



**EXIN BCS
Artificial Intelligence**

FOUNDATION

Certified by


考试样卷

202009 版本

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考试说明

本试卷是 EXIN BCS Artificial Intelligence Foundation (AIF.CH)模拟考试。EXIN 考试准则适用于该考试。

本试卷由 40 道单项选择题组成。每道选择题有多个选项，但这些选项中只有一个是正确答案。

本试卷的总分是 40 分。每道题的分数是 1 分。您需要获得 26 分或以上通过考试。

考试时间为 60 分钟。

祝您好运!

考试样卷

1 / 40

“人类逻辑层次”是由哪位作者创建出来的？

The Human Logical Levels was created by which author?

- A) 罗伯特·戴尔兹 (Robert Dilts)
Robert Dilts
- B) 汤姆·米切尔 (Tom Mitchell)
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2 / 40

按照欧盟准则的定义，可信赖的人工智能 (AI) 必须...

Trustworthy Artificial Intelligence (AI), as defined by the EU Guidelines, must...

- A) 至少包含3项联合国可持续发展措施。
have at least 3 UN sustainability measures.
- B) 确保质量符合ISO标准。
be quality assured to ISO standards.
- C) 有CE认证。
be CE marked.
- D) 采用健全的技术。
be technically robust.

3 / 40

智能体必须是.....

An intelligent agent must be ...

- A) 主观的。
subjective.
- B) 非理性的。
irrational.
- C) 理性的。
rational.
- D) 有同情心的。
empathic.

4 / 40

通用设计或全民设计属于哪家国际组织可持续发展目标的一部分？

Universal Design or Design-for-all are part of which international organization's sustainability goals?

- A) 北美航天局
North American Space Agency
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United Nations
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European Union
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Future of Life Institute

5 / 40

欧盟发布了关于道德和可信赖的人工智能（AI）的准则。

它是以下哪一项的准则？

The EU have published guidelines for Ethics and Trustworthy Artificial Intelligence (AI).

This is which of the following?

- A) 以环境为中心
Environment-centric
- B) 以商业为中心
Business-centric
- C) 以社会为中心
Social-centric
- D) 以人类为中心
Human-centric

6 / 40

哪个世界级的机构公布了17项可持续发展目标？

Which world institution has published seventeen sustainability goals?

- A) 联合国
United Nations
- B) 世界贸易组织
World Trade Organization
- C) 世界经济论坛
World Economic Forum
- D) 世界银行
World Bank

7 / 40

IBM的深蓝科技对机器学习（ML）的成功做出了贡献。

它在哪一年打败了世界国际象棋冠军？

IBM's Deep Blue has contributed to the success of Machine Learning (ML).

In what year did it beat the world chess champion?

- A) 1977年
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8 / 40

人们普遍认为谁定义了机器学习（ML）？

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Dame Wendy Hall
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Marvin Minsky

9 / 40

智能体使用下列哪一项来操纵它的环境？

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Stereography and actuators
- B) 声音和执行器
Sound and actuators
- C) 传感器和执行器
Sensors and actuators
- D) 视觉和执行器
Sight and actuators

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机器人范式一共有几个？

How many robot paradigms are there?

- A) 三个
Three
- B) 四个
Four
- C) 五个
Five
- D) 六个
Six

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基于效用的智能体与基于目标的智能体的区别在于它测量智能体的哪方面？

A utility-based agent differs from a goal-based agent in that it measures an agent's what?

- A) 资源用量
Resource usage
- B) 完成速度
Speed of completion
- C) 学习率
Learning rate
- D) 幸福感
Happiness

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智能机器人是利用以下哪一项的机器人？

An intelligent robot is a robot that uses which of the following?

- A) 客观性
Objectivity
- B) 同情心
Empathy
- C) 自主
Autonomy
- D) 人工智能 (AI)
Artificial Intelligence (AI)

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在人工智能 (AI) 中, 是什么通过传感器感知环境并通过执行器对环境进行作用?

In Artificial Intelligence (AI), what perceives its environment through sensors and acts on its environment through actuators?

- A) 智能体
An agent
- B) 人类
A human
- C) 聊天机器人
A chatbot
- D) 机器
A machine

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反射和基于模型属于什么的类型?

Reflex and Model-based are types of what?

- A) 机器学习 (ML) 算法
Machine learning (ML) algorithms
- B) 统计数据
Statistical Data
- C) 人工智能 (AI) 智能体
Artificial Intelligence (AI) agents
- D) 执行器
Actuators

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自上而下的层级范式是基于____、规划和实施建立的。

空白处应该填写什么内容?

The top-down hierarchical paradigm is built from _____, plan and act.

What is the missing term?

- A) 理解
understand
- B) 感知
sense
- C) 反馈
feedback
- D) 学习
learn

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人工智能（AI）学习智能体原理图中的感知和行为与机器人范式的哪方面紧密相关？

The percept and action in the schematic of an Artificial Intelligence (AI) learning agent are linked closely to what in the robotic paradigm?

- A) 感知和实施
Sense and act
- B) Critic和问题生成器
Critic and problem generator
- C) 探测器和学习元素
Sensors and learning element
- D) Critic和学习元素
Critic and learning element

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人类的价值观将通过未来的人工智能（AI）与我们的哪方面协调一致来驱动变革？

Human values will drive change by aligning future Artificial Intelligence (AI) with our...

- A) 可持续发展目标
sustainability goals.
- B) 欧盟道德准则
EU ethical principles.
- C) 未来生活的乌托邦目标
future of life Utopia goals.
- D) 法律
laws.

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实现欠拟合和过拟合之间的平衡属于掌握.....的一部分。

Finding the balance between under-fitting and over-fitting is part of knowing what is...

- A) 适合消费。
fit for consumption.
- B) 敏捷Scrum目标。
the Agile Scrum objective.
- C) 符合目标。
fit for purpose.
- D) 瀑布项目目标。
the Waterfall project objective.

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如果人工智能 (AI) 项目团队缺乏以下哪项, 则很可能导致AI项目的失败?

An Artificial Intelligence (AI) project is highly likely to fail if the AI project team does not have which of the following?

- A) 项目关注点
Project focus
- B) 领域专家
Domain expert
- C) 推动者
Facilitator
- D) 业务支持者
Business champion

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根据高德纳咨询公司 (Gartner) 在2018年公布的数据, 有多大比例的人工智能 (AI) 项目 “未能交付” ?

According to Gartner in 2018 what percentage of Artificial Intelligence (AI) projects 'fail to deliver' ?

- A) 0.65
65%
- B) 0.75
75%
- C) 0.85
85%
- D) 0.95
95%

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“符合目标” 的定义是由谁确定的?

Who defines what is 'fit for purpose'?

- A) 董事长
Chairperson
- B) 项目负责人
Project Lead
- C) Scrum Master
Scrum Master
- D) 领域专家
Domain Expert

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以下哪项是典型的早期（TRL 1-3）人工智能（AI）项目的资金来源？

Which of the following is a typical early stage (TRL 1-3) Artificial Intelligence (AI) project funder?

- A) 慈善机构
Charity
- B) 股市
Stock market
- C) 投行
Investment bank
- D) 房屋互助协会
Building society

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以下哪项对于机器学习（ML）项目的所有阶段都很有用？

Which of the following is useful at all stages of a Machine Learning (ML) project?

- A) 面向对象
Object orientation
- B) 数据可视化
Data visualization
- C) 云计算
Cloud computing
- D) 开源Python
Open source Python

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以下哪项属于机器学习（ML）软件的示例？

Which of the following is an example of Machine Learning (ML) software?

- A) Fortran
Fortran
- B) C++
C++
- C) Tensor flow
Tensor flow
- D) Objective C
Objective C

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以下哪项是准备数据过程中的任务?

Which of the following is a task in preparing data?

- A) 删除数据的随机取样
Delete a random sample of data
- B) 识别缺失数据
Identify missing data
- C) 加密数据
Encrypt data
- D) 发布结果
Publish results

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贝叶斯网络解释了多个变量可能对利用以下哪项的结果产生影响?

Bayes's networks describe how multiple variables may have influenced a result using what?

- A) 中心极限定理
The central limit theorem
- B) 概率分布
A probability distribution
- C) 遍历统计
Ergodic statistics
- D) 推断
Inference

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矢量微积分是利用.....的理论。

Vector Calculus is the theory that uses...

- A) 求和和斜率。
summation and gradients.
- B) 积分和差分。
integration and differences.
- C) 积分和微分。
integration and differentiation.
- D) 数列和梯度。
series and gradients.

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机器学习 (ML) , 通过分析数据 “在经验中学习” 。

为了实现这一目的, 需要什么?

Machine Learning (ML), 'learns from experience' by analyzing data.

What is needed to do this?

- A) 功能、软件和硬件
Functionality, Software and Hardware
- B) Python、Paraview和Linux
Python, Paraview and Linux
- C) 线性代数、概率学/统计学和最优化
Linear algebra, probability/statistics and optimization
- D) 云计算、开源软件和算法
Cloud computing, open source software and an algorithm

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人工神经网络 (ANN) 是由什么组成的?

An artificial neural network (ANN) is made up of what?

- A) 隐藏的突触
Hidden synapses
- B) 互联的节点群
Inter-connected group of nodes
- C) 神经线
Nervous edges
- D) 树状节点
Dendritic nodes

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机器学习 (ML) 与哪个数学学科相关?

Which mathematical subject is associated with Machine Learning (ML)?

- A) 光谱分析
Spectral analysis
- B) 复变量
Complex variable
- C) 数论
Number Theory
- D) 线性代数
Linear Algebra

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哪种库可以用于以较低的成本创建人工神经网络（ANN）？

What type of library can be used to build an Artificial Neural Network (ANN) cost effectively?

- A) 开源库
Open source
- B) 版权库
Copyright
- C) 标准库
Standards
- D) 医学库
Medical

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在统计学中，pdf代表什么？

In statistics, what does the term pdf stand for?

- A) 点态离散函数
Pointwise Discrete Function
- B) 点态密度函数
Pointwise Density Function
- C) 概率离散函数
Probability Discrete Function
- D) 概率密度函数
Probability Density Function

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在监督学习中，智能体利用什么进行学习？

In supervised learning an agent uses what to learn from?

- A) 随机数据
Random data
- B) 标记数据
Labeled data
- C) 无标记数据
Unlabeled data
- D) 实验数据
Experimental data

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哪种狭义人工智能 (AI) 功能对AI智能体有用?

What type of narrow Artificial Intelligence (AI) functionality is useful to AI agents?

- A) 有意识的AI
Conscious AI
- B) 傅里叶变换
Fourier Transform
- C) 通用AI
Artificial General AI
- D) 规划
Planning

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如今采用的机器人手术属于下列哪一项的应用案例?

Robotic surgery is used today and is an example of which of the following?

- A) 人机协作
Human and machines working together
- B) 自主人工智能 (AI)
Autonomous Artificial Intelligence (AI)
- C) 狭义AI
Narrow AI
- D) 自主机器人
Autonomous robotics

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Daugherty和Wilson在《人类+机器》一书中对什么进行了说明?

Daugherty and Wilson have identified what in their book on Human Plus Machine?

- A) 监测机器人
Monitoring the robots
- B) 缺失的中间地带
Missing middle
- C) 低级低值工作
Menial low value work
- D) 检查机器人的工作
Checking the robots work

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哪种项目类型本质上属于“从经验中学习”？

Which project style is fundamentally 'learning from experience'?

- A) 敏捷式
Agile
- B) 瀑布式
Waterfall
- C) 辅导式
Mentoring
- D) 独裁式
Autocratic

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在Daugherty和Wilson的著作《人类+机器》中，哪种文化被描述为理想文化？

In Daugherty and Wilson's book Human plus Machine, what is described as a desirable culture?

- A) 渴望实现透明
Desire to be transparent
- B) 渴望去尝试
Desire to experiment
- C) 渴望实现可持续性
Desire to be sustainable
- D) 渴望“首次正确”
Desire to be 'right first time'

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将飞机停在机场的计算机程序属于？

What is a computer program that works out where to park aircraft at an airport an example of?

- A) 意识智能
Conscious intelligence
- B) 通用人工智能 (AI)
Artificial General Intelligence
- C) 狭义 (弱) 智能
Narrow (Weak) Intelligence
- D) 自动化
Automation

40 / 40

如今，不明确的创造性工作最好由谁来完成？

Today, ambiguous and creative tasks are better undertaken by what?

- A) 算法
Algorithms
- B) 人类
Humans
- C) 聊天机器人
Chatbots
- D) 通用人工智能 (AI)
Artificial general intelligence

答案解析

1 / 40

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A) 正确。通过这个简单明了的问题考察学员是否记得自然语言处理 (NLP) 逻辑层级的创立者。干扰项是人工智能 (AI) 领域的其他贡献者。

Correct. Straight forward question to remember the person who wrote the Natural Language Processing (NLP) logical levels. Distractors are other contributors to the field of Artificial Intelligence (AI).

B) 错误。
Incorrect.

C) 错误。
Incorrect.

D) 错误。
Incorrect.

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be technically robust.
-
- A) 错误。
Incorrect.
 - B) 错误。
Incorrect.
 - C) 错误。
Incorrect.
 - D) 正确。欧盟准则将技术健全性融入了道德AI的基础流程中。干扰项貌似是备选项。
Correct. The EU guides put technical robustness in the fundamental process of ethical AI. The distractors are plausible alternatives.

3 / 40

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 - B) 非理性的。
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 - C) 理性的。
rational.
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empathic.
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- A) 错误。
Incorrect.
 - B) 错误。
Incorrect.
 - C) 正确。在人工智能（AI）理论中，智能的AI从根本上依赖于理性，并会作出理性的行为。干扰项是人类的能力，是人类未来的角色的基础。
Correct. In Artificial Intelligence (AI) theory the intelligent AI relies fundamentally on being rational and that it will act rationally. The distractors are the human capabilities on which our future roles will build from.
 - D) 错误。
Incorrect.

4 / 40

通用设计或全民设计属于哪家国际组织可持续发展目标的一部分？

Universal Design or Design-for-all are part of which international organization's sustainability goals?

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North American Space Agency
 - B) 联合国
United Nations
 - C) 欧盟
European Union
 - D) 生命未来研究所
Future of Life Institute
-
- A) 错误。
Incorrect.
 - B) 错误。
Incorrect.
 - C) 正确。欧盟是领先的国际组织，它将“全民设计”（Design for All）作为人工智能（AI）的一项核心要求。其他组织也有类似的目标或准则。
Correct. The European Union is the leading international organization that puts Design for All as a key requirement in Artificial Intelligence (AI). The other organizations have similar goals or principles.
 - D) 错误。
Incorrect.

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Human-centric
-
- A) 错误。
Incorrect.
 - B) 错误。
Incorrect.
 - C) 错误。
Incorrect.
 - D) 正确。AI是理性的，且必须有一个目标。为了遵循欧盟的道德准则，目标必须以人为中心。干扰项貌似合理，来自可持续性和商业等课题。
Correct. AI is rational and must have a goal. In order for these to follow the EU ethical guidelines the goals must be human centric. The distractors are plausible and from subjects such as sustainability and business.

6 / 40

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World Trade Organization
- C) 世界经济论坛
World Economic Forum
- D) 世界银行
World Bank

A) 正确。本题就是考察学员对所学信息的掌握情况。其他干扰项是在其他领域发挥作用的组织。
Correct. The answer is a straightforward recall of information. The other distractors are organizations that play a part elsewhere in the course.

B) 错误。
Incorrect.

C) 错误。
Incorrect.

D) 错误。
Incorrect.

7 / 40

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In what year did it beat the world chess champion?

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A) 错误。
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Incorrect.

C) 错误。
Incorrect.

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Correct. The answer is a straightforward recall of information.

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Dame Wendy Hall
 - D) 马文·明斯基 (Marvin Minsky)
Marvin Minsky
- A) 错误。
Incorrect.
- B) 正确。考察学员对于机器学习相关信息的掌握情况。干扰项为课程中出现的其他人物。
Correct. Again, a straightforward recall of information on ML. The distractors are other people described in the course.
- C) 错误。
Incorrect.
- D) 错误。
Incorrect.

9 / 40

智能体使用下列哪一项来操纵它的环境?

An intelligent agent uses which of the following to manipulate its environment?

- A) 立体摄影和执行器
Stereography and actuators
 - B) 声音和执行器
Sound and actuators
 - C) 传感器和执行器
Sensors and actuators
 - D) 视觉和执行器
Sight and actuators
- A) 错误。
Incorrect.
- B) 错误。
Incorrect.
- C) 正确。本题考察考生对人工智能 (AI) 学习智能体的掌握情况。干扰项对正确答案进行干扰。
Correct. This question is to test a candidates recall of the Artificial Intelligence (AI) learning agent. Distractors are plays on the correct answers.
- D) 错误。
Incorrect.

10 / 40

机器人范式一共有几个？

How many robot paradigms are there?

- A) 三个
Three
- B) 四个
Four
- C) 五个
Five
- D) 六个
Six

- A) 正确。存在三种机器人范式，这对理解机器人和人工智能（AI）为何有相似的概念起着重要的作用。
Correct. There are three robotic paradigms, this plays an important part in the understanding of how robotics and Artificial Intelligence (AI) have similar concepts.
- B) 错误。
Incorrect.
- C) 错误。
Incorrect.
- D) 错误。
Incorrect.

11 / 40

基于效用的智能体与基于目标的智能体的区别在于它测量智能体的哪方面？

A utility-based agent differs from a goal-based agent in that it measures an agent's what?

- A) 资源用量
Resource usage
- B) 完成速度
Speed of completion
- C) 学习率
Learning rate
- D) 幸福感
Happiness

- A) 错误。
Incorrect.
- B) 错误。
Incorrect.
- C) 错误。
Incorrect.
- D) 正确。虽然智能体依赖于理性，但效用衡量可以用来衡量一个人在实现目标时有多快乐。干扰项貌似合理但不正确。
Correct. Although agents rely on rationality, a utility measure can be used to measure how happy a person is in achieving a goal. Distractors are plausible but incorrect.

12 / 40

智能机器人是利用以下哪一项的机器人？

An intelligent robot is a robot that uses which of the following?

- A) 客观性
Objectivity
 - B) 同情心
Empathy
 - C) 自主
Autonomy
 - D) 人工智能 (AI)
Artificial Intelligence (AI)
-
- A) 错误。
Incorrect.
 - B) 错误。
Incorrect.
 - C) 错误。
Incorrect.
 - D) 正确。本题考察学员对课程中的信息的掌握情况。干扰项貌似是备选项。
Correct. This question is a simple recall of information in the course. Distractors are plausible alternatives.

13 / 40

在人工智能 (AI) 中，是什么通过传感器感知环境并通过执行器对环境进行作用？

In Artificial Intelligence (AI), what perceives its environment through sensors and acts on its environment through actuators?

- A) 智能体
An agent
 - B) 人类
A human
 - C) 聊天机器人
A chatbot
 - D) 机器
A machine
-
- A) 正确。考察学员对于AI学习智能体相关信息的掌握情况。干扰项不属于AI智能体的正式定义。
Correct. Again, a straightforward recall of information on the AI learning agent. The distractors are mentioned in the course but are not part of the formal definition of an agent in AI.
 - B) 错误。
Incorrect.
 - C) 错误。
Incorrect.
 - D) 错误。
Incorrect.

14 / 40

反射和基于模型属于什么的类型?

Reflex and Model-based are types of what?

- A) 机器学习 (ML) 算法
Machine learning (ML) algorithms
 - B) 统计数据
Statistical Data
 - C) 人工智能 (AI) 智能体
Artificial Intelligence (AI) agents
 - D) 执行器
Actuators
-
- A) 错误。
Incorrect.
 - B) 错误。
Incorrect.
 - C) 正确。从智能体的基本概念出发，我们需要不同类型的智能体来描述它们的运作方式。本题考察考生是否能识别出两种AI智能体。
Correct. From the basic idea of an agent we need different types of agent to describe how they operate. The question asks if the candidate can identify two types of AI agent.
 - D) 错误。
Incorrect.

15 / 40

自上而下的层级范式是基于_____、规划和实施建立的。

空白处应该填写什么内容？

The top-down hierarchical paradigm is built from _____, plan and act.

What is the missing term?

- A) 理解
understand
 - B) 感知
sense
 - C) 反馈
feedback
 - D) 学习
learn
-
- A) 错误。
Incorrect.
 - B) 正确。考察学员是否记得机器人范式的元素。干扰项基于机器人的潜在替代描述方式。
Correct. Can the candidate remember an element from the robotic paradigms. Other answers are distractors based on possible alternatives ways to describe a robot.
 - C) 错误。
Incorrect.
 - D) 错误。
Incorrect.

16 / 40

人工智能（AI）学习智能体原理图中的感知和行为与机器人范式的哪方面紧密相关？

The percept and action in the schematic of an Artificial Intelligence (AI) learning agent are linked closely to what in the robotic paradigm?

- A) 感知和实施
Sense and act
 - B) Critic和问题生成器
Critic and problem generator
 - C) 探测器和学习元素
Sensors and learning element
 - D) Critic和学习元素
Critic and learning element
- A) 正确。考察学员是否能够识别关于机器人和AI智能体的类似概念。
Correct. This question is to test if the candidate can identify the similar concepts of robotics and AI agents.
- B) 错误。
Incorrect.
- C) 错误。
Incorrect.
- D) 错误。
Incorrect.

17 / 40

人类的价值观将通过未来的人工智能（AI）与我们的哪方面协调一致来驱动变革？

Human values will drive change by aligning future Artificial Intelligence (AI) with our...

- A) 可持续发展目标
sustainability goals.
 - B) 欧盟道德准则
EU ethical principles.
 - C) 未来生活的乌托邦目标
future of life Utopia goals.
 - D) 法律
laws.
- A) 正确。考察对欧盟准则、联合国可持续发展目标和自然语言处理（NLP）人类建模相关信息的掌握情况。干扰项貌似合理，但不如通过统一欧盟、联合国和人类价值观来实现可持续发展目标更有说服力。
Correct. Can the candidate use the information from the EU guidelines, UN sustainability goals and Natural Language Processing (NLP) Human modelling subjects to pick the answer. The distractors are plausible but not as powerful as aligning EU, UN and human values to achieve sustainable goals.
- B) 错误。
Incorrect.
- C) 错误。
Incorrect.
- D) 错误。
Incorrect.

18 / 40

实现欠拟合和过拟合之间的平衡属于掌握.....的一部分。

Finding the balance between under-fitting and over-fitting is part of knowing what is...

- A) 适合消费。
fit for consumption.
 - B) 敏捷Scrum目标。
the Agile Scrum objective.
 - C) 符合目标。
fit for purpose.
 - D) 瀑布项目目标。
the Waterfall project objective.
-
- A) 错误。
Incorrect.
 - B) 错误。
Incorrect.
 - C) 正确。考察是否记得该领域对于定义“符合目的”具有重要作用的部分。干扰项貌似是备选项。
Correct. This question asks the candidate to recall the important part the domain has in defining what is fit for purpose. Distractors are plausible alternatives.
 - D) 错误。
Incorrect.

19 / 40

如果人工智能（AI）项目团队缺乏以下哪项，则很可能导致AI项目的失败？

An Artificial Intelligence (AI) project is highly likely to fail if the AI project team does not have which of the following?

- A) 项目关注点
Project focus
 - B) 领域专家
Domain expert
 - C) 推动者
Facilitator
 - D) 业务支持者
Business champion
-
- A) 错误。
Incorrect.
 - B) 正确。考察是否记得该领域对于确定“符合目的”具有重要作用的部分。干扰项貌似是备选项。
Correct. This questions ask the candidate to recall the important part the domain has in defining what is fit for purpose. Distractors are plausible alternatives.
 - C) 错误。
Incorrect.
 - D) 错误。
Incorrect.

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根据高德纳咨询公司 (Gartner) 在2018年公布的数据, 有多大比例的人工智能 (AI) 项目 “未能交付” ?

According to Gartner in 2018 what percentage of Artificial Intelligence (AI) projects ‘fail to deliver’ ?

- A) 65%
65%
 - B) 75%
75%
 - C) 85%
85%
 - D) 95%
95%
-
- A) 错误。
Incorrect.
 - B) 错误。
Incorrect.
 - C) 正确。考察考生是否记得AI项目成功的可能性。
Correct. Test the recall of a candidate about the likelihood of AI projects being successful.
 - D) 错误。
Incorrect.

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“符合目标” 的定义是由谁确定的?

Who defines what is 'fit for purpose'?

- A) 董事长
Chairperson
 - B) 项目负责人
Project Lead
 - C) Scrum Master
Scrum Master
 - D) 领域专家
Domain Expert
-
- A) 错误。
Incorrect.
 - B) 错误。
Incorrect.
 - C) 错误。
Incorrect.
 - D) 正确。考察考生是否完全理解领域专家的作用。干扰项貌似合理。
Correct. Asks the candidate if they have understood fully what the role of the domain expert is. Distractors are plausible

22 / 40

以下哪项是典型的早期（TRL 1-3）人工智能（AI）项目的资金来源？

Which of the following is a typical early stage (TRL 1-3) Artificial Intelligence (AI) project funder?

- A) 慈善机构
Charity
- B) 股市
Stock market
- C) 投行
Investment bank
- D) 房屋互助协会
Building society

- A) 正确。考察是否记得谁有可能为早期的研究项目提供资金。干扰项通常是项目后期的资金来源。
Correct. Test if the candidate had remembered who is likely to fund an early research stage project. Distractors are typical funders of later stage projects.
- B) 错误。
Incorrect.
- C) 错误。
Incorrect.
- D) 错误。
Incorrect.

23 / 40

以下哪项对于机器学习（ML）项目的所有阶段都很有用？

Which of the following is useful at all stages of a Machine Learning (ML) project?

- A) 面向对象
Object orientation
- B) 数据可视化
Data visualization
- C) 云计算
Cloud computing
- D) 开源Python
Open source Python

- A) 错误。
Incorrect.
- B) 正确。数据可视化在ML中起着重要作用，本题考察考生是否记得这一知识点。干扰项是ML的其他领域。
Correct. Data visualization plays an important role in ML, this question test the recall of the candidate as to this fact. The distractors are other areas of ML.
- C) 错误。
Incorrect.
- D) 错误。
Incorrect.

24 / 40

以下哪项属于机器学习（ML）软件的示例？

Which of the following is an example of Machine Learning (ML) software?

- A) Fortran
Fortran
- B) C++
C++
- C) Tensor flow
Tensor flow
- D) Objective C
Objective C

- A) 错误。
Incorrect.
- B) 错误。
Incorrect.
- C) 正确。Tensor flow属于ML软件。干扰项是通用的软件代码或编码类型。
Correct. Tensor flow is a specific example of ML software. The distractors are general software codes or types of coding style.
- D) 错误。
Incorrect.

25 / 40

以下哪项是准备数据过程中的任务？

Which of the following is a task in preparing data?

- A) 删除数据的随机取样
Delete a random sample of data
- B) 识别缺失数据
Identify missing data
- C) 加密数据
Encrypt data
- D) 发布结果
Publish results

- A) 错误。
Incorrect.
- B) 正确。本题强调了在进行机器学习（ML）项目时识别缺失数据的任务。干扰项貌似合理，但不正确。
Correct. This question emphasizes the task of identifying missing data when undertaking a machine learning project. The distractors are plausible tasks but not correct.
- C) 错误。
Incorrect.
- D) 错误。
Incorrect.

26 / 40

贝叶斯网络解释了多个变量可能对利用以下哪项的结果产生影响？

Bayes's networks describe how multiple variables may have influenced a result using what?

- A) 中心极限定理
The central limit theorem
 - B) 概率分布
A probability distribution
 - C) 遍历统计
Ergodic statistics
 - D) 推断
Inference
-
- A) 错误。
Incorrect.
 - B) 错误。
Incorrect.
 - C) 错误。
Incorrect.
 - D) 正确。本题考察考生是否记得哪种热门的机器学习（ML）技术是从贝叶斯定理衍生出来的。干扰项属于统计学数学学科。
Correct. From the basic theory of statistics, this question asks the candidate to recall what popular Machine Learning (ML) technique is derived from Bayes' theorem. The distractors are topics in the mathematical subject of statistics.

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矢量微积分是利用.....的理论。

Vector Calculus is the theory that uses...

- A) 求和和斜率。
summation and gradients.
 - B) 积分和差分。
integration and differences.
 - C) 积分和微分。
integration and differentiation.
 - D) 数列和梯度。
series and gradients.
-
- A) 错误。
Incorrect.
 - B) 错误。
Incorrect.
 - C) 正确。考察是否记得哪种矢量微积分属于数学学科。干扰项貌似是备选项，但不正确。
Correct. Asks the candidate to recall what vector calculus is as a mathematical subject. The distractors are plausible alternatives but are not correct.
 - D) 错误。
Incorrect.

28 / 40

机器学习 (ML) , 通过分析数据 “在经验中学习” 。

为了实现这一目的, 需要什么?

Machine Learning (ML), 'learns from experience' by analyzing data.

What is needed to do this?

- A) 功能、软件和硬件
Functionality, Software and Hardware
 - B) Python、Paraview和Linux
Python, Paraview and Linux
 - C) 线性代数、概率学/统计学和最优化
Linear algebra, probability/statistics and optimization
 - D) 云计算、开源软件和算法
Cloud computing, open source software and an algorithm
- A) 正确。考察是否记得ML项目的三大主题。干扰项是功能、软件和硬件的主体或要素。
Correct. The candidate is asked to recall what are three main topics to a machine learning project. The distractors are subjects or elements of functionality, software and hardware
- B) 错误。
Incorrect.
- C) 错误。
Incorrect.
- D) 错误。
Incorrect.

29 / 40

人工神经网络 (ANN) 是由什么组成的?

An artificial neural network (ANN) is made up of what?

- A) 隐藏的突触
Hidden synapses
 - B) 互联的节点群
Inter-connected group of nodes
 - C) 神经线
Nervous edges
 - D) 树状节点
Dendritic nodes
- A) 错误。
Incorrect.
- B) 正确。要求考生回答ANN是由什么组成的。干扰项是用来描述神经网络示意图的词汇, 但并不正确。
Correct. When building an ANN, the candidate is asked what it is made up of. The distractors are words used to describe the schematic of a Neural Network but are not correct
- C) 错误。
Incorrect.
- D) 错误。
Incorrect.

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机器学习 (ML) 与哪个数学学科相关?

Which mathematical subject is associated with Machine Learning (ML)?

- A) 光谱分析
Spectral analysis
 - B) 复变量
Complex variable
 - C) 数论
Number Theory
 - D) 线性代数
Linear Algebra
-
- A) 错误。
Incorrect.
 - B) 错误。
Incorrect.
 - C) 错误。
Incorrect.
 - D) 正确。线性代数是在计算机上进行ML所必需的一门基础学科。干扰项是其他数学学科，但不是ML的基础。
Correct. Linear Algebra is a fundamental subject that is required in order to undertake ML on a computer. The candidate is asked to recall this. The distractors are other mathematical subjects but are not fundamental to ML.

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哪种库可以用于以较低的成本创建人工神经网络 (ANN) ?

What type of library can be used to build an Artificial Neural Network (ANN) cost effectively?

- A) 开源库
Open source
 - B) 版权库
Copyright
 - C) 标准库
Standards
 - D) 医学库
Medical
-
- A) 正确。考察是否记得在构建机器学习 (ML) ANN时，开源软件是具有成本效益的。干扰项貌似合理，但不正确。
Correct. The candidate is asked to recall that open source software is cost effective in building a Machine Learning (ML) ANN. The distractors are plausible distractors but not correct.
 - B) 错误。
Incorrect.
 - C) 错误。
Incorrect.
 - D) 错误。
Incorrect.

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在统计学中，pdf代表什么？

In statistics, what does the term pdf stand for?

- A) 点态离散函数
Pointwise Discrete Function
- B) 点态密度函数
Pointwise Density Function
- C) 概率离散函数
Probability Discrete Function
- D) 概率密度函数
Probability Density Function

- A) 错误。
Incorrect.
- B) 错误。
Incorrect.
- C) 错误。
Incorrect.
- D) 正确。考察是否记得pdf表示概率密度函数。干扰项偏离了真正的定义，其中一个词改变了。
Correct. The candidate is asked to recall accurately that pdf stands for probability density function. The distractors are deviations of the true definition with one of the words changed.

33 / 40

在监督学习中，智能体利用什么进行学习？

In supervised learning an agent uses what to learn from?

- A) 随机数据
Random data
- B) 标记数据
Labeled data
- C) 无标记数据
Unlabeled data
- D) 实验数据
Experimental data

- A) 错误。
Incorrect.
- B) 正确。考察是否记得监督学习使用哪类数据。答案是标记数据。干扰项所列的其他数据类型貌似合理，但不正确。
Correct. The candidate is asked to recall what type of data is used on supervised learning. This is labeled data. The other types of data that make up the distractors are plausible but not correct.
- C) 错误。
Incorrect.
- D) 错误。
Incorrect.

34 / 40

哪种狭义人工智能 (AI) 功能对AI智能体有用?

What type of narrow Artificial Intelligence (AI) functionality is useful to AI agents?

- A) 有意识的AI
Conscious AI
 - B) 傅里叶变换
Fourier Transform
 - C) 通用AI
Artificial General AI
 - D) 规划
Planning
- A) 错误。
Incorrect.
- B) 错误。
Incorrect.
- C) 错误。
Incorrect.
- D) 正确。在机器学习 (ML) 习中, 规划是AI智能体用来实现目标的一种典型功能。干扰项貌似合理, 但属于AI和数学的其他领域。
Correct. In Machine Learning (ML) planning is a typical type of functionality that an AI agent would use to achieve a goal. The distractors are plausible but are made up from other area of AI and Mathematics.

35 / 40

如今采用的机器人手术属于下列哪一项的应用案例?

Robotic surgery is used today and is an example of which of the following?

- A) 人机协作
Human and machines working together
 - B) 自主人工智能 (AI)
Autonomous Artificial Intelligence (AI)
 - C) 狭义AI
Narrow AI
 - D) 自主机器人
Autonomous robotics
- A) 正确。机器人在医疗过程中帮助外科医生, 提高他们的能力, 这是人机协作的示例。干扰项貌似合理, 但不正确。
Correct. Robots are helping surgeons in medical procedures, enhancing their capability. This is an example of humans and machines working together. The distractors are plausible but not correct.
- B) 错误。
Incorrect.
- C) 错误。
Incorrect.
- D) 错误。
Incorrect.

36 / 40

Daugherty和Wilson在《人类+机器》一书中对什么进行了说明?

Daugherty and Wilson have identified what in their book on Human Plus Machine?

- A) 监测机器人
Monitoring the robots
- B) 缺失的中间地带
Missing middle
- C) 低级低值工作
Menial low value work
- D) 检查机器人的工作
Checking the robots work

- A) 错误。
Incorrect.
- B) 正确。Daugherty和Wilson写了一本关于人机协作的书，在本书中，他们对机器和人类互补的缺失的中间地带进行了说明。干扰项貌似合理，但不正确。
Correct. In writing their book on human and machines working together, Daugherty and Wilson have identified the missing middle where machines and humans complement each other. The distractors are plausible but not correct.
- C) 错误。
Incorrect.
- D) 错误。
Incorrect.

37 / 40

哪种项目类型本质上属于“从经验中学习”？

Which project style is fundamentally 'learning from experience'?

- A) 敏捷式
Agile
- B) 瀑布式
Waterfall
- C) 辅导式
Mentoring
- D) 独裁式
Autocratic

- A) 正确。考察是否记得敏捷项目基于迭代和从经验中学习的模型。其他干扰项是管理类型或瀑布式。
Correct. The candidate is asked to recall that agile projects are based on an iterative and learning from experience model. The other distractors are management styles or waterfall
- B) 错误。
Incorrect.
- C) 错误。
Incorrect.
- D) 错误。
Incorrect.

38 / 40

在Daugherty和Wilson的著作《人类+机器》中，哪种文化被描述为理想文化？

In Daugherty and Wilson's book Human plus Machine, what is described as a desirable culture?

- A) 渴望实现透明
Desire to be transparent
 - B) 渴望去尝试
Desire to experiment
 - C) 渴望实现可持续性
Desire to be sustainable
 - D) 渴望“首次正确”
Desire to be 'right first time'
-
- A) 错误。
Incorrect.
 - B) 正确。尝试文化有利于从经验中学习，而从经验中学习是机器学习（ML）和人工智能（AI）的核心。干扰项貌似合理，但与本书无关。
Correct. An experimental culture is conducive to learning from experience which is at the heart of Machine Learning (ML) and Artificial Intelligence (AI). Distractors are not relevant to the book but are plausible.
 - C) 错误。
Incorrect.
 - D) 错误。
Incorrect.

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将飞机停在机场的计算机程序属于？

What is a computer program that works out where to park aircraft at an airport an example of?

- A) 意识智能
Conscious intelligence
- B) 通用人工智能 (AI)
Artificial General Intelligence
- C) 狭义 (弱) 智能
Narrow (Weak) Intelligence
- D) 自动化
Automation

A) 错误。
Incorrect.

B) 错误。
Incorrect.

C) 正确。本题考察考生是否记得狭义AI的定义 - 该示例是专注于一项具体任务的机器学习技术。干扰项包括非AI或尚未实现的复杂AI。

Correct. This question asks the candidate to recall the definition of narrow AI - the example is a machine learning technique focused on one specific task. The distractors are either not AI or are sophisticated AI that is still not possible.

D) 错误。
Incorrect.

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如今，不明确的创造性工作最好由谁来完成？

Today, ambiguous and creative tasks are better undertaken by what?

- A) 算法
Algorithms
- B) 人类
Humans
- C) 聊天机器人
Chatbots
- D) 通用人工智能 (AI)
Artificial general intelligence

A) 错误。
Incorrect.

B) 正确。考察是否记得人类比机器更擅长承担什么工作。干扰项貌似合理，但不正确。
Correct. This question asks the candidate to recall what humans are better than machines at. The distractors are plausible but not correct.

C) 错误。
Incorrect.

D) 错误。
Incorrect.

试题评分

如下表格为本套样题的正确答案，供参考使用。

问题	答案	问题	答案
1	A	21	D
2	D	22	A
3	C	23	B
4	C	24	C
5	D	25	B
6	A	26	D
7	D	27	C
8	B	28	A
9	C	29	B
10	A	30	D
11	D	31	A
12	D	32	D
13	A	33	B
14	C	34	D
15	B	35	A
16	A	36	B
17	A	37	A
18	C	38	B
19	B	39	C
20	C	40	B



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