Eccouncil

(612-51)

Certified Responsible AI Governance and Ethics Professional

Total: **100 Questions**

Link:

MYEXAM.FR

Answer: D

Question: 4

StreamLine Media plans to develop a recommendation engine that forecasts the next video a user is likely to watch by analyzing the chronological sequence of their viewing history from the past month. The Lead Data Scientist is guiding the team in choosing the most suitable architecture for handling time-dependent sequential data.
Which architecture should be selected for this recommendation engine?

A. Convolutional Neural Networks (CNNs)
B. Recurrent Neural Networks (RNNs)
C. Generative Adversarial Networks (GANs)
D. Feedforward Neural Networks (FNNs)

Answer: B

Question: 5

Michael Turner, Vice President of Enterprise Technology at a global insurance organization, is coordinating the rollout of an AI-based customer verification and fraud analytics platform across multiple regions. To support rapid scaling and operational resilience, the organization partners with an external firm that supplies on-demand computing capacity, managed data storage, embedded security controls, and a standardized environment for deploying and operating machine learning workloads. Internal teams remain responsible for developing application logic, governing AI models, and ensuring regulatory and policy compliance. The external firm's accountability is confined to operating, securing, and maintaining the underlying technical infrastructure that enables these AI systems to run reliably.
Which third-party role within the AI ecosystem best describes this external firm's function?

A. Data Vendors
B. AI-as-a-Service (API) Providers
C. Cloud Providers
D. Model Providers

Answer: C

Question: 6

A national digital-learning board deploys an AI-driven recommendation engine to personalize course pathways for students across public institutions. After the first academic cycle, education auditors discover that the system automatically redirects students into lower complexity learning tracks solely based on early performance indicators. Neither students nor instructors are informed of these automated pathway changes, and no mechanism exists for learners to express preferences, contest the outcomes, or opt for advanced coursework. Several students report feeling constrained by decisions they were never involved in, raising concerns about the system's impact on learner autonomy and developmental opportunities. As the Chief AI Governance Officer, you must identify the ethical principle compromised to guide necessary policy and design corrections.
Which ethical principle has been violated in this scenario?

A. Fairness

B. Transparency

C. Human-Centric Values

D. Accountability

Answer: C

Question: 7

The executive dashboard at HorizonService has successfully alerted the leadership team that Q3 sales revenue has dropped by 10% compared to the previous quarter. The Business Intelligence Manager now tasks the data science team with investigating historical data patterns to determine the specific root causes of this decline, such as whether it was driven by a competitor's price cut or a seasonal weather shift.
Which category of analytics is the Business Intelligence Manager requesting to uncover the root causes behind the observed revenue decline?

A. Diagnostic Analytics

B. Predictive Analytics

C. Prescriptive Analytics

D. Descriptive Analytics

Answer: A

Question: 8

Dr. Aris, the Head of AI Research, is leading an internal governance review to formally classify a legacy chess-playing system developed in the 1990s as part of an enterprise AI inventory. The system determines its moves exclusively by evaluating the current board state using predefined logic and exhaustive search strategies. It does not retain information from prior matches, adapt its strategy over time, or modify its decision process based on historical gameplay data. Dr. Aris must assign a category that accurately reflects the system's lack of learning, absence of memory, and purely state-based decision behavior.
Which classification represents this system from a technical and conceptual standpoint?

A. Reactive Machines

B. Self-Aware AI

C. Limited Memory AI

D. Theory of Mind AI

Answer: A

Question: 9

Maria is spearheading a pilot program to enhance early disease detection capabilities within the hospital. She has selected a deep learning solution that processes high-dimensional inputs from different equipment's to identify subtle tissue irregularities and micro-calcifications. The system flags these regions for specialist review, effectively reducing the rate of false negatives in pathology identification.
Based on the AI Applications framework, how should this initiative be classified?

management workflow. The system routinely influences clinician decisions on when to intensify or modify treatment plans. During an independent compliance examination, reviewers request justification for several recommendations that materially affected patient outcomes. Although aggregate validation results and accuracy benchmarks are readily available, the organization is unable to reconstruct how individual patient factors contributed to specific recommendations, limiting meaningful review by both clinicians and regulators.
From an AI ethics and governance standpoint, which principle is being most directly challenged by this limitation?

A. Accountability
B. Sustainability
C. Safety and security
D. Transparency

Answer: D

Question: 13

Your AI engineering team is building a next-generation machine translation engine intended for enterprise and regulatory use, where accurate interpretation of long and complex sentences is critical. The previous model (using RNNs) failed to translate long sentences accurately because it processed words sequentially. To address these issues, the team determines that the new architecture is required that utilizes self-attention mechanisms to process the entire sequence of data in parallel, handling long-range dependencies effectively.
Which deep learning architecture should the team adopt to meet these requirements?

A. Convolutional Neural Networks (CNNs)
B. Radial Basis Function Networks
C. Autoencoders
D. Transformer Networks

Answer: D

Question: 14

AutoWarehousing is deploying autonomous robots to navigate a complex, changing warehouse floor. The robots are not given a map; instead, they must learn to navigate by trial and error, receiving a “reward” signal when they successfully reach a destination and a “penalty” when they hit an obstacle.
Which machine learning approach describes this learning process?

A. Unsupervised Learning
B. Reinforcement Learning
C. Semi-Supervised Learning
D. Supervised Learning

Answer: B

Question: 15

Prime Retail presents a quarterly vendor report to the Board of Directors. The CEO requests a “Red/Amber/Green” status view of the strategic risks, rather than raw technical logs.
Which dashboard level is appropriate for this specific audience?

A. Operational Technical Dashboard
B. Executive Strategic Dashboard
C. Raw API Stream
D. Developer Debug Console

Answer: B

Question: 16

A cloud security vendor is questioned by regulatory authorities after several clients experience unexpected privilege denials generated by its AI-powered access-control engine during high severity cyber events. When customers request justification, engineering teams report that the deep-learning model’s internal reasoning cannot be interpreted or traced. This lack of interpretability complicates auditability standards for high-risk security operations. As the Chief AI Compliance Officer, you are asked to assess the core AI governance issue exposed by this incident.
Which AI concern does this scenario highlight?

A. Autonomous Weapons
B. Misinformation
C. Lack of Transparency
D. Bias and Discrimination

Answer: C

Question: 17

An organization claims to be “AI-driven” but relies heavily on manual processes, inconsistent data pipelines, and isolated experiments. AI projects are not repeatable, and governance controls vary across teams. External reviewers challenge the organization’s maturity claims.
According to AI maturity models, which level best describes this organization?

A. Transformational
B. Structured
C. Emerging
D. Optimized

Answer: C

Question: 18

Meridian Logistics is updating an AI-based route optimization system after inconsistencies are traced to upstream data issues rather than model logic. A review reveals gaps in how historical shipment records were curated,

Question: 21

At FinTech Solutions, Elena Cross, the Regulatory Affairs Director, is reviewing recent regulatory developments that may affect the company's AI-based credit scoring systems. A newly enacted regional AI transparency regulation has been formally published, but no internal adjustments have yet been initiated. Before introducing technical modifications or updating internal policies, Elena needs to determine how the new regulation influences existing risk classifications and whether current data handling practices remain aligned.
Which step of the regulatory change management process should be performed at this point to transition from regulatory awareness to informed decision-making?

A. Regulation Tracking
B. Policy and Framework Updates
C. Change Implementation and Validation
D. Impact Assessment

Answer: D

Question: 22

A large enterprise launches several AI initiatives across operations, customer analytics, and internal decision-support. Despite strong leadership support, AI initiatives suffer from fragmented execution marked by unclear priorities, misaligned timelines, inconsistent governance oversight, and uneven success measurement, hindering coordinated delivery. An internal review concludes that the organization lacks a mechanism to systematically structure execution, manage dependencies, and ensure progress is measured consistently across initiatives.
Which AI strategy and planning component would most directly address the challenges identified in this scenario?

A. Governance, compliance, and risk integration
B. Vision, assessment, and readiness check
C. AI monitoring, performance measurement, and continuous improvement
D. A Use-case selection and roadmap creation

Answer: D

Question: 23

Orion Systems is implementing a tiered control environment to oversee its enterprise-wide AI adoption. The organization is currently establishing formal oversight bodies, including an AI Governance Board and an Ethics Panel, to review high-risk deployments and provide organizational accountability.
Which level of the AI governance hierarchy governs enterprise-wide oversight through formal boards and ethics committees?

A. AI Values
B. Institutional Structures
C. Operational Mechanisms
D. Regulations

Answer: B

Question: 24

A large enterprise has begun expanding its AI capabilities beyond a single successful pilot into multiple business functions. To manage this expansion responsibly, leadership establishes a structure in which enterprise-wide standards for governance, architecture, platforms, and ethical oversight are centrally maintained. At the same time, individual departments are given designated representatives who adapt AI solutions to local workflows, coordinate adoption efforts, and act as liaisons between central oversight and operational teams. This approach is designed to balance innovation at the department level with consistency, interoperability, and compliance across the organization, preventing fragmented AI adoption while enabling scalable growth.
Which AI scaling strategy is being applied in this scenario to support coordinated, enterprise-wide deployment while maintaining governance consistency?

A. Continuous model refinement
B. Interoperability enablement
C. Hub-and-spoke model
D. Phased expansion

Answer: C

Question: 25

A national cybersecurity infrastructure agency deploys an autonomous facility-monitoring system used to evaluate risks across power grids and transportation hubs. During a parliamentary technology review, investigators discovered that the system lacks engineering safeguards such as auditability trails, transparency controls, human-rights impact documentation, and structured technical governance checkpoints. The review concludes that developers did not apply a globally recognized engineering-focused framework that provides concrete technical standards, through the P7000 series, for embedding ethical principles into system design.
As the Chief AI Governance Officer, recognize which globally recognized AI governance and engineering framework should have guided the system's design and implementation?

A. DoD AI Ethical Principles
B. OECD
C. UNESCO
D. IEEE

Answer: D

Question: 26

A multinational organization initiates a governance review of its AI-driven marketing platform after leadership identifies a conflict between data architecture and regulatory obligations. User behavioral data is ingested into an immutable write-once storage tier to preserve model training consistency. However, this design prevents permanent deletion when legally valid data erasure requests are submitted by individuals whose data falls under EU-applicable privacy protections.
As the Data Protection Officer, determine which regulatory framework obligates a redesign of the data architecture to ensure enforceable data erasure rights?

A. GDPR
B. CCPA

B. Transparency and Audit Rights clauses

C. Accountability and Oversight clauses

D. Incident and Escalation Procedures clauses

Answer: B

Question: 30

A regulated enterprise deploys a vendor-supplied AI system that influences customer eligibility decisions. During internal audits, the organization struggles to explain how certain outputs were produced due to limited documentation and lack of insight into the model's internal logic.
Which AI-specific contract requirement would most directly mitigate this issue?

A. Documentation security Standards

B. Transparency Requirements

C. Human Oversight Provisions

D. Sub-Processor Controls

Answer: B