MCQ Assessment - For Students

Question 1: What is the main issue with conventional CF-based methods?

a: They rely solely on ratings.

b: They are too complex to implement.

c: They cannot handle sparse data.

d: They are not scalable to large datasets.

Question 2: What is the purpose of CTR?

a: To improve the latent representation learned by CF.

b: To reduce the sparsity of rating data.

c: To combine item content information with ratings.

d: To make recommendations based on user demographics.

Question 3: What is the main limitation of CTR?

a: It is not suitable for sparse auxiliary information.

b: It requires a large amount of training data.

c: It cannot handle non-i.i.d. input.

d: It is computationally expensive.

Question 4: What is the main contribution of CDL?

a: It extends deep learning to non-i.i.d. input.

b: It combines deep representation learning with collaborative filtering.

c: It addresses the sparsity problem in CF.

d: All of the above.

Question 5: What type of model is CDL?

a: Hierarchical Bayesian model

b: Neural network model

c: Linear regression model

d: Decision tree model

Question 6: What is the purpose of deep representation learning in CDL?

a: To extract features from item content information.

b: To predict user ratings.

c: To improve the latent representation learned by CF.

d: To reduce the sparsity of rating data.

Question 7: What is the purpose of collaborative filtering in CDL?

a: To make recommendations based on user-item interactions.

b: To learn a latent representation of users and items.

c: To predict user ratings.

d: To extract features from item content information.

Question 8: What type of data is CDL suitable for?

a: Sparse rating data with auxiliary content information.

b: Dense rating data with no auxiliary information.

c: Structured data with no missing values.

d: Unstructured data with no labels.

Question 9: What is the main advantage of CDL over CTR?

a: It can handle sparse auxiliary information.

b: It requires less training data.

c: It is more computationally efficient.

d: It can make more accurate recommendations.

Question 10: Which of the following is NOT a potential application of CDL?

a: Recommender systems

b: Fraud detection

c: Image classification

d: Natural language processing