. Business levers
- B. Action value
- C. Context weighing
- **D.** Propensity

#### **Answer: D**

**Explanation:** Propensity Reference:

The PCV\*L arbitration formula used by the Customer Decision Hub to select the Next-Best-Action for each customer calculates **propensity** using AI.

#### **Question No: 15**

When building a predictive model, in which development step is the regression model created?

#### A. Model Export

- **B.** Data Analysis
- C. Model Analysis
- D. Model Development

**Answer: D** 

#### **Question No: 16**

What happens when you increase the performance threshold setting of an adaptive model rule?

- **A.** The number of active predictors increases
- **B.** The performance of the model is increased
- **C.** The correlation threshold decreases
- **D.** The number of active predictors may decrease

#### **Answer: D**

**Explanation:** When you increase the performance threshold setting of an adaptive model rule, the number of active predictors may decrease. The performance threshold is the minimum performance that a predictor must have to be included in the model. If you increase this value, some predictors may not meet the criteria and be excluded from the model. References:

https://community.pega.com/sites/default/files/help\_v82/procomhelpmain.htm#rule-/rule-decision-rule-decision-adaptivemodel/main.htm

#### **Question No: 17**

When selecting the list of predictors for an adaptive model you should

- **A.** Select up to a maximum of 500 predictors
- **B.** Consider properties from a wide range of sources
- **C.** Always use numeric type for integer properties
- **D.** Select at least one date property

#### **Answer: B**

**Explanation:** When selecting the list of predictors for an adaptive model you should consider properties from a wide range of sources. Predictors are properties that influence the customer behavior and can be derived from various sources such as customer profile, interaction history, proposition details, etc. References:

https://community.pega.com/sites/default/files/help\_v82/procomhelpmain.htm#rule-/rule-

decision-/rule-decision-adaptivemodel/main.htm

#### **Question No: 18**

The likelihood that a proposition will be accepted by the customer is stored in the strategy property called\_\_\_\_\_.

- A. pyPropensity
- B. pyLikelihood
- C. pyProbability
- **D.** pyBehavior

#### **Answer: D**

**Explanation:** The likelihood that a proposition will be accepted by the customer is stored in the strategy property called pyBehavior. This property is calculated by an adaptive model or a predictive model and reflects the customer's propensity to respond to an offer. References: https://academy.pega.com/module/creating-and-understanding-decision-strategies-archived/topic/using-predictions-decision

#### **Question No: 19**

Prediction Studio supports keyword-based topic detection, model-based topic detection and the combination of these. When using machine learning,

- A. keywords have a higher impact on the model than the training data
- **B.** the Must keywords are required to detect the topic
- **C.** the Must keywords function as positive features
- **D.** the keywords are ignored

#### **Answer: C**

**Explanation:** When using machine learning, the Must keywords function as positive features.

#### **Question No: 20**

As a data scientist, you have enabled capturing of historical data in an adaptive model.