Resources refer to more than just human resources; it also includes materials, equipment, supplies and anything else needed to complete the project

The Resource Management Process	Done During			
Plan Resource Management	Planning process group			
Estimate Activity Resources	Planning process group Executing process group Executing process group			
Acquire Resources				
Develop Team				
Manage Team	Executing process group			
Control Resources	Monitoring and controlling process group			

Exercise Did you complete the exercise on project roles in the Project Management Framework chapter? Your understanding of that content will impact how well you do on this exercise. You may want to review those pages before starting this exercise, or use the information in that exercise to fill your gaps.

This exercise is designed to help you answer situational questions on the exam dealing with project roles and responsibilities. If you disagree with some of the answers, make sure you are not reading something into the question, and assess whether it indicates a gap in your project management knowledge.

In the following table, write the initials of the key role responsible for solving each of the problems listed. Because much of the confusion of roles is between the team members (T), the project manager (PM), the sponsor (SP), and the functional manager (FM), this exercise is limited to those roles. Consider what you have learned about project roles, and remember to keep matrix organizations in mind when reading through these situations.

Situation Key Role

- 1 Two project team members are having a disagreement.
- 2 There is a change to the overall project deliverable.
- 3 A functional manager is trying to pull a team member off the project to do other work.
- 4 The project manager does not have the authority to get things done.
- 5 There are not enough resources to complete the project.
- 6 The team is unsure of what needs to happen when.
- 7 An activity needs more time and will cause the project to be delayed.
- 8 An activity needs more time without causing the project to be delayed.
- 9 A team member is not performing.
- 10 The team is not sure who is in charge of the project.
- 11 There is talk that the project may no longer be needed.
- 12 The sponsor provides an unrealistic schedule objective.
- 13 The team is in conflict over priorities between activities.
- 14 The project is behind schedule.
- 15 A team member determines that another method should be used to complete an activity.
- 16 The project is running out of funds.
- 17 Additional work that will increase cost and that was not identified during the risk management process is added to the project.

	Situation	Key Role				
1	Two project team members are having a disagreement. The people involved in the conflict should attempt to solve it themselves.	Т				
2	There is a change to the overall project deliverable. A change to the project deliverable is a change to the project charter. Only the sponsor can approve changes to the project charter.					
3	A functional manager is trying to pull a team member off the project to do other work. The project manager must give team members enough information (such as the schedule, network diagram, project management plan, and identified risks) so they can manage their own workloads. Because the word "trying" is used, we know this situation is occurring at the present time. If the question used the words "has pulled," the answer would be the project manager. Read situational questions carefully.	Т				
4	The project manager does not have the authority to get things done. It is the sponsor's role to give the project manager authority via the project charter.	SP				
5	There are not enough resources to complete the project. The sponsor and functional manager control resources.	SP/FM				
6	The team is unsure of what needs to happen when. It is the project manager's role to take the individual estimates, combine them into the project schedule, and communicate that schedule to team members.					
7	An activity needs more time and will cause the project to be delayed. Notice the word "will." This means the evaluation by the team is completed and there is no available reserve, since the project completion date is most likely included in the project charter. Any such changes are changes to the project charter and require sponsor involvement.					
8	An activity needs more time without causing the project to be delayed. Think about integrated change control here. It is the project manager's role to look for impacts to the other project constraints.	PM				
9	A team member is not performing. In a matrix environment, the project manager and the functional manager share responsibility for directing resources.	PM/FM				
07	The team is not sure who is in charge of the project. The sponsor designates the project manager in the project charter.	SP				
1	There is talk that the project may no longer be needed. It is the sponsor's role to protect the project from changes, including such a large change as termination (unless it becomes clear that the project is no longer meeting the objectives of the organization).	SP				

Plan Resource Management

- This plan encompasses the management of HR as well as physical resources
- The key benefit of this process is that it establishes the approach and level of management effort needed for managing project resources based on the type and complexity of the project
- Resource planning is used to determine and identify an approach to ensure that sufficient resources are available for the successful completion of the project

Plan Resource Management

Plan Resource Management

Inputs

- .1 Project charter
- .2 Project management plan
 - Quality management plan
 - Scope baseline
- .3 Project documents
 - Project schedule
 - Requirements documentation
 - Risk register
 - Stakeholder register
- .4 Enterprise environmental factors
- .5 Organizational process assets

Tools & Techniques

- .1 Expert Judgment
- 2 Data representation
 - Hierarchical charts
 - Responsibility assignment matrix
 - Text-oriented formats
- .3 Organizational theory
- .4 Meetings

- .1 Resource management plan
- .2 Team charter
- .3 Project documents updates
 - Assumption log
 - Risk register

Assignment Matrix

RACI Chart	Person					
Activity	Ann	Ben	Carlos	Dina	Ed	
Create charter	Α	R	1	1	1	
Collect requirements	1	Α	R	С	С	
Submit change request	1	A	R	R	С	
Develop test plan	Α	С	1	1	R	
	R = Responsible A = Accountable C = Consult I = Inform					

Estimate Activity Resources

- Estimate activity resources is the process of estimating team resources and the type/qty of materials, equipment, and supplies necessary to perform project work
- This process is performed periodically throughout the project s needed

Estimate Activity Resources

Estimate Activity Resources

Inputs

- .1 Project management plan
 - Resource management plan
 - Scope baseline
- 2 Project documents
 - Activity attributes
 - Activity list
 - Assumption log
 - Cost estimates
 - Resource calendars
 - Risk register
- .3 Enterprise environmental factors
- .4 Organizational process assets

Tools & Techniques

- .1 Expert judgment
- .2 Bottom-up estimating
- .3 Analogous estimating
- .4 Parametric estimating
- .5 Data analysis
 - Alternatives analysis
- .6 Project management information system
- .7 Meetings

- .1 Resource requirements
- 2 Basis of estimates
- 3 Resource breakdown structure
- A Project documents updates
 - Activity attributes
 - Assumption log
 - Lessons learned register

Acquire Resources

- It is the process of obtaining team members, facilities, equipment, materials, supplies and other resources necessary to complete project work
- It outlines and guides the selection of resources and assigns them to their respective activities

Acquire Resources

Acquire Resources

Inputs

- .1 Project management plan
 - Resource management plan
 - Procurement management plan
 - Cost baseline
- .2 Project documents
 - Project schedule
 - Resource calendars
 - Resource requirements
 - Stakeholder register
- 3 Enterprise environmental factors
- .4 Organizational process assets

Tools & Techniques

- .1 Decision making
 - Multicriteria decision analysis
- .2 Interpersonal and team skills
 - Negotiation
- .3 Pre-assignment
- .4 Virtual teams

- Physical resource assignments
- 2 Project team assignments
- 3 Resource calendars
- .4 Change requests
- 5 Project management plan updates
 - Resource management plan
 - Cost baseline
- .6 Project documents updates
 - Lessons learned register
 - Project schedule
 - Resource breakdown structure
 - Resource requirements
 - Risk register
 - Stakeholder register
- .7 Enterprise environmental factors updates
- Ø Organizational process assets updates

Develop Team

- It is the process of improving competencies, team member interaction, and the overall team environment to enhance project performance
- It results in improved teamwork, enhanced interpersonal skills and competencies, motivated employees, reduced attrition, and improved overall project performance

Develop Team

Develop Team

Inputs

- .1 Project management plan
 - Resource management plan
- .2 Project documents
 - Lessons learned register
 - Project schedule
 - Project team assignments
 - Resource calendars
 - Team charter
- .3 Enterprise environmental factors
- .4 Organizational process assets

Tools & Techniques

- .1 Colocation
- .2 Virtual teams
- .3 Communication technology
- 4 Interpersonal and team skills
 - Conflict management
 - Influencing
 - Motivation
 - Negotiation
 - Team building
- .5 Recognition and rewards
- .6 Training
- .7 Individual and team assessments
- .8 Meetings

- Team performance assessments
- .2 Change requests
- Project management plan updates
 - Resource management plan
- 4 Project documents updates
 - Lessons learned register
 - Project schedule
 - Project team assignments
 - Resource calendars
 - Team charter
- .5 Enterprise environmental factors updates
- 6 Organizational process assets updates

Manage Team

- It is the process of tracking team members performance, providing feedback, resolving issues and managing team changes to optimize project performance
- Its key benefit is that influences team behavior, manages conflict, and resolves issues

Manage Team

Manage Team

Inputs

- .1 Project management plan
 - Resource management plan
- .2 Project documents
 - Issue log
 - Lessons learned register
 - Project team assignments
 - Team charter
- .3 Work performance reports
- .4 Team performance assessments
- .5 Enterprise environmental factors
- .6 Organizational process assets

Tools & Techniques

- .1 Interpersonal and team skills
 - Conflict management
 - Decision making
 - Emotional Intelligence
 - Influencing
 - Leadership
- Project management information system

- .1 Change requests
- Project management plan updates
 - Resource management plan
 - Schedule baseline
 - Cost baseline
- .3 Project documents updates
 - Issue log
 - Lessons learned register
 - Project team assignments
- 4 Enterprise environmental factors updates

Control Resources

- It is the process of ensuring that physical resources assigned and allocated to the project are available as planned, as well as monitoring the planned versus actual utilization of resources and taking corrective action as necessary
- Its key benefit is ensuring that the assigned resources are available to the project at the right time and in the right place and ar released when no longer needed

Control Resources

Control Resources

Inputs

- .1 Project management plan
 - Resource management plan
- .2 Project documents
 - Issue log
 - Lessons learned register
 - Physical resource assignments
 - Project schedule
 - Resource breakdown structure
 - Resource requirements
 - Risk register
- .3 Work performance data
- .4 Agreements
- .5 Organizational process assets

Tools & Techniques

- .1 Data analysis
 - Alternatives analysis
 - Cost-benefit analysis
 - Performance reviews
 - Trend analysis
- .2 Problem solving
- .3 Interpersonal and team skills
 - Negotiation
 - Influencing
- A Project management information system

- .1 Work performance information
- .2 Change requests
- Project management plan updates
 - Resource management plan
 - Schedule baseline
 - Cost baseline
- 4 Project documents updates
 - Assumption log
 - Issue log
 - Lessons learned register
 - Physical resource assignments
 - Resource breakdown structure
 - Risk register