



## ***The ITIL® 4 High Velocity IT Examination***

### ***Sample Paper 2***

#### ***Question Booklet***

#### **Multiple Choice**

**Examination Duration: 1 hour and 30 minutes**

#### ***Instructions***

1. You should attempt all 40 questions. Each question is worth one mark.
2. There is only one correct answer per question.
3. You need to answer 28 questions correctly to pass the exam.
4. Mark your answers on the answer sheet provided. Use a pencil (NOT pen).
5. You have 1 hour and 30 minutes to complete this exam.
6. This is a 'closed book' exam. No material other than the exam paper is allowed.

- 1) An organization wants to adopt a human-centered, holistic, and co-creational approach to service design.

Which represents the co-creational aspect of this approach?

- A. Considering all elements of a service design when changing individual elements
- B. Involving all relevant stakeholders, both internal and external, in the design process
- C. Using service design models to orchestrate design activities and resources
- D. Empathizing with stakeholders and considering users' emotions when designing services

- 2) An organization has decided to design some of its new services as microservices. One of the reasons for doing so is to reduce the time to market.

Which is the BEST contribution of the 'architecture management' practice to this situation?

- A. Reviewing the organization's business architecture to understand how its resources are used
- B. Providing architectural templates and guidelines to reduce the service design effort
- C. Maintaining systems to track the interdependencies among the components of the new microservices
- D. Understanding and interpreting customer requirements related to the new microservices

- 3) A team is developing a new mobile app to enable users to make online purchases.

Which practice should be the FIRST to contribute to the user experience, and at which point in the product lifecycle?

- A. The 'release management' practice should contribute first, after the code has been written, but before initial pilot tests
- B. The 'service desk' practice should contribute first, after the app has been deployed, whenever users have an issue
- C. The 'service level management' practice should contribute first, after the app has been designed, and before the development is finalized
- D. The 'service design' practice should contribute first, before any development work is started

- 4) An organization has experienced service interruption after large deployments and releases. It wants to reduce both the size of the deployments and the variation in the types of deployments.

Which technique for fast development would achieve this?

- A. Infrastructure as code
- B. Loosely coupled information system architecture
- C. Blameless post-mortems
- D. Kanban

- 5) A service provider wants to ensure that value is co-created.

What is the BEST way for them to achieve this?

- A. Ensure that users understand how to use the service, and that they have a good experience of every service interaction
- B. Involve customers and users at every stage, including service design as well as during service interactions
- C. Ensure that the service meets its agreed targets for both service utility and service warranty
- D. Involve relationship managers in service reviews to ensure that customer feedback is understood

- 6) Which term BEST describes beneficial investments in digital technology, when the value of those investments is realized within tight deadlines?

- A. Digital product
- B. Digital transformation
- C. High-velocity IT
- D. IT transformation

- 7) From the perspective of a service provider, how does the digital product lifecycle start?

- A. With the onboarding of customers
- B. With the exploration of market opportunities
- C. With the co-creation of value
- D. With the offboarding of customers

- 8) Which term describes a system that is unpredictable, so that learning from experimentation is more appropriate than following rigid processes?
- A. Obvious
  - B. Complicated
  - C. Complex
  - D. Disorder
- 9) Change practitioners of an organization are responsible for deciding on the level of risks which they are prepared to accept for each change, on a case-by-case basis. Recently, the organization has experienced regulatory breaches related to changes.

Which is the BEST improvement action for this situation?

- A. The practitioners create a model for acceptable risk levels, depending on the category of change
  - B. The organization adopts guidance from the DevOps Audit Defense Toolkit, to create a shared understanding of risk between the IT function and auditors
  - C. Development teams decide on acceptable levels of risk for each change, based on their subject-matter expertise
  - D. Decisions about acceptable risk levels are moved to the organization's governing body, which communicates the decisions to the change practitioners
- 10) A service provider tests the production environment with simulated scenarios. The 'infrastructure and platform management' practice is expected to ensure that there are no significant outages resulting from these tests.

Which HVIT objective does this activity MOST contribute to?

- A. Resilient operations
- B. Co-created value
- C. Fast development
- D. Valuable investments

11) How can managers BEST demonstrate the adoption of Lean culture?

- A. By encouraging practitioners to explore possible unintended consequences of their work
- B. By committing to safety, and encouraging employees to express themselves
- C. By encouraging practitioners to practice complexity thinking
- D. By observing the actual work process and asking questions of practitioners

12) An organization used to have a product owner who frequently made decisions without involving stakeholders and who was not open to feedback. As a result, users are dissatisfied, the development team is unhappy, and the value of the product is diminished. A new product owner has been assigned to replace the previous product owner.

How can the 'relationship management' practice BEST contribute to helping the new product owner quickly regain the trust of stakeholders and maximize the value of the product?

- A. Adopt a common set of values and principles that can be shared by everyone in the organization
- B. Provide techniques that can be used to establish customers' priorities and address complaints
- C. Ensure that the right investment decisions are being made and that resources are allocated appropriately
- D. Improve the approach the team is using to develop the product based on the organization's requirements

13) A problem manager is notified that a patch is available for a serious defect in a third party software product that is used by the organization. After analysis they determine that the defect will not impact the organization as the defective version of the application has been retired and is no longer in use.

What should the problem manager do next?

- A. Create a known error record so that future incidents can be associated with this problem
- B. Plan to deploy the patch as soon as practical
- C. Close the problem record as it is not relevant to the organization
- D. Prioritize the problem for analysis based on urgency and impact

14) An organization wants to understand the overall user experience of a new service.

What would be the BEST way to collect data about their experience of the new service?

- A. Use application performance metrics from the new service to calculate a user experience score
- B. Business relationship managers should collect user experience metrics from customers in monthly meetings
- C. The service desk should ask users for a simple rating of the new service whenever they interact with them
- D. Collect data in an annual survey to evaluate user satisfaction with IT services

15) Which is an example of a digital organization?

- A. An organization which uses IT to change its strategic direction
- B. An organization which uses IT to support its operational processes
- C. An organization which uses IT to improve its 'service desk' practice
- D. An organization which has undergone an IT transformation

16) Which is an example of IT transformation?

- A. Automating the flow of work between development and operations
- B. Significantly accelerating the performance of business activities
- C. Using technology to create personalized customer experiences
- D. Using digital technology to enable quicker business decisions

17) Which concept is concerned with creating prototypes to test hypotheses?

- A. Design thinking
- B. Safety culture
- C. Continual improvement
- D. Complexity thinking

- 18) A service provider has experienced a number of major outages of its cloud services. These are suspected to be the result of unpredicted and uneven usage of the service.

How can the 'capacity and performance management' practice contribute to resolving the issue?

- A. Identifying and costing the resources required to support the minimum viable product for the cloud service
- B. Analysing the output from AIOps tools to identify patterns and anomalies in the workload of the cloud services
- C. Deciding whether to invest in resolving the issues with the cloud services or allocate expenditure to other services
- D. Identifying the components of the cloud service that require regular updates and automating their implementation

- 19) An organization is planning to make improvements to a complex service, to improve performance and reliability. They have analysed the current situation, and they know what they want to achieve.

What approach should they take for the 'how do we get there?' step of the improvement?

- A. Create a plan based on a detailed gap analysis and follow the steps of the plan
- B. Define metrics for the desired future state and continually measure these
- C. Define a minimum viable product and improve it incrementally
- D. Establish hypotheses and perform safe to fail experiments

- 20) Which can be used to improve people's ability to imagine the potential consequences of their actions; particularly when facing a dilemma such as being asked to skip security procedures?

- A. Service-dominant logic
- B. Design thinking
- C. Ethics education
- D. Complexity thinking

- 21) An organization has recently experienced service outages. The organization has complained to their service provider that the outages were not resolved in a way which would have most benefited the organization.

Which is an example of how the 'availability management' practice could contribute to preventing such a situation in the future?

- A. Increasing the MTBF targets with the aim of eliminating all possible outages, in conjunction with service continuity activities
- B. Understanding the services from the consumers' perspectives and altering the MTRS targets accordingly
- C. Reviewing the targets related to service performance to ensure that the expected demand can be fulfilled
- D. Understanding which applications are most critical to the organization's services and designing them with more resilience

- 22) Which statement regarding value streams in a HVIT organization is CORRECT?

- A. In HVIT organizations it is often useful to dictate procedures for every step in a value stream
- B. HVIT organizations' value streams reflect the diversity of their products and services
- C. ITIL provides templates for each HVIT value stream
- D. A value stream provides a generic description of the activities required to manage products and services



- 23) An organization has many different portfolios (product, programme, project, application) that are managed with varying degrees of formality. The organization wants to ensure appropriate use of its resources across these portfolios. It also wants to obtain more accurate data on how the items in these portfolios are performing.

Which approach would BEST enable the organization to accomplish these objectives?

- A. Ensure each portfolio has a documented charter and an owner who prioritizes the portfolio regularly
- B. Develop a health check template that can be used to compare the value realization of all portfolio items
- C. Establish a policy that portfolio items deemed important by stakeholders are given adequate resources
- D. Establish criteria that can be used to review the value propositions and financial health of new initiatives

- 24) How should a product team make use of a 0.1% error budget?

- A. 0.1 per cent of funding should be used for remediation of defects
- B. If downtime approaches 0.1 per cent then more effort should be spent on improving stability
- C. 0.1 per cent of coding time should be spent developing error handling routines
- D. If errors approach 0.1 per cent of user messages then more time should be spent on reducing errors

25) An organization is reviewing its processes and procedures for developing digital products. The goal is to ensure that product teams develop new or changed components, products and services that meet the agreed criteria for quality and experience.

Which practice would BEST contribute to this goal?

- A. Service Validation and Testing
- B. Business Analysis
- C. Architecture management
- D. Deployment management

26) In which circumstance would a transformation to high-velocity IT be considered undesirable?

- A. An organization wants to support business enablement at speed
- B. An organization is used to innovating and operating quickly and effectively
- C. An organization consistently uses a high level of digital technology
- D. An organization believes that its values and leadership style are incompatible with the change

27) Which high-velocity IT objective considers an organization's ability to continue providing business services when disruptive events affect its digital products?

- A. Valuable investments
- B. Resilient operations
- C. Fast development
- D. Assured conformance

28) A stock trading company uses artificial intelligence (AI) to analyse markets and suggest investment strategies. The IT staff work long hours under pressure to manage the algorithms required. An increasing number of errors are occurring and staff are disagreeing and blaming each other.

What approach should be taken to improve the situation?

- A. Reinforce trust by fostering a safe environment in which to voice opinions and resolve issues
- B. Introduce chaos engineering to proactively detect errors in the algorithms
- C. Design a new value stream that ensures that errors cannot be introduced
- D. Reduce the number of algorithm changes so that IT staff have more time to spend on each one

29) An organization has historically ensured strict segregation of duties in an effort to catch errors and prevent fraud. In order to reduce bureaucracy, the organization has introduced automated controls that ensure changes adhere to the organization's compliance requirements.

Which is the BEST approach this organization can use on a regular basis to maintain the automated controls?

- A. Evaluate the organization's risk capacity and appetite
- B. Perform both quantitative and qualitative risk analysis
- C. Perform reviews and audits to ensure the mitigation of risks
- D. Review the probability of the accepted risks

30) An organization has set up a new team to develop a mobile app. They want this team to help start their digital transformation journey.

Who should analyse and document requirements for the new app?

- A. The existing business analysis team should do this work
- B. A new digital business analysis team should be created to do this work
- C. The product owner for the new mobile app should do this work
- D. Software developers should iteratively define the needs as business analysis is not needed for this work

- 31) Real-time monitoring solutions are an example of which of the four dimensions of service management?
- A. Value streams and processes
  - B. Organizations and people
  - C. Information and technology
  - D. Partners and suppliers
- 32) Which is an example of how the 'information security management' practice contributes to achieving assured conformance?
- A. Ensuring that any developed code is checked for information security flaws by a colleague
  - B. Responding to major incidents by reviewing alert thresholds for critical service components
  - C. Creating standard build models, which incorporate information security controls, for service components
  - D. Developing a policy to address a third party's access to the organization's virtual private network (VPN)
- 33) An organization has historically communicated to their employees that 'failure is not an option'. As a result, it is common for employees to hide mistakes.
- What should be adopted to BEST foster an open and trusting work environment where people can run experiments?
- A. Safety culture
  - B. Design thinking
  - C. Service-dominant logic
  - D. Cynefin

- 34) A digitally-enabled organization is introducing the discipline of chaos engineering in an effort to test and improve the resilience of its IT systems.

In this context, which would NOT be a contribution of the 'service continuity management' practice?

- A. Introducing controls to ensure failsafe systems
- B. Considering the risks and designing countermeasures
- C. Conducting exercises to test plans and increase readiness
- D. Continually monitoring plans and countermeasures

- 35) The IT Teams of an organization manage events affecting infrastructure and software components by taking action when thresholds are exceeded. Sometimes the first time the organization learns about a major incident is when a user contacts the service desk.

Which is the BEST improvement action to take?

- A. Create automated workarounds for incidents relating to entire services
- B. Create fast incident escalation routes to the appropriate resolving groups
- C. Revise the service continuity plan for the services most frequently affected
- D. Change the design of the monitoring tools to include service events

- 36) After completing an online training course, the employees of an organization are better equipped to utilize digital systems.

Which high velocity IT objective is supported by this training?

- A. Valuable investments
- B. Resilient operations
- C. Fast development
- D. Co-created value

- 37) A commercial service provider organization uses multiple approaches to software development. Several of its largest customers have communicated their requirements and priorities and have suggested they might leave if those requirements are not met in the near future. In some cases, the requirements are unclear and conflicting.

Which software development approach would BEST enable this organization to meet the needs of its largest customers?

- A. A waterfall approach as the requirements, priorities, and required resources are known
- B. An iterative approach that enables small teams to work independently
- C. An agile approach that enables fast feedback and the ability to develop the highest priority items first
- D. A parallel experimentation approach that includes prototyping so that unarticulated requirements are captured

- 38) An organization aims to ensure valuable investments in products, services and improvements.

Which initiative BEST supports this objective?

- A. Reducing the amount of code in each deployment to enable external customers to take advantage of new functionality earlier in the product lifecycle
- B. Documenting both the technical and non-technical components of a service and how they work together to maintain operability in a variety of adverse circumstances
- C. Ensuring that proposed changes to products align with data protection regulations and the organization's information security policy
- D. Establishing external focus groups to understand changes in consumer habits, and internal working groups to examine the feasibility and profitability of the ideas

- 39) An organization would like to improve the speed of development for digital products, and enable development teams to shift their focus from components to products and features. To achieve this objective, the organization needs to divide its products into smaller parts that can be developed and managed independently.

Which technique BEST meets these requirements?

- A. Loosely coupled information system architecture
- B. Continuous testing
- C. Continuous business analysis
- D. Infrastructure as code

- 40) An organization is implementing new technology that will significantly improve how they interact with their customers.

Which term BEST describes this situation?

- A. Digital organization
- B. High-velocity IT
- C. Digital transformation
- D. IT transformation

**END OF EXAMINATION**