

**IT Service Management Practitioner  
Plan and Improve (based on ITIL®)  
edition June 2007**

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## **Introduction**

This is the sample exam IT Service Management Practitioner Plan and Improve (based on ITIL®).

This sample exam consists of 40 multiple-choice questions. Each multiple-choice question has a number of possible answers, of which only one is the correct answer.

The maximum number of points that can be obtained for this exam is 40. Each correct answer is worth one point. If you obtain 26 points or more you will pass.

The time allowed for this exam is 120 minutes.

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Good luck!

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## Sample exam

### 1 of 40

As a member of the Plan and Improve team, you are discussing staffing with the manager of the print room where salary slips and invoices for the company's customers are produced. The manager of this department tells you that he uses the Capacity Management method to make sure he is not understaffed.

Who is responsible for recommendations on sufficient human resources for the print room?

- A. the manager of the print room, because he has adapted the Capacity Management method
- B. the manager of the print room, because he runs the department
- C. the Plan and Improve team, because it is responsible for making recommendations on IT resources and meeting Business requirements
- D. the Plan and Improve team, because it is responsible for the throughput of the print process

### 2 of 40

During the implementation of IT Service Continuity Management (ITSCM) you find out that an amount of crucial data is stored on local workstations. The workstations are also connected to the LAN. If this data is to be available after a possible system crash a regular backup of all the data is necessary.

What is the best way to make sure this backup is realized?

- A. ask the employees who are storing data on their workstation to store the data on the network drives
- B. ask the IT engineers to make regular backups of the workstations involved
- C. plan an awareness session for all employees to make sure data is stored on the network drives

### 3 of 40

What is a benefit of an Availability plan?

- A. an Availability Plan provides the necessary information on current and planned resource utilization of individual Components
- B. the frequency and duration of IT Service failures can be reduced over time
- C. the IT organization can actively manage the Infrastructure and use systems to reduce the impact of Component failure

**4 of 40**

Senior management wishes to document the benefits of an IT Service Continuity (ITSCM) plan and execute regular testing against that plan.

Which of the following should **not** be included as a benefit of successful testing against an IT Service Continuity plan?

- A.** successful testing against the ITSCM plan demonstrates that the business processes are able to continue to operate in the event of a disaster
- B.** successful testing against the ITSCM plan generates credibility with customers and business partners
- C.** the demonstrated ability to meet regulatory requirements

**5 of 40**

As member of the Plan & Improve team you are asked to advise IT management how to measure IT Availability. Traditionally these measurements have concentrated on Component Availability and are based on a combination of an Availability percentage (%), the amount of time lost and the frequency of failure.

Why are these traditional measurements no longer acceptable?

- A.** manufacturers of Configuration Items (CIs) provide detailed data on resilience
- B.** much better measurement techniques are available
- C.** they fail to reflect Availability from a Business perspective

**6 of 40**

During a review of the IT Service Continuity Management (ITSCM) process, you take the following into account:

- Major Changes to the IT Infrastructure
- New systems or networks
- New service providers

What is a fourth element you need to take into account?

- A.** new Business requirements
- B.** new Configuration Items (CIs) in the Configuration Management Database (CMDB)
- C.** new employees in the Recovery team
- D.** new Incidents since the last review of the IT Service Continuity Management (ITSCM) process

**7 of 40**

In the Plan and Improve process monthly reports are produced on the Capacity of the company's systems. While writing your monthly report you find out that free disk space on one system has rapidly decreased since last month.

In which document will you sound the alarm for this system?

- A. the current monthly report, because you found out in time
- B. the next monthly report, because it needs investigation first
- C. you write the monthly report and an exception report for this specific system

**8 of 40**

You are initiating the Capacity Management process.

How do you find out what Monitoring activities are already being executed?

- A. You check the current work instructions on System Monitoring used by the engineers supporting the IT environment.
- B. You check which monitoring tools have been installed on the various systems.
- C. You interview the system engineers who are responsible for the various systems.

**9 of 40**

You are planning the sub process Resource Capacity Management in your organization. Your organization is a large mail company with distribution centers all over the country. Because there are various systems and applications, you decide that Capacity Management only identifies the monitoring requirements and that the actual implementation of the process is done locally.

In this case, how should you implement the Capacity Database (CDB)?

- A. centralized, where the sites send their raw data to the central CDB
- B. decentralized, where every site reports on the agreed requirements
- C. decentralized with raw data, centralized with an analyzed set

**10 of 40**

What is the output of the sub-process Business Capacity Management?

- A. a proactive Change
- B. the Capacity Plan
- C. the Service Level Requirements

**11 of 40**

While monitoring the systems an exception report is produced, because the required Capacity of certain resources has not been met.

Which process is responsible for initiating Changes on the systems?

- A. the Change Management process
- B. the Incident Management process
- C. the Service Level Management process

**12 of 40**

Both tangible and intangible costs result from non-availability of a System. Examples are:

- imposed fines or penalties;
- loss of customer goodwill;
- loss of customers;
- lost User productivity;
- overtime payments.

What is an example of a tangible cost?

- A. damage to the business' reputation
- B. loss of business opportunities
- C. lost revenue

**13 of 40**

Your company is running several systems on a 24/7 basis. You are asked to plan service windows for maintenance on these systems.

What is the first step for planning the required service windows?

- A. find out what is agreed in the Service Level Agreement (SLA) and plan accordingly
- B. find out which components can be serviced concurrently in order to minimize Impact
- C. perform a Component Failure Impact Analysis (CFIA) on the systems
- D. perform Monitoring to check out what time windows are least critical

**14 of 40**

You are the Availability Manager in your organization. You recognize that the reports currently produced by the IT support organization are mainly focused on IT component Availability.

Why is it important to shift to a more User and Business orientated perspective concerning IT Availability?

- A. because it is necessary to meet the Service Level Agreements (SLAs)
- B. because the other processes need information reflecting Availability
- C. because Users need the IT Availability in order to perform business tasks

**15 of 40**

You are defining a policy for IT Service Continuity Management (ITSCM) for your company. Your company has a critical business system "TravelReg" where your customers are working 5 days a week (Monday - Friday) from 08:30 am until 5:30 pm. You guarantee that the system is available during these opening hours for 98 percent.

What is the best policy description for this critical business system?

- A. The system "TravelReg" is available for the company's customers as agreed in the SLA.
- B. The system "TravelReg" will be available on working days during working hours for at least 98 percent during this time.
- C. The system "TravelReg" will be available on working days from 08:30 am till 5:30 pm for 98 percent.

**16 of 40**

The computer systems your organization uses are being hosted by a third party. The production systems (four servers) are placed in one rack. The test systems, configured for multiple test cases (also four servers), are placed in another rack. All systems are up and running. The Recovery Strategy in case of a malfunction of the production system is that the test system will be put on-line with a backup of the correct software and data.

What is the name of this Recovery strategy?

- A. immediate Recovery
- B. intermediate Recovery
- C. graduate Recovery

**17 of 40**

Which of the following is the best description of Demand Management?

- A. Demand Management delivers extra resources when the business needs them.
- B. Demand Management influences business needs for computing resources.
- C. Demand Management inquires into business needs and takes appropriate action.

**18 of 40**

As a result of Capacity Management Tuning Changes are implemented.  
Such Changes are more Impact and risk associated than other kinds of Changes.

Why is the Impact and risk that is associated with Tuning Changes likely to be greater than that of other different types of Changes?

- A. Tuning activities can have unexpected side effects. Therefore a thorough Impact analysis is necessary.
- B. Tuning Changes can have major implications on the Customers of the service involved.
- C. Tuning Changes usually deal with core resources, such as CPU usage, memory and disk usage or network bandwidth.

**19 of 40**

In your role as the manager of the Capacity Management process, you have been made aware of new technology that could be used to improve some of the existing proposed Capacity recommendations.

What is the first action you should take?

- A. determine the Impact of using this new technology on current projects to properly size applications
- B. modify and reissue the Capacity Plan
- C. recommend the use of this new technology through a Service Improvement Program

**20 of 40**

The iterative activities within Capacity Management use many sources of input data.

Which of the following is **not** a major source of input into these iterative activities?

- A. Service Level Management Thresholds
- B. The Capacity Management Database
- C. The Forward Schedule of Change

**21 of 40**

As the manager of the Capacity Management process, you have become aware of Business plans to hire a number of new sales staff that are expected to use a sales related Service.

What action should you take to ensure sufficient Capacity will exist to support the new users of the service?

- A. You should prepare to use Demand Management techniques to manage Service utilization.
- B. You should use analytical modeling to predict the additional Capacity required to support the new users of the Service.
- C. You should use trend analysis to predict the additional Capacity required to support the new users of the Service.

**22 of 40**

One of your applications is hosted by an external party. Internally you have agreed that Availability on the desktop should be 90 percent. You want to define and agree the Availability percentage in a contract with the external party. The complete route between third party and desktop is: Host (H), VPN tunnel (VT), Internal Network (IN), Server (S) and Desktop (DT).

How can the required availability of the Host (H) be calculated?

- A.  $H = (VT * IN * S) / 0.90$
- B.  $H = VT * IN * S * 0.90$
- C.  $H = 0.90 / (VT * IN * S)$

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As a member of the Plan & Improve team you are asked to advise on selecting an Availability Management technique.

Which Availability Management technique is appropriate for analyzing Maintainability and its influence on Downtime?

- A. CCTA Risk Analysis and Management Method (CRAMM)
- B. Expanded Incident Lifecycle
- C. Technical Observation Post

**24 of 40**

Your organization is growing towards a more mature Availability Management. Until now your department (Plan & Improve) reported Availability levels expressed in percentage (%) available on critical systems, but your Customers want the reports to reflect user and businesses experience. Incident recording is at a basic level.

What would be the next step in measuring and reporting about Availability if you want to satisfy your customers?

- A.** measure and report on Impact of failure
- B.** measure and report the duration and frequency of Unavailability. Present duration in hours and minutes.
- C.** measure and report the duration of Unavailability in hours and minutes

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While measuring Availability it shows that some network components have become more and more unavailable.

To which Service Management process could this best be reported?

- A.** Capacity Management
- B.** Incident and Problem Management
- C.** Service Level Management

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As a member of the Plan & Improve team you are asked to advise on Availability Management techniques.

Which Availability Management technique is suitable for Availability reporting?

- A.** CCTA Risk Analysis and Management Method (CRAMM)
- B.** Component Failure Impact Analysis (CFIA)
- C.** Fault Tree Analysis (FTA)

**27 of 40**

The Availability Plan should be a long-term plan for the proactive improvement of IT Availability within the imposed Cost constraints.

The impetus to improve Availability comes from, among others

- the inability for a new IT Service to meet its Service Level Agreement (SLA) on a consistent basis
- Availability measurement trends indicating a gradual deterioration in Availability
- unacceptable IT Service recovery and restoration time
- requests from the business to increase the level of Availability provided
- increasing Impact on the business and its customers from IT Service failures as a result of growth and/or increased Business functionality

What could be another reason to improve Availability?

- A.** a request from Service Level Management (SLM) to improve Availability
- B.** an update of the Availability Management plan
- C.** developing Business and User measurement and reporting

**28 of 40**

While setting up IT Service Continuity Management (ITSCM) you have to plan its organization. For Recovery purposes only IT is only part of the overall command, control and communications structure.

In which layers of this organization structure of ITSCM does IT take part?

- A.** in the Business Impact Analysis, Data Management and Recovery layer
- B.** in the executive, coordination and recovery layer
- C.** in the Risk Reduction, Testing and recovery layer

**29 of 40**

Which of the following measures is **not** an implementation of a risk reduction measure?

- A.** a comprehensive backup strategy and an off-site storage of tapes
- B.** improving Change control
- C.** outsourcing services to a third party

**30 of 40**

While implementing new Changes it is necessary that the Requests for Change (RFCs) are evaluated against the IT Service Continuity Management (ITSCM) plans.

In which step of the Change Management process will this take place?

- A. Change building, testing and implementation
- B. Change Impact and resource assessment
- C. Change logging and filtering

**31 of 40**

Every year your department tests the IT Service Continuity Management (ITSCM) plans. After a 3 year period one of the ITSCM plans fails.

What is the first action you will take?

- A. review all Changes of the last year regarding Impact on this ITSCM plan
- B. review the ITSCM plan
- C. review the ITSCM plan together with the report of the failed test

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As your organization progresses to the final stages of the Business Continuity project, the emphasis shifts from awareness of the need for IT Service Continuity Management (ITSCM) mechanisms towards the responsibilities and actions necessary to implement, test and maintain those mechanisms in an operational environment.

Who has the key role in **ongoing** awareness and commitment throughout the entire organization?

- A. senior management
- B. the ITSCM manager in the Plan and Improve team
- C. the Plan and Improve team

**33 of 40**

What must be done during the review of the Availability, Capacity and IT Service Continuity plans to ensure the validity of these plans?

- A. check if the Key Performance Indicators are still being met
- B. check if the procedures are still carried out
- C. check if the scope of the plan is still being met

**34 of 40**

As a member of the Plan and Improve team it is your responsibility to review the tools used for Availability Management, Capacity Management and IT Service Continuity Management.

Which approach ensures that your review gives the desired results?

- A. checking the tools' results with another tool
- B. having the tools certified by a specialized party
- C. performing an EDP audit

**35 of 40**

Which of the following approaches is the most appropriate in conducting process audits?

- A. ad hoc process audits
- B. regularly planned process audits
- C. regularly planned and ad hoc process audits

**36 of 40**

What is an important advantage of using the continuous improvement methodology in Availability Management?

- A. all threats become identified and their levels accurately assessed
- B. it delivers Availability improvements from a customer's point of view
- C. it enables IT staff to observe the operational environment

**37 of 40**

You are reviewing the capacity of the mail system of your organization. After one year the current utilization of storage capacity of the mail system is 40 percent. Each mailbox is limited to 200 MB and there are 50 users. The disk capacity threshold is set to 80 percent. The management of the company does not want a limit on the mailboxes at all and asks you to remove this restriction, since there is more than enough space on the server.

What is the best action you can take?

- A. You order to remove the limit for all users and place additional hard disks.
- B. You order to remove the limit for all users and set the disk capacity threshold to 60 percent.
- C. You order to remove the limit for all users because there is enough space.

**38 of 40**

Last month you have been confronted with Capacity Problems on a specific system. You find out that the reason for those Problems is that the number of Users on this system has increased rapidly.

In the future, in which process should you take corrective action?

- A.** in the Business Capacity Management sub-process
- B.** in the Change Management process
- C.** in the Service Capacity Management sub-process

**39 of 40**

How can you effectively identify new IT Service Continuity Management requirements (ITSCM) in order to plan appropriate actions in the ITSCM plans?

- A.** by performing a Business Impact Analysis and a risk assessment
- B.** by reviewing all new or updated Service Level Agreements (SLAs)
- C.** by scrutinizing all new or amended laws concerning new requirements to the Business processes

**40 of 40**

Some Changes have an effect on one or more IT Service Continuity Management (ITSCM) plans. It is your responsibility to identify the Changes and the effects.

How can you keep track of the Changes that have an effect on ITSCM plans?

- A.** All new Changes must be known.
- B.** The Forward Schedule of Changes (FSC) must be known.
- C.** You need to be a member of the Change Advisory Board (CAB) and attend meetings on a regular basis.

## Answer key

### 1 of 40

As a member of the Plan and Improve team, you are discussing staffing with the manager of the print room where salary slips and invoices for the company's customers are produced. The manager of this department tells you that he uses the Capacity Management method to make sure he is not understaffed.

Who is responsible for recommendations on sufficient human resources for the print room?

- A.** the manager of the print room, because he has adapted the Capacity Management method
- B.** the manager of the print room, because he runs the department
- C.** the Plan and Improve team, because it is responsible for making recommendations on IT resources and meeting Business requirements
- D.** the Plan and Improve team, because it is responsible for the throughput of the print process

A. Incorrect. Using the Capacity Management method is no guarantee that human resources are in line with other IS/IT processes.

B. Incorrect.

C. Correct. Capacity Management is responsible for matching all kinds of resources with Business requirements, including human resources when it's crucial for end to end response time (Section 6.1.2 - 6.1.3).

D. Incorrect. The throughput of the print process is a given fact. Therefore it cannot be someone's responsibility.

### 2 of 40

During the implementation of IT Service Continuity Management (ITSCM) you find out that an amount of crucial data is stored on local workstations. The workstations are also connected to the LAN. If this data is to be available after a possible system crash a regular backup of all the data is necessary.

What is the best way to make sure this backup is realized?

- A.** ask the employees who are storing data on their workstation to store the data on the network drives
- B.** ask the IT engineers to make regular backups of the workstations involved
- C.** plan an awareness session for all employees to make sure data is stored on the network drives

A. Incorrect. You may tackle the problem now for current employees who are storing data on their workstation, but the problem may occur with other users in the future or in other departments.

B. Incorrect. It is possible, but it is not a realistic solution because it takes too much planning and work.

C. Correct. Make sure everyone is aware of the problem and the solution (Section 7.1.4).

**3 of 40**

What is a benefit of an Availability plan?

- A.** an Availability Plan provides the necessary information on current and planned resource utilization of individual Components
- B.** the frequency and duration of IT Service failures can be reduced over time
- C.** the IT organization can actively manage the Infrastructure and use systems to reduce the impact of Component failure

- A. Incorrect. This is a benefit of Capacity Management (Section 6.1.1).
- B. Correct. This is a benefit of an Availability plan (Section 8.3.5).
- C. Incorrect. This is a benefit of IT Service Continuity Management (Section 7.1.5).

**4 of 40**

Senior management wishes to document the benefits of an IT Service Continuity (ITSCM) plan and execute regular testing against that plan.

Which of the following should **not** be included as a benefit of successful testing against an IT Service Continuity plan?

- A.** successful testing against the ITSCM plan demonstrates that the business processes are able to continue to operate in the event of a disaster
- B.** successful testing against the ITSCM plan generates credibility with customers and business partners
- C.** the demonstrated ability to meet regulatory requirements

- A. Incorrect. This is a benefit of a successfully tested ITSCM plan (Section 7.1.5 in the Service Delivery Book).
- B. Correct. A successful test of an ITSCM plan is only part of overall Business Continuity management (Section 7.1.5 in the Service Delivery Book).
- C. Incorrect. This is a benefit of a successfully tested ITSCM plan (Section 7.1.5 in the Service Delivery Book).

**5 of 40**

As member of the Plan & Improve team you are asked to advise IT management how to measure IT Availability. Traditionally these measurements have concentrated on Component Availability and are based on a combination of an Availability percentage (%), the amount of time lost and the frequency of failure.

Why are these traditional measurements no longer acceptable?

- A.** manufacturers of Configuration Items (CIs) provide detailed data on resilience
- B.** much better measurement techniques are available
- C.** they fail to reflect Availability from a Business perspective

A. Incorrect. Despite detailed data on resilience, this lacks the point of view of the Business and Users.

B. Incorrect. It is true that better techniques are available but they lack the point of view of the business and Users.

C. Correct. The traditional IT approach to measurement and reporting provides an indication of IT Availability and component reliability, which is important for the internal IT support organization. However, to the business and to Users these measures fail to reflect Availability from their perspective and are rarely understood. This often fuels mistrust between the business and the IT department when, despite periods of instability, the percentage (%) target has been met even though significant business disruptions have occurred and customer complaints have been received (Section 8.7.3).

**6 of 40**

During a review of the IT Service Continuity Management (ITSCM) process, you take the following into account:

- Major Changes to the IT Infrastructure
- New systems or networks
- New service providers

What is a fourth element you need to take into account?

- A.** new Business requirements
- B.** new Configuration Items (CIs) in the Configuration Management Database (CMDB)
- C.** new employees in the Recovery team
- D.** new Incidents since the last review of the IT Service Continuity Management (ITSCM) process

A. Correct. The Infrastructure, assets and suppliers need to be reviewed as well as the Business strategy, the Business direction and IT strategy (Section 7.3.4).

B. Incorrect. New CIs are implemented as a result of the Change Management process. Those Changes are already mentioned in the question, so are the assets (CIs).

C. Incorrect. New employees need to be trained when they arrive on the job. The ITSCM process is not influenced by new employees.

D. Incorrect. Incidents will not be of influence on the ITSCM process, unless they result in a Change.

**7 of 40**

In the Plan and Improve process monthly reports are produced on the Capacity of the company's systems. While writing your monthly report you find out that free disk space on one system has rapidly decreased since last month.

In which document will you sound the alarm for this system?

- A.** the current monthly report, because you found out in time
- B.** the next monthly report, because it needs investigation first
- C.** you write the monthly report and an exception report for this specific system

A. Incorrect. Monthly reports do not have a high enough status.  
B. Incorrect. One month of waiting may be too long. Action is required.  
C. Correct. It is possible that the trend has been broken. Therefore you need an exception report where you specify the symptoms and possible causes which you send to management (Section 6.3.1).

**8 of 40**

You are initiating the Capacity Management process.

How do you find out what Monitoring activities are already being executed?

- A.** You check the current work instructions on System Monitoring used by the engineers supporting the IT environment.
- B.** You check which monitoring tools have been installed on the various systems.
- C.** You interview the system engineers who are responsible for the various systems.

A. Incorrect. The work instructions do not provide enough information, since the Capacity Management process has not been implemented yet.  
B. Incorrect. The Monitoring tools do not tell you what is actively being monitored. It only tells you how something is monitored.  
C. Correct. The system engineers can give details of the existing procedures and tools. (Section 6.5.1)

**9 of 40**

You are planning the sub process Resource Capacity Management in your organization. Your organization is a large mail company with distribution centers all over the country. Because there are various systems and applications, you decide that Capacity Management only identifies the monitoring requirements and that the actual implementation of the process is done locally.

In this case, how should you implement the Capacity Database (CDB)?

- A.** centralized, where the sites send their raw data to the central CDB
- B.** decentralized, where every site reports on the agreed requirements
- C.** decentralized with raw data, centralized with an analyzed set

A. Incorrect. The local sub process Resource Capacity Management needs a local CDB.  
B. Incorrect. You will be unable to report on services across all the technology resources involved.  
C. Correct. Keep the raw data and much of the analyzed data on each of the host platforms, and only transfer to a central location a very limited amount of analyzed data (Section 6.5.2).

**10 of 40**

What is the output of the sub-process Business Capacity Management?

- A.** a proactive Change
- B.** the Capacity Plan
- C.** the Service Level Requirements

A. Incorrect. Pro active Changes are output of the subprocess Resource Capacity Management (Section 6.5.3).  
B. Correct. The main document produced by the subprocess Business Capacity Management is the Capacity Plan. (Section 6.5.3).  
C. Incorrect. Service Level Requirements are input for Business Capacity Management (Section 6.2).

**11 of 40**

While monitoring the systems an exception report is produced, because the required Capacity of certain resources has not been met.

Which process is responsible for initiating Changes on the systems?

- A.** the Change Management process
- B.** the Incident Management process
- C.** the Service Level Management process

A. Incorrect. This process is responsible for implementing Changes.  
B. Incorrect. The exception report is produced by Business Capacity Management.  
C. Correct. Exception reports are of interest to the Service Level Management (SLM) process in determining whether the targets in Service Level Agreements (SLAs) have been breached. (Section 6.5.3) SLM will initiate the Changes. The Changes are further implemented under Change Management.

**12 of 40**

Both tangible and intangible costs result from non-availability of a System. Examples are:

- imposed fines or penalties;
- loss of customer goodwill;
- loss of customers;
- lost User productivity;
- overtime payments.

What is an example of a tangible cost?

- A.** damage to the business' reputation
- B.** loss of business opportunities
- C.** lost revenue

A. Incorrect. This is an intangible cost.  
B. Incorrect. This is an intangible cost.  
C. Correct. Tangible costs are, among others, lost User productivity, lost IT staff productivity, lost revenue, overtime payments, wasted materials, imposed fines or penalties (Section 8.4.3).

**13 of 40**

Your company is running several systems on a 24/7 basis. You are asked to plan service windows for maintenance on these systems.

What is the first step for planning the required service windows?

- A.** find out what is agreed in the Service Level Agreement (SLA) and plan accordingly
- B.** find out which components can be serviced concurrently in order to minimize Impact
- C.** perform a Component Failure Impact Analysis (CFIA) on the systems
- D.** perform Monitoring to check out what time windows are least critical

- A. Incorrect. After you find out the best time windows, you can record it in the SLA.
- B. You need the CFIA and the monitoring to determine what can go down for service concurrently.
- C. Correct. The output from the CFIA indicates the Impact on the User for a given component when the component is not available. The definition of IT Service downtime determined in the Availability requirements establishes the level of business Impact arising from the Unavailability of this component. So performing a CFIA tells you if there are alternatives and what their Impact is. After that you can plan the service window (Section 8.5.6).
- D. Incorrect. You need more information on the systems.

**14 of 40**

You are the Availability Manager in your organization. You recognize that the reports currently produced by the IT support organization are mainly focused on IT component Availability.

Why is it important to shift to a more User and Business orientated perspective concerning IT Availability?

- A.** because it is necessary to meet the Service Level Agreements (SLAs)
- B.** because the other processes need information reflecting Availability
- C.** because Users need the IT Availability in order to perform business tasks

- A. Incorrect. When the SLAs are formulated in terms of IT component Availability, this is not a reason to shift the perspective.
- B. Incorrect. It is important that other processes can use information about Availability but the User and the business come first.
- C. Correct. Component availability is not enough. The User being able to perform Business tasks is the main purpose of the IT support organization (Section 8.7.2).

**15 of 40**

You are defining a policy for IT Service Continuity Management (ITSCM) for your company. Your company has a critical business system "TravelReg" where your customers are working 5 days a week (Monday - Friday) from 08:30 am until 5:30 pm. You guarantee that the system is available during these opening hours for 98 percent.

What is the best policy description for this critical business system?

- A.** The system "TravelReg" is available for the company's customers as agreed in the SLA.
- B.** The system "TravelReg" will be available on working days during working hours for at least 98 percent during this time.
- C.** The system "TravelReg" will be available on working days from 08:30 am till 5:30 pm for 98 percent.

- A. Incorrect. This description is not specific, it only refers to another document.
- B. Correct. The policy should express the objective to be met (Section 7.3.1).
- C. Incorrect. This description is not useful because the objective for Availability refers to a maximum of 98 percent.

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The computer systems your organization uses are being hosted by a third party. The production systems (four servers) are placed in one rack. The test systems, configured for multiple test cases (also four servers), are placed in another rack. All systems are up and running. The Recovery Strategy in case of a malfunction of the production system is that the test system will be put on-line with a backup of the correct software and data.

What is the name of this Recovery strategy?

- A.** immediate Recovery
- B.** intermediate Recovery
- C.** graduate Recovery

- A. Incorrect. The test system is not a hot standby. Therefore this is not an immediate Recovery Strategy.
- B. Correct. The test system can be seen as a warm standby. Therefore this is called an intermediate Recovery. It is selected by organizations that need to recover IT facilities within a predetermined time to prevent Impact to the business process. This typically involves the re-establishment of critical systems and services within a 24 to 72 hour period (Section 7.3.2).
- C. Incorrect. Gradual Recovery (sometimes referred to as 'cold standby') is applicable to organizations that do not need immediate restoration of business processes and can function for a period of up to 72 hours, or longer, without a re-establishment of full IT facilities.

**17 of 40**

Which of the following is the best description of Demand Management?

- A.** Demand Management delivers extra resources when the business needs them.
- B.** Demand Management influences business needs for computing resources.
- C.** Demand Management inquires into business needs and takes appropriate action.

A. Incorrect. Demand Management will deliver new resources. It just uses the current resources in a more appropriate way.

B. Correct. The prime objective of Demand Management is to influence the demand for computing resources and the use of those resources (Section 6.3.6).

C. Incorrect. The subprocess Business Capacity Management inquires into business needs and takes appropriate action.

**18 of 40**

As a result of Capacity Management Tuning Changes are implemented. Such Changes are more Impact and risk associated than other kinds of Changes.

Why is the Impact and risk that is associated with Tuning Changes likely to be greater than that of other different types of Changes?

- A.** Tuning activities can have unexpected side effects. Therefore a thorough Impact analysis is necessary.
- B.** Tuning Changes can have major implications on the Customers of the service involved.
- C.** Tuning Changes usually deal with core resources, such as CPU usage, memory and disk usage or network bandwidth.

A. Incorrect. These Changes need to be closer investigated through an Impact analysis.

B. Correct. System Tuning Changes can have major implications for the customers of the service (Section 6.3.4).

C. Incorrect. Tuning does not only relate to core resources, but can also relate to services.

**19 of 40**

In your role as the manager of the Capacity Management process, you have been made aware of new technology that could be used to improve some of the existing proposed Capacity recommendations.

What is the first action you should take?

- A.** determine the Impact of using this new technology on current projects to properly size applications
- B.** modify and reissue the Capacity Plan
- C.** recommend the use of this new technology through a Service Improvement Program

A. Incorrect. This approach does not change the existing recommendations in the Capacity Plan. This is an activity in the Capacity Management process.

B. Correct. The recommendations in the Capacity Plan should be refined to account for the new technology and the plan should be reissued (Section 6.3.9).

C. Incorrect. This approach does not change the existing recommendations in the Capacity Plan. The Service Improvement Program can contain new services the IT Service Organization is capable to deliver. These services are supported by the Service Management processes. New technology for improving Capacity should be supported by Capacity Management and therefore be part of the Capacity Plan before it is included in a SIP.

**20 of 40**

The iterative activities within Capacity Management use many sources of input data.

Which of the following is **not** a major source of input into these iterative activities?

- A.** Service Level Management Thresholds
- B.** The Capacity Management Database
- C.** The Forward Schedule of Change

A. Incorrect. SLM thresholds are required to monitor and measure SLA breaches.

B. Correct. The CDB is not an essential input to the iterative activities, but holds the information/output from Capacity Management (See figure 6.3 and figure 6.3).

C. Incorrect. The FSC is a useful input (see figure 6.3).

**21 of 40**

As the manager of the Capacity Management process, you have become aware of Business plans to hire a number of new sales staff that are expected to use a sales related Service.

What action should you take to ensure sufficient Capacity will exist to support the new users of the service?

- A.** You should prepare to use Demand Management techniques to manage Service utilization.
- B.** You should use analytical modeling to predict the additional Capacity required to support the new users of the Service.
- C.** You should use trend analysis to predict the additional Capacity required to support the new users of the Service.

A. Incorrect. Demand Management will not ensure sufficient Capacity is available to support the new users of the Service, it can only be used to manage Service utilization. (Section 6.3.7).

B. Correct. (Section 6.3.7).

C. Incorrect. Trend analysis is not an accurate method for predicting an increase in workload. It is only useful to predict the existing workload is changing over time. (Section 6.3.7). Trend analysis delivers information that can be used as input in predictive modeling tools.

**22 of 40**

One of your applications is hosted by an external party. Internally you have agreed that Availability on the desktop should be 90 percent. You want to define and agree the Availability percentage in a contract with the external party. The complete route between third party and desktop is: Host (H), VPN tunnel (VT), Internal Network (IN), Server (S) and Desktop (DT).

How can the required availability of the Host (H) be calculated?

- A.**  $H = (VT * IN * S) / 0.90$
- B.**  $H = VT * IN * S * 0.90$
- C.**  $H = 0.90 / (VT * IN * S)$

A. Incorrect. Availability on desktop = Host \* VPN Tunnel \* Internal network \* Server.

B. Incorrect. Availability on desktop = Host \* VPN Tunnel \* Internal network \* Server.

C. Correct. Availability on desktop = Host \* VPN Tunnel \* Internal network \* Server (Section 8.9.4).

**23 of 40**

As a member of the Plan & Improve team you are asked to advise on selecting an Availability Management technique.

Which Availability Management technique is appropriate for analyzing Maintainability and its influence on Downtime?

- A.** CCTA Risk Analysis and Management Method (CRAMM)
- B.** Expanded Incident Lifecycle
- C.** Technical Observation Post

A. Incorrect. CRAMM is aimed at identification of risks and countermeasures.  
B. Correct. Expanded Incident Lifecycle has a focus on Incident diagnosis and Incident repair (Section 8.9.9).  
C. Incorrect. Technical Observation Post is aimed at progressing continuous improvement opportunities (section 8.9.11).

**24 of 40**

Your organization is growing towards a more mature Availability Management. Until now your department (Plan & Improve) reported Availability levels expressed in percentage (%) available on critical systems, but your Customers want the reports to reflect user and businesses experience. Incident recording is at a basic level.

What would be the next step in measuring and reporting about Availability if you want to satisfy your customers?

- A.** measure and report on Impact of failure
- B.** measure and report the duration and frequency of Unavailability. Present duration in hours and minutes.
- C.** measure and report the duration of Unavailability in hours and minutes

A. Incorrect. This requires a mature Incident recording level where the inability of Users to perform their business tasks is the most important piece of information captured.  
B. Correct. This would be a logical next step: it is two out of three items of Impact of failure. This could easily be accomplished with the current incident recording level (Sections 8.7.2 and 8.7.4).  
C. Incorrect. It is also possible to report on the frequency with the current Incident recording level.

**25 of 40**

While measuring Availability it shows that some network components have become more and more unavailable.

To which Service Management process could this best be reported?

- A.** Capacity Management
- B.** Incident and Problem Management
- C.** Service Level Management

A. Correct. Availability measurement and reporting produced to support the Availability Management process can be used as input to Capacity Management. It can highlight Availability trends that indicate Capacity or response time issues (Sections 8.7.7 & 6.7.9).

B. Incorrect. Incident and Problem Management report to Availability Management about Unavailability of Configuration Items (CIs).

C. Incorrect. Service Level Management will be informed when threshold values for the Availability of Services are exceeded.

**26 of 40**

As a member of the Plan & Improve team you are asked to advise on Availability Management techniques.

Which Availability Management technique is suitable for Availability reporting?

- A.** CCTA Risk Analysis and Management Method (CRAMM)
- B.** Component Failure Impact Analysis (CFIA)
- C.** Fault Tree Analysis (FTA)

A. Incorrect. CRAMM cannot be used for reporting Availability.

B. Correct. Component Failure Impact analysis is suitable for reporting Availability (Section 8.9).

C. Incorrect. Fault Tree Analysis is not suitable for reporting Availability.

**27 of 40**

The Availability Plan should be a long-term plan for the proactive improvement of IT Availability within the imposed Cost constraints.

The impetus to improve Availability comes from, among others

- the inability for a new IT Service to meet its Service Level Agreement (SLA) on a consistent basis
- Availability measurement trends indicating a gradual deterioration in Availability
- unacceptable IT Service recovery and restoration time
- requests from the business to increase the level of Availability provided
- increasing Impact on the business and its customers from IT Service failures as a result of growth and/or increased Business functionality

What could be another reason to improve Availability?

- A.** a request from Service Level Management (SLM) to improve Availability
- B.** an update of the Availability Management plan
- C.** developing Business and User measurement and reporting

A. Correct. A request from SLM to improve Availability as part of an overall Service Improvement Program (Section 8.6).

B. Incorrect. Improvement actions are planned in the update of the Availability Management plan.

C. Incorrect. This is a technique, not an impetus to improve Availability.

**28 of 40**

While setting up IT Service Continuity Management (ITSCM) you have to plan its organization. For Recovery purposes only IT is only part of the overall command, control and communications structure.

In which layers of this organization structure of ITSCM does IT take part?

- A.** in the Business Impact Analysis, Data Management and Recovery layer
- B.** in the executive, coordination and recovery layer
- C.** in the Risk Reduction, Testing and recovery layer

A. Incorrect. IT takes part three tiers: executive, coordination and recovery.

B. Correct. IT takes part three tiers: executive, coordination and recovery.

C. Incorrect. IT takes part three tiers: executive, coordination and recovery.

**29 of 40**

Which of the following measures is **not** an implementation of a risk reduction measure?

- A.** a comprehensive backup strategy and an off-site storage of tapes
- B.** improving Change control
- C.** outsourcing services to a third party

A. Incorrect. A comprehensive backup and Recovery strategy, including off-site storage is a risk reduction measure.

B. Incorrect. Improving procedures to reduce the likelihood of errors or failures such as Change control is a risk reduction measure.

C. Correct. Outsourcing to just one third party is not an example of risk reduction. Outsourcing services to more than one provider is a risk reduction measure (Section 7.3.2).

**30 of 40**

While implementing new Changes it is necessary that the Requests for Change (RFCs) are evaluated against the IT Service Continuity Management (ITSCM) plans.

In which step of the Change Management process will this take place?

- A.** Change building, testing and implementation
- B.** Change Impact and resource assessment
- C.** Change logging and filtering

A. Incorrect. During this stage authorized Changes RFCs are being built, tested and implemented. There is no relation to ITSCM.

B. Correct. During impact analysis the effect of Changes upon all possible plans is being measured. ITSCM must be included as part of the Change Management process to ensure that any Changes in the Infrastructure are reflected in the contingency arrangements provided by IT or third parties (Section 7.3.4).

C. Incorrect. During this stage RFCs are being registered. There is no relation to ITSCM.

**31 of 40**

Every year your department tests the IT Service Continuity Management (ITSCM) plans. After a 3 year period one of the ITSCM plans fails.

What is the first action you will take?

- A.** review all Changes of the last year regarding Impact on this ITSCM plan
- B.** review the ITSCM plan
- C.** review the ITSCM plan together with the report of the failed test

A. Incorrect. In this stage it is not wise to go this deep.  
B. Incorrect. This gives too little information to conclude something.  
C. Correct. It is possible that the ITSCM plan has not been followed correctly. It is important to start the ITSCM plan before you check other things. Inaccurate plans and inadequate Recovery capabilities may result in failure of ITSCM (Section 7.3.4).

**32 of 40**

As your organization progresses to the final stages of the Business Continuity project, the emphasis shifts from awareness of the need for IT Service Continuity Management (ITSCM) mechanisms towards the responsibilities and actions necessary to implement, test and maintain those mechanisms in an operational environment.

Who has the key role in **ongoing** awareness and commitment throughout the entire organization?

- A.** senior management
- B.** the ITSCM manager in the Plan and Improve team
- C.** the Plan and Improve team

A. Correct. It is important that, wherever possible, senior management personnel are involved, in order to demonstrate commitment from the top and so that they can see and understand how the money has been spent. The overall aim must be to get to a stage where management considers Business and ITSCM issues in relation to, and prior to, making key business decisions (Section 7.5.1).  
B. Incorrect. Although actions are coordinated from this team, senior management is the driving force for creating commitment.  
C. Incorrect. Commitment should be coming from senior management.

**33 of 40**

What must be done during the review of the Availability, Capacity and IT Service Continuity plans to ensure the validity of these plans?

- A.** check if the Key Performance Indicators are still being met
- B.** check if the procedures are still carried out
- C.** check if the scope of the plan is still being met

A. Incorrect. The Key Performance Indicators give information about the process.

B. Incorrect. The procedures give information about the process.

C. Correct. The scope of the plan is related to the business intentions and therefore important for the validity (e.g. the IT Service Continuity manager undertakes regular reviews, at least annually, of the Continuity plans with the business areas to ensure that they accurately reflect the business processing environment) (Annex 7A).

**34 of 40**

As a member of the Plan and Improve team it is your responsibility to review the tools used for Availability Management, Capacity Management and IT Service Continuity Management.

Which approach ensures that your review gives the desired results?

- A.** checking the tools' results with another tool
- B.** having the tools certified by a specialized party
- C.** performing an EDP audit

A. Correct. Checking results with another tool, by modeling or by hand gives you the desired information (Section 6.3.7).

B. Incorrect. A certified tool could still give unpredictable results in a given circumstance.

C. Incorrect. An EDP audit is not tailored for reviewing Service Management tools.

**35 of 40**

Which of the following approaches is the most appropriate in conducting process audits?

- A.** ad hoc process audits
- B.** regularly planned process audits
- C.** regularly planned and ad hoc process audits

A. Incorrect. Ad hoc process audits are only part of the total approach in auditing for effective and efficient processes. If only ad hoc process audits are held, it could mean that processes are not audited frequently enough.

B. Incorrect. Regularly planned process audits are only part of the total approach in auditing to ensure that processes are working effectively and efficiently. Process staff should not know and should not be able to prepare for an audit in advance.

C. Correct. All processes should be audited on a regular and ad hoc basis. This is the appropriate approach in auditing.

**36 of 40**

What is an important advantage of using the continuous improvement methodology in Availability Management?

- A.** all threats become identified and their levels accurately assessed
- B.** it delivers Availability improvements from a customer's point of view
- C.** it enables IT staff to observe the operational environment

A. Incorrect. This is an outcome of a Risk Management method like CRAMM (Section 8.9.3).

B. Correct. This technique can provide the IT support organization with real business and User perspectives on how deficiencies within the IT Infrastructure and the underpinning process and procedures impact the business operation and ultimately their Customers (Section 8.9.10).

C. Incorrect. This is an advantage of Technical Observation Post (Section 8.9.11).

**37 of 40**

You are reviewing the capacity of the mail system of your organization. After one year the current utilization of storage capacity of the mail system is 40 percent. Each mailbox is limited to 200 MB and there are 50 users. The disk capacity threshold is set to 80 percent. The management of the company does not want a limit on the mailboxes at all and asks you to remove this restriction, since there is more than enough space on the server.

What is the best action you can take?

- A.** You order to remove the limit for all users and place additional hard disks.
- B.** You order to remove the limit for all users and set the disk capacity threshold to 60 percent.
- C.** You order to remove the limit for all users because there is enough space.

A. Incorrect. In this stage it is too early to buy extra resources. This is not cost effective.  
B. Correct. Information on resource utilization will be collected by monitoring. Defining the new threshold gives you enough time to take corrective actions with limited costs (Section 6.3.1).  
C. Incorrect. Open end limits will quickly cause problems because the threshold was set on 80 percent, which will not give you enough time to act in case the threshold is exceeded.

**38 of 40**

Last month you have been confronted with Capacity Problems on a specific system. You find out that the reason for those Problems is that the number of Users on this system has increased rapidly.

In the future, in which process should you take corrective action?

- A.** in the Business Capacity Management sub-process
- B.** in the Change Management process
- C.** in the Service Capacity Management sub-process

A. Correct. It is obvious that more people are using this specific system. This is a business decision and the system should be updated in the Capacity Database (CDB) in order to plan the Capacity correctly (Section 6.2.1).  
B. Incorrect. Change Management identifies the performance required of a planned Change. The increase of the number of Users is not in the scope of Change Management.  
C. Incorrect. Business Capacity Management should understand the Customer's Capacity requirements.

**39 of 40**

How can you effectively identify new IT Service Continuity Management requirements (ITSCM) in order to plan appropriate actions in the ITSCM plans?

- A.** by performing a Business Impact Analysis and a risk assessment
- B.** by reviewing all new or updated Service Level Agreements (SLAs)
- C.** by scrutinizing all new or amended laws concerning new requirements to the Business processes

A. Correct. The Business Impact Analysis identifies the minimum critical requirements to support the business (Section 7.3.2).

B. Incorrect. The requirements should have been defined before agreements about the level of IT Service continuity are made.

C. Incorrect. Regulatory requirements are an important source for new business requirements, but it does not matter for IT to scrutinize the laws concerning business processes.

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Some Changes have an effect on one or more IT Service Continuity Management (ITSCM) plans. It is your responsibility to identify the Changes and the effects.

How can you keep track of the Changes that have an effect on ITSCM plans?

- A.** All new Changes must be known.
- B.** The Forward Schedule of Changes (FSC) must be known.
- C.** You need to be a member of the Change Advisory Board (CAB) and attend meetings on a regular basis.

A. Correct. Changes affecting the IT infrastructure should be identified; therefore all Changes can have their effect on the ITSCM plans and should be monitored (Section 7.1.8).

B. Incorrect. It is too late to take any action now since the Changes have already been planned.

C. Incorrect. Not all CAB meetings are useful.

## Evaluation

The table below shows the correct answers to the questions in this sample examination.

<b>number</b>	<b>answer</b>	<b>points</b>
1	C	1
2	C	1
3	B	1
4	B	1
5	C	1
6	A	1
7	C	1
8	C	1
9	C	1
10	B	1
11	C	1
12	C	1
13	C	1
14	C	1
15	B	1
16	B	1
17	B	1
18	B	1
19	B	1
20	B	1

<b>number</b>	<b>answer</b>	<b>points</b>
21	B	1
22	C	1
23	B	1
24	B	1
25	A	1
26	B	1
27	A	1
28	B	1
29	C	1
30	B	1
31	C	1
32	A	1
33	C	1
34	A	1
35	C	1
36	B	1
37	B	1
38	A	1
39	A	1
40	A	1