1. Which of the following is NOT true of obtaining project plan approval?
   A. Until you obtain plan approval, you don’t need to put changes to it through change control
   B. Change control makes sure that only approved changes can make it into the approved plan
   C. It’s important for the entire team to buy into the Project Management Plan for it to be successful
   D. Only one person needs to approve the Project Management Plan and that’s the Project Manager

2. Joe is a project manager on an industrial design project. He has found a pattern of defects occurring in all of his projects over the past few years and he thinks there might be a problem in the process his company is using that is causing it. He uses Ishikawa diagrams to come up with the root cause for this trend over projects so that he can make recommendations for process changes to avoid this problem in the future. What process is he doing?
   A. Perform Quality Planning
   B. Perform Quality Control
   C. Perform Quality Assurance
   D. Qualitative Risk Analysis

3. Which of the following shows roles and responsibilities on your project?
   A. RACI matrix
   B. Bar chart
   C. Resource histogram
   D. Human Resource Management Plan
4. Brandi is a project manager on a software project. About halfway through development, her team found that they had not estimated enough time for some of the technical work they needed to do. She requested that the new work be added to the scope statement and that the time to do the work be added to the schedule. The change control board approved her change. What’s her next step?
   A. Start doing the work
   B. Update the scope and schedule baselines to reflect the approved change.
   C. Gather performance metrics on the team’s work so far.
   D. Perform Quality Assurance

5. Your project has a virtual team. Half of your team members are located in another country, where they are working for a subcontractor. You want to promote the top performing foreign team member to a leadership position, but you are told by the other team members that women are not allowed to hold positions of authority. When you bring it up with their manager, you are informed that it is the subcontractor’s policy not to promote women, and that in their country, it is culturally considered offensive for a man to take orders from a woman. What is the BEST way to respond to this situation?
   A. “Do nothing, because discrimination against women is a cultural norm in the subcontractor’s country”
   B. Request that the team attend sensitivity training
   C. Promote another team member, but find a different way to reward the woman for her work
   D. Inform the subcontractor that they must adopt a non-discriminatory policy or you will be forced to terminate the contract and find a subcontractor that does not discriminate against women.

6. “Which of the following is NOT a source of information about specific project constraints and assumptions?”
   A. The project scope management plan
   B. The project charter
   C. The preliminary scope statement
   D. The project stakeholders

7. When do you perform stakeholder analysis?
   A. When developing the project charter
   B. When defining the project scope
   C. When creating the project management plan
   D. When putting changes through change control
8. A team member approaches you with a change that could cut your schedule down by a month. What is the first thing you should do?
   A. Write up a change request and see if you can get it approved
   B. Figure out the impact on the scope of the work and the cost before you write up the change request
   C. “Make the change. It’s going to save time and nobody will want the project to take longer than it should”
   D. “Tell the team member that you’ve already communicated the deadline for the project, so you can’t make any changes now”

9. When are the most expensive defects most likely to be introduced into a product?
   A. When the product is being assembled
   B. When the quality management plan is being written
   C. When the product is being reviewed by the customers
   D. When the product is being designed

10. You are the project manager for a railroad construction project. Your sponsor has asked you for a forecast for the cost of project completion. The project has a total budget of $80,000 and CPI of .95. The project has spent $25,000 of its budget so far. How much more money do you plan to spend on the project?
    A. $80000
    B. $84,210
    C. $59,210
    D. $109,210

11. Which of the following best describes decomposition?
    A. Taking a deliverable and breaking it down into the smaller work packages so that it can be organized and planned
    B. Waiting for a task to expire so that it can break down into smaller tasks
    C. Categorizing work packages
    D. Dividing work packages into deliverables that can be planned for

12. Which is the BEST definition of quality?
    A. A product made of very expensive materials
    B. A product made with a lot of care by the team who built it.
    C. A product that passes all of its tests.
    D. A product that satisfies the requirements of the people who pay for it.
13. In which plan do you define the processes that will be used to keep people informed throughout the project?
   A. Staffing Management Plan
   B. Project Management Plan
   C. Communications Management Plan
   D. Schedule Management Plan

14. Which enterprise environmental factor defines how work is assigned to people?
   A. RACI matrix
   B. Work authorization system
   C. Project Management Information System (PMIS)
   D. Resource histogram

15. You are currently performing the Select Sellers process. You are considering two bids from companies on your qualified sellers list. Your project is on a tight budget, and you have been instructed by senior management to consider the cost over any other criteria. You used the company that submitted the lower bid on a previous project, and you were not happy with their work. The company that submitted the higher bid has a reputation for treating their clients well, flying project managers first class and giving them accommodations in five-star hotels. What is the BEST way to handle this situation?
   A. Give the manager at the company with the higher bid information that will allow him to tailor his bid so that it better meets your needs
   B. Select the company with the lowest bid
   C. Rewrite the RFP so that the company with the lowest bid is excluded
   D. Select the company with the higher bid

16. Which of the following is not a tool or technique of the Perform Quality Control process?
   A. Inspection
   B. Pareto charts
   C. Statistical sampling
   D. Quality audits
17. A project manager is working in a country where it is customary to pay the police for private protection services. The project manager’s supervisor tells him that in another country, that would be considered a bribe. What is the BEST way for the project manager to proceed?
   A. Pay the police for private protection services, because it is customary in the country they are operating in
   B. Do not pay the police for private protection services, because that would be a bribe
   C. Consult the Cost Management Plan about payment
   D. Ask the supervisor for guidance

18. Which conflict resolution technique is most effective?
   A. Withdrawal
   B. Compromise
   C. Confronting
   D. Smoothing

19. Which of the following is NOT an input to Perform Quality Control?
   A. Deliverables
   B. Work Performance Information
   C. Checklists
   D. Recommended Defect Repairs

20. You have just delivered a product to your client for acceptance, when you get a call that some features they were expecting are missing. What’s the first thing you should do?
   A. Get your team together and reprimand them for building a product that doesn’t meet user expectations
   B. Call a meeting with the client to understand exactly what is unacceptable in the product and try to figure out what went wrong along the way.
   C. “Tell the client that the product passed all of your internal quality inspections and scope verification processes, so it must be fine.”
   D. Tell the team to start building the missing features into the product right away.
21. You are managing a software project. You are partway through the project, and your team has just delivered a preliminary version of part of the software. You are holding a weekly status meeting, when one of the team members points out that an important stakeholder is running into a problem with one of the features of the current software. The team member feels that there is a risk that the stakeholder will ask for a change in that feature, even though that change would be out of scope of the current release - and if the stakeholder requests that change, there is a high probability that the change control board would approve the change. What is the BEST action to take next?

A. Add the risk to the risk register and gather information about its probability and impact
B. Mitigate the risk by asking a team member to get familiar with the feature of the software that might be changed
C. Schedule a meeting with the stakeholder to discuss the risk
D. Add the risk to the issue log and revisit it when there is more information

22. Tom is the project manager of an accounting project. He has just finished defining the scope for the project and is creating the WBS. He goes to his organizational process asset library and finds a WBS from a past project to use as a jumping off point. Which of the following is the tool of the Create WBS process he is using?

A. Decomposition
B. Delphi Technique
C. Templates
D. Brainstorming

23. Which of the following BEST describes the main purpose of the project charter?

A. It authorizes the project manager to work on the project
B. It identifies the sponsor and describes his or her role on the project
C. It contains a list of all activities to be performed
D. It describes the initial scope of the work
24. You are the project manager for a software development project. When you need to get staff from the manager of the QA department, he suggests a few test engineers with performance problems for your team. Which is the BEST response to this situation?
   A. Stop talking to the QA manager
   B. Tell the QA manager that the staffing problems are really no big deal, and you're sure that the two of you can eventually figure out the right answer together
   C. “Tell the manager that you know which team members you want for your team and he needs to give them to you.”
   D. Call a meeting with the QA manager to try to figure out why he suggested those candidates and how the two of you can work together to find team members with suitable skills and interests for your team

25. You are managing a construction project using a fixed price (FP) contract. The contract is structured so that your company will be paid a fee of $85,000 to complete the work. There was a $15,000 overhead cost that your company had to cover. It’s now three months into the project, and your costs have just exceeded $70,000. The project has now consumed the entire fee, and your company will now be forced to pay for all costs on the project from this point forward. What’s the BEST way to describe this situation?
   A. The project has reached the point of total assumption
   B. The project manager has overspent the budget
   C. The project is overdrawn
   D. The project has ceased to be a profit center for the company

26. A project manager is reporting the final status of the closed contract to the stakeholders. Which form of communication is appropriate?
   A. Informal written
   B. Informal verbal
   C. Formal verbal
   D. Formal written

27. You are managing a software engineering project. Your team is having trouble completing their object design tasks. One of your team members tells you that her friend at another company sent her a copy of a software package they own that will help your team meet its deadline. Without that software package, your project will probably be late. But you don't have enough money in the budget to purchase it. What’s the BEST way to handle this situation?
   A. Use the software so that your project comes in on time
   B. Tell the team member not to use the software, and accept that the project will be late
   C. Purchase the software so that you have a licensed copy
   D. “Tell the team member that you need to maintain plausible deniability, so she should just do what's necessary and not tell you about it.”
28. You are managing a project with a total budget of $450,000. According to the schedule, your team should have completed 45% of the work by now. But at the latest status meeting, the team only reported that 40% of the work has actually been completed. The team has spent $165,000 so far on the project. How would you BEST describe this project?
   A. The project is behind schedule and within its budget
   B. The project is ahead of schedule and within its budget
   C. The project is ahead of schedule and over its budget
   D. The project is behind schedule and over its budget

29. Which of the following is the correct order of the Monitoring & Controlling processes for Scope Management?
   A. First Scope Verification, then Scope Control
   B. There is not enough information to decide
   C. First Scope Control, then Scope Verification
   D. Both happen simultaneously

30. You are working on a construction project. You, your team, and your senior manager all feel that the work is complete. However, one of your stakeholders disagrees, and feels that one deliverable is not acceptable. What is the BEST way to handle this conflict?
   A. Renegotiate the contract
   B. File a lawsuit to force the stakeholder to accept the deliverable
   C. Follow the administrative and contract closure procedures
   D. Consult the contract and follow its claims administration procedure

31. One way contract closure differs from administrative closure is:
   A. “Administrative closure involves the stakeholders and the team; contract closure involves only the team but not the stakeholders”
   B. Administrative closure defines actions the team must take; contract closure defines legal commitments
   C. Administrative closure means verifying that the project is complete or terminated; contract closure means verifying that the contract terms were satisfied
   D. Administrative closure is performed by the seller; contract closure is performed by the buyer

32. Which of the following contracts has the MOST risk for the buyer?
   A. Cost plus percentage of costs (CPPC)
   B. Cost plus fixed fee (CPFF)
   C. Time and Materials (T&M)
   D. Fixed price (FP)
33. You are managing a software project. During a walk through of newly implemented functionality, your team shows you a new feature that they have added to help make the work flow in the product easier for your client. The client didn’t ask for the feature, but it does look like it will make the product easier to use. The team developed it on their own time because they wanted to make the client happy. You know this change would never have made it through change control. What is this an example of?
   A. Gold plating
   B. Scope creep
   C. Alternatives Analysis
   D. Schedule Variance

34. While identifying risks for a new construction project, you discover that a chemical you are using on your building cannot be applied in rainy conditions. You also learn that your project will be ready for the chemical application around the time when most of the rainfall happens in this part of the country. Since the project can’t be delayed until after the rainy season and you need to make sure the building gets the chemical coating, you decide that your team will just have to work around the rain. This is an example of which strategy?
   A. Mitigate
   B. Accept
   C. Exploit
   D. Transfer

35. You are managing a construction project. During your risk identification interviews you learn that there has been a string of construction site thefts over the past few months in the area where your will be building your project. The team agrees that it’s unlikely that people will be able to steal from your site. Even if thieves could get around your security, it’s even more unlikely that your project will lose a significant amount of material if a theft does occur. You decide to monitor the risk from time to time to be sure that it continues to have a low probability and impact. Where do you record the risk so that you don’t lose track of it?
   A. In a trigger
   B. In the Probability and Impact Matrix
   C. In the Monte Carlo analysis report
   D. On a watch list

36. Which of the following is NOT a characteristic of the Project Management Plan?
   A. Collection of subsidiary plans
   B. Formal, written communication
   C. A bar chart that shows the order of tasks and their resource assignments
   D. Must be approved by project sponsor
37. You are developing the project scope statement for a new project. Which of the following is NOT part of creating a project scope statement?
   A. Using the Preliminary Scope Statement
   B. Alternatives identification
   C. Obtaining plan approval
   D. Scope verification

38. Which of the following is NOT a cost estimation tool or technique?
   A. Bottom-up
   B. Cost aggregation
   C. Parametric
   D. Analogous

39. You’re managing a construction project to install several hundred air conditioner panels in a new office building. Every floor has identical panels. The customer, a construction contracting company, has provided specifications for the installations. The team is using a process to install and verify each panel. As the team completes each panel, your team’s quality control inspector measures it and adds the data point to a control chart. You examine the control chart, and discover that the process is out of control and you need to take close look at it immediately. Which of the following BEST describes what you found on the control chart?
   A. At least seven consecutive measurements are either above or below the mean but within the control limits
   B. At least one point is inside of the control limits
   C. At least seven consecutive measurements are inside of the control limits
   D. At least one point is above or below the mean

40. Your project files need to be sent via overnight mail to your company’s central office. If the files do not arrive tomorrow, your company will not be able to deliver the project on time and you will lose an important client. The deadline cannot be negotiated. The team worked right up to the last minute in order to give you the files. Due to a traffic jam, you are running late and the overnight delivery company will close in five minutes. You can only make it if you drive over the speed limit. Which of the following is correct?
   A. You must stay within the speed limit, even if you lose the client
   B. You must drive over the speed limit so that you can save the client relationship
   C. You must negotiate a new deadline
   D. “You can use the earned value metrics to show that the SPI is over 1, meaning the project is not late”
41. You are planning a project that uses the same team as a project that is currently being performed by your company. What should you consult to find information about when those people will be available for your project?
   A. The project schedule for your project
   B. The project manager for the project that the team is working on
   C. The communications management plan for your project
   D. The staffing management plan for the project that the team is working on

42. When is the BEST time to have project kickoff meetings?
   A. At the beginning of the project
   B. At the start of each phase
   C. When each deliverable is created
   D. When the Communications Management plan is approved

43. You have been hired by a contractor, who wants you to manage a construction project for one of their clients. The project team has been working for six weeks. You need to determine whether the team is ahead of or behind schedule. Which of the following tools and techniques is the BEST one for you to consult?
   A. Project Management Software
   B. Schedule Change Control System
   C. Bottom-Up Estimating
   D. Performance measurement

44. You are a project manager for a software project. Your team buys a component for a web page but they run into defects when they use it. Those defects slow your progress down considerably. Fixing the bugs in the component will double your development schedule and building your own component will take even longer. You work with your team to evaluate the cost and impact of all of your options and recommend hiring developers at the company that built the component to help you address problems in it. That will cost more but it will reduce your delay by a month. What is your next step?
   A. Fix the component
   B. Start Procurement Planning so you can get the contract ready for the vendor.
   C. Write up the change request and take it to the change control board
   D. Change the Scope Baseline to include your recommendation
45. The terms of union contracts are considered __________ in your project plan.
   A. Constraints
   B. Assumptions
   C. Requirements
   D. Collective bargaining agreements

46. A change has occurred on your project. You’ve documented the change, filled out a change request, and submitted that request to the change control board (CCB). What’s the NEXT thing that must happen on the project?
   A. Stakeholders on the CCB use expert judgment to evaluate the requested change for approval
   B. A senior manager decides whether or not to make the change and informs the project management team of the decision.
   C. The project manager informs the CCB whether or not to approve the change.
   D. The project manager meets with the team to analyze the impact of the change on the project’s time, scope and cost.

47. You are managing a design project. You find that bringing all of your team members into a single room to work increases their communication, and helps build a sense of community. This is referred to as a:
   A. Virtual team
   B. Socially active team
   C. Common area
   D. War room

48. You are a project manager on a construction project. You have just prepared an RFP to send around to electrical contractors. You get a call from your uncle who owns an electrical contracting company. He wants to bid on your project. You know he’s done good work before, and it may be a good fit for your company. How do you proceed?
   A. You disclose the conflict of interest to your company, and disqualify your uncle’s company
   B. You disclose the conflict of interest to your company, and make the selection based on objective criteria
   C. “You disclose the conflict of interest to your company, and provide your uncle with information that the other bidders don’t have so that he has a better chance of winning the contract”
   D. You do not disclose the conflict of interest, and give your uncle the bid
49. You are managing a software project. You are partway through the project, and your team has just delivered a preliminary version of part of the software. Your team gives a demonstration to the project sponsor and key stakeholders. Later, the sponsor informs you that there is an important client who will be using the software your team is building, and whose needs are not being met. As a result, you must now make a large and expensive change to accommodate that client. What is the BEST explanation for this?

A. The sponsor is being unreasonable
B. The team made a serious mistake and you need to use punishment power to correct it
C. You do not have enough budget to perform the project
D. Stakeholder analysis was not performed adequately

50. Which of the following is NOT an output of the Close Project process?

A. Project closure documents
B. Project management methodology
C. Project files
D. Formal acceptance documentation

51. The scope baseline consists of:

A. The Scope Management Plan, the Project Scope Statement, and the WBS
B. The Scope Management Plan, the Preliminary Scope Statement, and the WBS.
C. The project Scope Statement, WBS and WBS dictionary
D. The Scope Management Plan, the WBS, and the WBS Dictionary

52. You are managing a construction project that is currently being initiated. You met with the sponsors and several important stakeholders, and have started to work on the preliminary scope statement. You’ve documented several key assumptions that have been made, and identified project constraints and initial risks. Before you can finish the preliminary scope statement, you must make a rough order of magnitude estimate of both time and cost, so that the sponsor can allocate the final budget. What’s the range of a rough order of magnitude (ROM) estimate?

A. (-10%) to +10%
B. (-50%) to +100%
C. (-50%) to +50%
D. (-100%) to +200%

53. Which of the following processes is in the Initiating process group?

A. Develop project management plan
B. Scope Definition
C. Activity Definition
D. Develop preliminary scope statement
54. Mary is a project manager at a consulting company. The company regularly builds teams to create products for clients. When the product is delivered, the team is dissolved and assigned to other projects. What kind of organization is she working for?
   A. Projectized  
   B. Weak matrix  
   C. Functional  
   D. Strong Matrix

55. An important part of performing stakeholder analysis is documenting quantifiable expectations. Which of the following expectations is quantifiable?
   A. The project must improve customer satisfaction  
   B. The project should be higher quality  
   C. The project must yield a 15% reduction in part cost  
   D. All stakeholders needs must be satisfied

56. At the close of your project, you measure the customer satisfaction and find that some customer needs were not fully met. Your supervisor asks you what steps you took on your project to improve customer satisfaction. Which subsidiary plan would you consult to determine this information?
   A. Communications management plan  
   B. Staffing management plan  
   C. Quality Management plan  
   D. Risk management plan

57. Customer satisfaction should be measured at the end of the project to maintain long-term relationships. Which of the following is NOT always an aspect of customer satisfaction?
   A. The product meets its stated and unstated requirements  
   B. The product is high quality  
   C. The customer’s needs are met  
   D. The project is profitable
58. “Dave is the project manager for a construction project that is building a gazebo. When the project first started, he met with the stakeholders to define the scope. The sponsors mentioned that the gazebo is a really important part of their daughter’s wedding ceremony that was planned for 7 months from then. In fact, they said that if the gazebo couldn’t be completed in 7 months, it wouldn’t be worth it for them to even start the project. Dave wrote down the 7-month deadline to put in his Project Scope Statement. In which section of the document did the deadline appear?”
   A. Project Constraints  
   B. Project Deliverables  
   C. Project Objectives  
   D. Project Assumptions

59. Which of the following is a “hygiene factor” under Herzberg’s Motivation-Hygiene Theory?
   A. Recognition for excellent work  
   B. Self-actualization  
   C. Clean clothing  
   D. Good relations with coworkers and managers

60. A bar chart shows the number and type of resources you need throughout your project is called a ____________.
   A. Organizational Chart  
   B. Resource histogram  
   C. Resource Schedule  
   D. Staffing Timetable

61. You have identified an opportunity to potentially increase the project’s value. Which of the following is an example of enhancing that opportunity?
   A. By taking additional actions, you increase the potential reward without reducing its probability  
   B. By forming a partnership with another company, the project’s value will increase for both companies  
   C. By taking out insurance, you can reduce potential costs to the project  
   D. By documenting the opportunity in the register, you can keep track of it and ensure it gets exploited
62. Which of the following best describes the Plan-Do-Check-Act cycle?
   A. Invented by Joseph Juran, it’s a way of tracking how soon defects are found in your process
   B. Made popular by Phillip Crosby in the 1980s, it’s a way of measuring your product versus its requirements
   C. Also called Deming Cycle, it’s a method of making small changes and measuring the impact before you make wholesale changes to a process
   D. It means that you plan your project, then do it, then test it, and then release it.

63. You are developing the project charter for a new project. Which of the following is NOT part of the enterprise environmental factors?
   A. Knowledge of which departments in your company typically work on projects
   B. Lessons learned from previous projects
   C. The work authorization system
   D. Government and industry standards that affect your project

64. You are managing a construction project to install new door frames in an office building. You planned on spending $12,500 on the project, but your costs are higher than expected, and now you’re afraid that your project is spending too much money. What number tells you the difference between the amount of money you planned on spending and what you’ve actually spent so far on the project?
   A. CV
   B. AC
   C. SV
   D. VAC

65. Tom is the project manager on a construction project. Midway through his project, he realizes that there’s a problem with the lumber they’ve been using in a few rooms and they’re going to have to tear down some of the work they’ve done and rebuild. One of his team members suggests that the defect isn’t bad enough to cause all of that re-work. Tom says that he’s worked on a project that made this same mistake before and they ended up having to redo the work when inspectors looked at the house. He convinces the team member that it’s probably better to fix it now than later. What kind of power is he using to make the decision?
   A. Legitimate
   B. Referent
   C. Reward
   D. Expert
66. Which of the following is NOT one of the most common sources of project conflict?
   A. Schedules  
   B. Priorities  
   C. Resources  
   D. Costs

67. Your company’s quality assurance department has performed a quality audit on your project. They have found that your team has implemented something inefficiently, and that could lead to defects. What’s the NEXT thing that should happen on your project?
   A. You work with the quality department to implement a change to the way your team does their work
   B. Your document recommended actions and submit them to the change control board
   C. You add the results of the audit to the lessons learned
   D. You meet with the manager of the quality assurance department to figure out the root cause of the problem

68. A junior project manager at your company does not know how to perform earned value analysis. You spend a weekend with him to teach him how to do this. This is an example of:
   A. Contributing to the project management body of knowledge
   B. Fraternizing, and should be discouraged
   C. Unpaid overtime
   D. Giving access to proprietary information, and should be reported to PMI

69. Your client has terminated your project before it is complete. Which of the following is true?
   A. You must stop all work and release the team immediately
   B. You must keep the team working on the project to give your senior management time to talk to the client
   C. You must work with the team to document the lessons learned
   D. You must update the project management plan to reflect this change

70. When you look at a control chart that measures defects in the product produced by your project, you find that seven values are showing up below the mean on the chart. What should you do?
   A. Look into the process that is being measured. There’s probably a problem there
   B. Ignore the anomaly. This is the rule of seven, so statistically the data doesn’t matter
   C. This means that the mean is too high.
   D. You should adjust your lower control limit – the values indicate a problem with where the limits have been set.
71. A project manager uses a facilitator to gather opinions from experts anonymously. What tool or technique of Risk Identification is being performed?
   A. Brainstorming
   B. Delphi Technique
   C. Interviews
   D. SWOT Analysis

72. You have just been authorized to manage a new project for your company. Which of the following BEST describes your first action?
   A. Create the work breakdown structure
   B. Develop the project management plan
   C. Develop the project charter
   D. Create the preliminary scope statement

73. You’re the project manager on a software project that is planning out various approaches to technical work. There’s a 20% chance that a component you are going to license will be difficult to integrate and cost $3000 in rework and delays. There’s also a 40% chance that the component will save $10,000 in time and effort that would have been used to build the component from scratch. What’s the EMV for these two possibilities?
   A. $3,400
   B. $13,000
   C. $7,000
   D. ($600)

74. You are managing a software engineering project, when two team members come to you with a conflict. The lead developer has identified an important project risk: you have a subcontractor that may not deliver on time. Another developer doesn’t believe that the risk is likely to happen; however, you consult the lessons learned from previous projects and discover that subcontractors failed to deliver their work on two previous projects. You decide that the risk is too big; you terminate the contract with the subcontractor, and instead hire additional developers to build the component. Both team members agree that this has eliminated the risk. Which of the following BEST describes this scenario?
   A. Avoidance
   B. Transference
   C. Mitigation
   D. Acceptance
75. **Which of the following BEST describes the contents of a WBS Dictionary entry?**

A. The definition of the work package including its net present value.
B. Work package ID and name, Statement of Work, Responsible Organization, Schedule Milestones, Quality Requirements, Code of Account Identifier, Required Resources, Cost Estimate
C. Work Package ID and Name, Statement of Work, Required Resources, and Monte Carlo Analysis
D. Work Package ID and Name, Statement of Work, Risk Register, Earned Value Calculation, Scheduled Complete Date, and Cost

76. **Two of your project team members approach you with a conflict that they are having with each other over the technical approach to their work. One of the two people is very aggressive, and tries to get you to make a decision quickly. The other team member is quiet, and seems less willing to talk about the issue. The conflict is starting to cause delays, and you need to reach a decision quickly. What's the BEST approach to solving this conflict?**

A. Confront the issue, even though one team member is hesitant
B. Tell the team members that they need to work this out quickly, because otherwise the project could face delays
C. Since it’s a technical problem, tell the team members that they should take it to the functional manager
D. Escalate the issue to your manager

77. **Tom is a project manager on an industrial design project. He is always watching when his team members come into the office, when they take their breaks and when they leave. He periodically walks around the office to be sure that everyone is doing work when they are at their desks and he insists that he make every project decision, even minor ones. What kind of manager is he?**

A. Theory Y
B. Cost cutter
C. Effective
D. Theory X
78. You are the project manager on a construction project. As you’re planning out the work your team will do, you divide up all of the work into work packages and create a WBS that shows how they fit into categories. For each one of the work packages, you write down details such as initial estimates and information about what account it should be billed against. Where do you store all of that information?
   A. WBS dictionary
   B. Scope Management Plan
   C. WBS
   D. Project Scope Statement

79. You are managing a project with an EV of $15,000, PV of $12,000 and AC of $11,000. How would you BEST describe this project?
   A. The project is ahead of schedule and within budget
   B. The project is behind schedule and within its budget
   C. The project is ahead of schedule and over its budget
   D. The project is behind schedule and over its budget

80. You are using a Pareto chart to examine the defects that have been found during an inspection of your product. Which process are you performing?
   A. Perform Quality Assurance
   B. Perform Quality Control
   C. Perform Quality Planning
   D. Scope Verification

81. A project manager is faced with two team members who have conflicting opinions. One team member explains her side of the conflict. The other team member responds by saying, “I know you’ll never really listen to my side, so let’s just go with her opinion and get back to work.” This is an example of:
   A. Compromise
   B. Smoothing
   C. Withdrawal
   D. Forcing

82. Complete the following sentence: “The later a defect is found, ________ .”
   A. The more expensive it is to repair.
   B. The easier it is to find
   C. The less important it is to the product
   D. The faster it is to repair
83. Your top team member has performed extremely well, and you want to reward her. She knows that you don’t have enough money in the budget to give her a bonus, so she approaches you and requests an extra day off, even though she is out of vacation days. She asks if she can take one of her sick days, even though the company doesn’t allow that. Which of the following is correct?

A. You should give her the time off, because McLelland’s Achievement Theory states that people need achievement, power, and affiliation to be motivated
B. You should give her the time off, because Expectancy Theory says that you need to give people an expectation of a reward in order to motivate them
C. You should give her the time off, because a Theory Y manager trusts the team
D. You should not give her the time off

84. Which of the following is NOT a tool or technique of Qualitative Risk Analysis?

A. Risk urgency assessment
B. Expected monetary value analysis
C. Probability and impact matrix
D. Risk categorization

85. A new project management software tool has come onto the market. You spend the weekend taking an online tutorial to learn about it. This is an example of:

A. Lessons learned
B. Not paying for copyrighted software
C. Contributing to the project management body of knowledge
D. Enhancing personal professional competence

86. Which of the following is NOT a tool in Risk Identification?

A. Risk Urgency Assessment
B. Brainstorming
C. Delphi technique
D. SWOT Analysis
87. You are managing a software engineering project, when two team members come to you with a conflict. The lead developer has identified an important project risk: you have a subcontractor that may not deliver on time. The team estimates that there is a 40% chance that the subcontractor will fail to deliver. If that happens, it will cost an additional $15,250 to pay your engineers to rewrite the work, and the delay will cost the company $20,000 in lost business. Another team member points out an opportunity to save money in another area to offset the risk: if an existing component can be adapted, it will save the project $4,500 in engineering costs. There is a 65% probability that the team can take advantage of that opportunity. What is the expected monetary value (EMV) of these two things?

A. (-$14,100)  
B. $6,100  
C. (-$11,175)  
D. $39,750

88. Your project team has completed the project work. All of the following must be done before the project can be closed EXCEPT:

A. Get formal acceptance of the deliverables from the customer  
B. Ensure that the schedule baseline has been updated  
C. Make sure the scope of the project was completed  
D. Verify that the product acceptance criteria have been met

89. During contract closure, a procurement audit includes all of the following EXCEPT:

A. Using the payment system to process consideration as per terms of the contract  
B. Reviewing the contract terms to ensure that they have all been met  
C. Identifying successes and failures that should be recognized  
D. Documenting lessons learned

90. You are reviewing performance goals to figure out how much bonus to pay to your team members. What document would you consult to find your team’s bonus plan?

A. The reward and recognition plan  
B. The staffing management plan  
C. The human resource management plan  
D. The project’s budget
91. You’re managing a construction project to install several hundred air conditioner panels in a new office building. Every floor has identical panels. The customer, a construction contracting company, has provided specifications for the installations. The team is using a process to install and verify each panel. As the team completes each panel, your team’s quality control inspector measures it and adds a data point to a control chart. You examine the control chart and discover that the process is out of control. Which of the following BEST describes what you found on the control chart?

A. At least one point is outside the control limits
B. At least two consecutive measurements are either above or below the mean but within the control limits
C. At least seven measurements are within the control limits
D. At least one point is above or below the mean

92. Your team has identified a risk with some of the chemicals you are using on your highway construction project. It is really difficult to mix them just right and, based on past projects, you’ve figured out that there’s a high probability that about 14% of the chemical supply will be lost in mixing problems. You decide to buy an extra 15% of the chemicals up front so that you will be prepared for those losses and your project won’t be delayed. Which response strategy are you using?

A. Mitigate
B. Avoid
C. Accept
D. Transfer

93. A project manager is planning the staffing levels that will be needed through the course of her project. She figures out the number of people that will be needed in each role over time and displays that information in a chart as part of her staffing management plan. What is that chart called?

A. Gantt chart
B. Resource histogram
C. RACI matrix
D. Organizational chart

94. Which of the following is NOT part of a typical change control system?

A. Stakeholder analysis
B. Approval
C. Change control board
D. Project management information system
95. A notice sent to a sub-contractor about the contract is an example of which kind of communication?
   A. Informal Verbal
   B. Formal Verbal
   C. Informal Written
   D. Formal written

96. You need to determine when to release resources from your project. Which part of the staffing management plan will be most useful for this?
   A. Safety procedures
   B. Recognition and rewards
   C. Training needs
   D. Resource histogram

97. Which of the following is NOT a type of communication?
   A. Noise
   B. Formal Written
   C. Paralingual
   D. Nonverbal

98. A company is about to begin work on a large construction project to build four new buildings for a bank that wants to open new branches. The sponsor is writing a project charter. She recalls that a previous project the company performed for another bank ran over budget because the team had underestimated the effort required to install the reinforced walls in the vault. The previous project manager had documented the details of the lessons learned from this project. Where should the sponsor look for these lessons learned?
   A. The project records management system
   B. The company’s organizational process assets
   C. The project’s work performance information
   D. The project’s performance reports

99. The customer has reviewed the deliverables of a project and finds that they are acceptable, and must now communicate that acceptance to the project manager. Which form of communication is appropriate?
   A. Formal written
   B. Informal written
   C. Informal verbal
   D. Formal verbal
100. Which of the following is NOT found in a project charter?
   A. Procedures to managing changes to contracts
   B. The business case for the project
   C. Constraints and limitations on the project work
   D. Assumptions that have been made about the project

101. Which of the following best describes the triple constraint?
   A. Cost, schedule, and quality
   B. Cost, schedule and scope
   C. Cost, resources, and schedule
   D. Cost, schedule, and product

102. What is a risk owner?
   A. The person who is responsible for the response plan for the risk.
   B. The person who monitors the watch list that contains the risk.
   C. The person who meets with stakeholders to explain the risk.
   D. The person who makes a risk happen.

103. You are managing a software engineering project, when two team members come to you with a conflict. The lead developer has identified an important project risk: you have a subcontractor that may not deliver on time. Another developer doesn’t believe that the risk is likely to happen; however, you consult the lessons learned from previous projects and discover that subcontractors failed to deliver their work on two previous projects. The lead developer suggests that you have two team members take three weeks to research the component being built by the subcontractor, and come up some initial work that you can fall back on in case that subcontractor does not deliver. You decide to follow the lead developer’s advice over the objections of the other team member. Which of the following BEST describes this scenario?
   A. Transference
   B. Avoidance
   C. Acceptance
   D. Mitigation

104. You are managing a project with AC = $25,100, ETC = $45,600, VAC = -$2,600, BAC = $90,000 and EAC = $92,100. Your sponsor asks you to forecast how much money you expect to spend on the remainder of the project. Which is the BEST estimate to use for this forecast?
   A. $45,600
   B. $87,400
   C. $90,000
   D. $92,100
105. Which is the BEST description of project scope?
A. All of the features and deliverables your project will deliver
B. All of the work you will do to build the product
C. All of the products your project will make
D. All of the people involved in your project

106. Given this portion of the network diagram above, what’s the LF of activity F?
A. 11
B. 16
C. 17
D. 10

107. A team member is showing up late to work and leaving early, and it is affecting the project. The project manager decides that the team member must be reprimanded. Which of the following is the BEST way to handle this situation?
A. At the next team meeting
B. In a private meeting with the team member and his functional manager
C. In a one-on-one meeting with the team member.
D. Over e-mail

108. You are managing an accounting project when a new CFO is hired at your company. He’ll be affected by all accounting projects in your company. What’s the BEST thing for you to do?
A. Show him the Project Charter so that he knows that you are in charge of the project
B. Keep working on the project and get his feedback when he can review the finished product.
C. Work with him to understand the current requirements and determine if he has new ones to add to the project
D. Add him to the communications plan
109. You're managing an industrial design project. Your project is currently in the Initiating phase. The project charter has been created, and you are working on developing the preliminary scope statement. Which of the following is NOT something that you should do?

A. Create the change control system
B. Document initial project risks
C. Identify internal and external constraints
D. Write down any assumptions that you have made

110. Alberto is the project manager of a software implementation project. His company has made an organization wide decision to move to a new accounting and human resources software package. He has read that some projects to implement the same package have resulted in the loss of personnel data when they tried to import it into the new system. He backs up the data so that it could be restored in the event of such a problem but also buys insurance to cover the cost of keying in the data manually if the implementation doesn't work. Which response strategies are Alberto using?

A. Mitigating and Accepting
B. Mitigating and Avoiding
C. Mitigating and Sharing
D. Mitigating and Transferring

111. Rekha is a project manager on a large construction project. Late in the project, her client demands a big change. She assesses the impact of the change and tells the client how much time and money it will cost. But the client says that he doesn’t have the time or budget to allow the change. What’s the BEST way for Rekha to handle this situation?

A. Have her senior managers meet with the client to explain the situation
B. Hold a meeting with the client to figure out why he’s asking for the change
C. Do nothing; she’s the project manager, so she sets the rules
D. Have the client find more money for the budget

112. You are conducting a status meeting and monitoring your risk register when you discover a risk that remains even after you implement all of your response strategies. What kind of risk is this and what should you do about it?

A. It’s a secondary risk. You don’t need to worry about it.
B. It’s a residual risk. You need to plan a response strategy for it.
C. It’s a contingency reserve. You should only use it if the first risk occurs.
D. It’s a residual risk. You don’t need to plan a response strategy for it because you’ve already implemented all of the risk responses you can plan for.
113. Rekha is a project manager on a large construction project. Late in the project, her client demands a big change. She assesses the impact of the change and tells the client how much time and money it will cost. But the client won’t allow any change to the schedule and won’t pay anything more for change. Rekha explains that the proposed change is well outside the documented scope of the original work. The client tells Rekha that he doesn’t care what was in the original scope and that she needs to implement the change with no impact to schedule or budget. What conflict resolution technique is the client using?

A. Forcing  
B. Confronting  
C. Withdrawal  
D. Smoothing

114. Which of the following is NOT a tool of the Scope Definition process?

A. Stakeholder Analysis  
B. Alternatives Identification  
C. Constrained Optimization  
D. Product Analysis

115. Which of the following BEST describes the records management system?

A. A system to store contracts and project records for future project managers to reference  
B. A library that stores the lessons learned for past projects  
C. A filing system to store paid invoices  
D. A system to store human resource records, salary information and work performance history

116. A project manager is negotiating with a contractor. Neither has a good idea of how long the project will take, or how much the materials will cost. Which contract type is MOST appropriate for this project?

A. Cost plus fixed fee (CPFF)  
B. Time & Materials  
C. Cost plus percentage of costs (CPPC)  
D. Fixed price (FP)

117. Which is NOT an example of cost of quality?

A. The cost of contracting another company to build part of the product.  
B. The cost of inspecting your product to be sure that it meets requirements  
C. The cost of reviewing documents used to produce your product to be sure that they do not have defects  
D. The cost of training your team on techniques that will help them avoid defects
118. Which of the following is NOT a stakeholder?
A. A project team member
B. A representative from your project team’s union
C. The project sponsors
D. An attorney from your company’s competitor

119. What is the main output of the Scope Definition process?
A. Project scope statement
B. Preliminary Scope Statement
C. Scope Definition
D. Scope Dictionary

120. Paul is a project manager for an industrial design project. The project has a 60% chance of making the company $230,000 over the next year. It has a 40% chance of costing the company $150,000. What’s the project’s EMV?
A. $138,000
B. $60,000
C. $230,000
D. $78,000

121. The project manager for a construction project discovers that the local city council will vote on a zoning change that would open up a new neighborhood to commercial building. She contacts other construction companies in the area that would benefit from the change to ask them to attend the council meeting in order to convince the city council to vote for the change. A “Yes” vote will benefit all of the companies. This is an example of which risk response strategy?
A. Share
B. Mitigate
C. Exploit
D. Enhance

122. You are interviewing new project managers for your company. One of the candidates claims to be a PMP Certified project manager, but you discover that she has never taken the PMP exam. What is the BEST way to handle this situation?
A. Do nothing
B. Report the person to your manager
C. Report the person to PMI
D. Call the police
123. Which of the following types of power is the most effective in leading teams?
   A. Referent
   B. Expert
   C. Reward
   D. Punishment

124. You are being hired to manage a highway construction project for a contractor working for Smith County. The sponsor is a project officer who works for the Smith County municipal government. You have three separate teams working all three shifts, with a separate foreman for each team. Each team has members from two different unions, and each union has its own representative. Who is the BEST person to approve the project charter?
   A. The project manager
   B. The team foreman
   C. The Smith County project officer
   D. The two union representatives

125. Which of the following is NOT an input of the Contract Administration process?
   A. Procurement management plan
   B. Work Performance Information
   C. Contract Management Plan
   D. Selected Sellers

126. You are having lunch with one of your colleagues. He tells you in confidence that he lied about having a PMP certification, and never actually passed the exam. What is the BEST way to handle this situation?
   A. Report the person to his manager
   B. Report the person to PMI
   C. Ask him to tell the truth to his manager
   D. Do nothing because you were told this in confidence

127. Your team has recommended a change to the scope verification process. What’s the first thing you should do?
   A. Analyze the change versus the Project Management plan to see what its impact will be.
   B. Implement the change
   C. Write up a change request
   D. Tell your team that the process has already been decided and they should follow it.
128. As you are executing your project you are constantly checking your risk register to be sure that you have planned responses for all of your risks. At one team status meeting, you find that a lower priority risk has suddenly become more likely. Where do you keep information about low priority risks?
   A. Triggers
   B. Risk Management Plan
   C. Qualitative analysis documents
   D. The watch list

129. Which of the following is NOT one of the triple constraints?
   A. Scope
   B. Quality
   C. Time
   D. Cost

130. You’re managing a project with a schedule performance index (SPI) of 1.07 and a cost performance index (CPI) of 0.94. How would you BEST describe this project?
   A. The project is ahead of schedule and within its budget
   B. The project is behind schedule and within its budget
   C. The project is ahead of its schedule and over its budget
   D. The project is behind schedule and over its budget

131. Which of the following is the BEST example of a reward system?
   A. Everyone will get a bonus of $500 if the project meets its quality goals, $500 if it meets its budget goals, and $600 if it comes in on time.
   B. The team member who works the hardest will receive $1000
   C. The five team members who put in the most hours will get a trip to Disneyland
   D. The team will only get a bonus if the project comes in 50% under budget, schedule and quality metric goals. Even though the team leads know this goal is unrealistic, they agree that it will motivate the team to work harder

132. There are 17 people on a project. How many lines of communication are there?
   A. 105
   B. 112
   C. 68
   D. 136
133. Which of the following project selection methods is NOT a comparative approach (or benefit measurement model)?

A. Murder boards
B. Benefit-to-cost ratios
C. Peer Review
D. Linear programming

134. You’re holding a PMP study group so that you and your coworkers can work together to study for the exam. One person recently took and passed the exam, and has offered to give you all of the questions he can remember. How should you respond?

A. Accept the questions, but to be fair to everyone in the study group you should make sure everyone gets a copy
B. Refuse the offer and report the person to PMI
C. Refuse the offer, but encourage other study group members to make up their own minds
D. Refuse the offer, and report the person to your manager

135. The project charter is typically approved by the project sponsor, although some charters can be approved by key stakeholders instead. Which of the following BEST describes the role of the project sponsor on the project?

A. The sponsor provides funding for the project
B. The sponsor manages the project
C. The sponsor verifies that all of the work was completed
D. The sponsor negotiates all contracts

136. Two of your project team members approach you with a conflict that they are having with each other over the technical approach to their work. One of the two people is very aggressive, and tries to get you to make a decision quickly. The other team member is quiet, and seems less willing to talk about the issue. The conflict is starting to cause delays, and you need to reach a decision quickly. You spend the weekend studying conflict resolution techniques, which is an example of _____.

A. Contributing to the project management body of knowledge
B. Maslow’s Hierarchy of Needs
C. Enhancing personal professional competence
D. Confronting (or problem-solving)
137. You are managing a software project. The stakeholders have found a few requirements that were missed in the initial Project Scope Statement. You put the requested changes through change control and they are approved so you need to update the Scope Statement to include the new work. Where can you find the most updated version of the Scope Statement?
A. In the Document Repository
B. In the Configuration Management System
C. In the Project Management Plan
D. In the Communications Management Plan

138. After a status meeting, one of your team members, John, pulls you aside and tells you that he was insulted by a comment from another team member. He felt that the comment was racist. You meet with the team member who made the comment, Suzanne, but she says that the other team member’s performance has been very poor. She has never made a comment like this before at the company. You review the records, and see that she is correct – he has consistently delivered lower quality work than any other team member. What is the BEST way to handle this situation?
A. Reprimand Suzanne in private for her racist comment, and follow any company policies for reporting racism among employees.
B. At the next team meeting, reprimand John for his poor performance and Suzanne for the racist comment
C. Get John additional help for his poor performance
D. Suzanne has never had this problem before, so she should be given another chance

139. You’re managing a project that is currently executing. You’re evaluating the work being performed by constantly measuring the project performance, and recommending changes, repairs and corrections where necessary. What process are you performing?
A. Integrated Change Control
B. Scope Control
C. Monitor and Control project work
D. Communications Management

140. Which of the following helps you identify the root cause of 80% of the defects in your project using the 80/20 rule?
A. Scatter chart
B. Pareto Chart
C. Control chart
D. Cause-and-effect diagram
141. As you complete each deliverable for your project, you check that it is correct along with your stakeholders and sponsors. Which process are you performing?
   A. Scope Definition
   B. Scope verification
   C. Activity Definition
   D. Scope Control

142. You are managing a project where you work with 7 other team members and two sponsors. How many lines of communications are there between stakeholders on this project?
   A. 21
   B. 36
   C. 54
   D. 45

143. Joe is an excellent programmer. He was promoted to a role of Project Manager because he understands technology better than anyone else in the company. Unfortunately, he is having trouble doing the project management job and his projects are failing. What is this an example of?
   A. Halo effect
   B. Gold plating
   C. Pre-assignment
   D. Ground rules

144. Which of the following describes the contents of a staffing management plan?
   A. Organizational Chart, Training needs, Estimated Labor Cost, and Release Criteria
   B. Sponsor, Organizational Chart, Scope Verification Plan, and Schedule
   C. Resource histogram, Training Needs, Recognition and Rewards, and Release Criteria
   D. RACI Matrix, Organizational Chart, Performance Improvement Plan, and Budget

145. Which of the following is NOT a part of the preliminary scope statement?
   A. A list of requested changes
   B. A list of project deliverables
   C. The project objectives
   D. A rough order of magnitude cost estimate
146. You have been hired by a contractor, who wants you to manage a construction project for one of their clients. The project team has been working for two months, and is 35% done with the job. Two of your team members come to you with a conflict about how to handle the ongoing maintenance for a piece of equipment. You know that they can safely ignore the problem for a while, and you’re concerned that if your project falls behind schedule before next week’s stakeholder meeting, it will cause problems in the future. You tell the two team members that the problem really isn’t as bad as they think it is, and if they take a few days to cool off about it you’ll help them with a solution. This approach to conflict resolution is known as ______.

A. Withdrawal  
B. Compromise  
C. Smoothing  
D. Forcing

147. Which of the following is not true about the Project Charter?

A. It is always created by the project manager  
B. It formally assigns the project manager  
C. It contains external constraints and assumptions  
D. Includes a high level milestone schedule

148. You’re managing a construction project to install several hundred air conditioner panels in a new office building. Every floor has identical panels. The customer, a construction contracting company, has provided specifications for the installations. The team is using a process to install and verify each panel. As the team completes each panel, your team’s quality control inspector measures it and identifies defects. The root cause of each defect is identified. You want to identify the ongoing trends of defective installations. Which is the BEST tool to use for this?

A. Control chart  
B. Fishbone diagram  
C. Run Chart  
D. Pareto chart

149. Which risk analysis tool is used to model your risks on a computer to show random probabilities?

A. Monte Carlo analysis  
B. Computerized risk audit  
C. EMV analysis  
D. Delphi technique
150. You are a project manager for a software project. As you are defining the scope of the work you need to do, you sit down with all of the project’s stakeholders and record all of the requirements you can get from them. Which of the following is NOT a valid requirement from stakeholder analysis?

A. There can be no more than 5% schedule variance on the project
B. The quality of the product must fit within organizational metrics for software quality
C. The budget must be within 10% of our projected cost
D. The work the team does must be better than they did on their last project

151. There have been several rounds of layoffs at your company. Now your project team is worried about their job security, and you’ve noticed that their performance has decreased significantly because of it. This is predicted by which motivational theory?

A. McGregor’s Theory of X and Y
B. Maslow’s Hierarchy of Needs
C. McLellands Achievement Theory
D. Herzberg’s Motivation-Hygiene Theory

152. Which of the following is NOT included in a cost of quality calculation?

A. Project managers time spent creating the project management plan
B. Team members time spent finding and repairing defects
C. Quality managers time spent writing quality standards
D. Team members time spent reviewing specifications, plans and other documents

153. Which of the following contracts has the MOST risk for the seller?

A. Cost plus fixed fee (CPFF)
B. Fixed price (FP)
C. Time and Materials (T&M)
D. Cost plus percentage of costs (CPPC)

154. You are managing an industrial design project for an important client. Two of your team members have a disagreement on project priorities. One person wants to do certain activities first, while the other feels they should be left until the end of the project. You work with both people to forge a compromise where those activities are neither first nor last, but instead done in the middle of the project. Nobody is particularly unhappy with this solution. Another name for a compromise is a _____.

A. Lose-lose solution
B. Win-win solution
C. Win-lose solution
D. Standoff solution
155. A project manager on a construction project includes a line item in the budget for insurance for the equipment and job site. This is an example of _____.
   A. Mitigation
   B. Avoidance
   C. Acceptance
   D. Transference

156. What is the order of the Procurement Management processes?
   A. Plan Purchases and Acquisitions, Plan Contracting, Select Sellers, Request Seller Responses, Contract Administration, Contract Closure
   B. Plan Purchases and Acquisitions, Plan Contracting, Request Seller Responses, Select Sellers, Contract Administration, Contract Closure
   C. Plan Purchases and Acquisitions, Plan Contracting, Contract Administration, Request Seller Responses, Select Sellers, Contract Closure
   D. Plan Contracting, Plan Purchases and Acquisitions, Request Seller Responses, Select Sellers, Contract Administration, Contract Closure

157. A project manager is creating a report of the final status of a closed project to the stakeholders. Which of the following is NOT used in a final project report to communicate the status of a project?
   A. Variance information
   B. Lessons learned
   C. Scope baseline
   D. Status of deliverables

158. You are the project manager for a railroad construction project. Your sponsor has asked you for a forecast for the cost of project completion. Which of the following is the BEST metric to use for forecasting?
   A. ETC and VAC
   B. EV and AC
   C. SV and CV
   D. SPI and CPI

159. Information about the project must be distributed to all stakeholders. Which of the following process outputs is used to report the status and cost of project activities?
   A. Issue logs
   B. Work performance information
   C. Status reports
   D. Project records
160. A company uses a management technique that employs quality assurance techniques to continuously improve all processes. This is called _____.

A. Just In Time Management
B. Ishikawa Diagrams
C. Inspection
D. Kaizen

161. Your project has a virtual team. Half of your team members are located in another country, where they are working for a subcontractor. The subcontractor’s team members speak a different dialect of English than your team does. After a conference call, two of your team members make jokes about the way your subcontractor’s team members speak. What is the BEST way to handle this situation?

A. Correct the team members individually, and hold a training session for your team to help remove communications barriers
B. Immediately correct the two people in front of the rest of the team
C. Report the team members to senior management and recommend that they be punished
D. Remove noise from the communication by contacting the subcontractor and requesting that the team adjust the way they speak

162. Mike is a project manager for an IT technology implementation project. He is using an Ishikawa diagram to figure out what could cause potential risks on his project. Which process is he doing?

A. Qualitative Analysis
B. Quality Control
C. Risk Identification
D. Risk Response Planning

163. Amit is the manager of a software project. His client has agreed on a Project Scope Statement at the beginning of the project, but whenever the client verifies deliverables, he comes up with features that he would like to add into the product. Amit is working with the client to find what requirements were missed in the planning stages of the project and how to plan better in the future. What is the BEST description of his project’s current situation?

A. Gold plating
B. Alternatives analysis
C. Schedule variance
D. Scope creep
164. You’re holding a PMP training seminar for people in your company to help them obtain enough hours to qualify to take the PMP exam. This is an example of _____.
   A. Organizational process assets
   B. Contributing to the project management body of knowledge
   C. Cheating, which should be reported to PMI
   D. Lessons learned

165. You are managing a construction project to install wiring in an office building. You discover that one of your team members has taken a box of cable from the job site so he can wire his attic. What is the BEST way to respond?
   A. Do nothing
   B. Call the police
   C. Report the team member to your manager
   D. Report the team member to PMI

166. You are working with potential sponsors to determine which project your company will pursue. Based on the benefit-to-cost (BCR) ratios, which of the following four projects should you recommend?
   A. Project A has a BCR of 5:2
   B. Project B has a BCR of 5:4
   C. Project C has a BCR of 3:1
   D. Project D has a BCR of 2:1

167. What are the 5 kinds of power?
   A. Legitimate, expert, reward, political, and bargaining
   B. Legitimate, expert, reward, referent, and punishment
   C. Legitimate, expert, reward, political, and punishment
   D. Legitimate, expert, reward, economic, and bargaining

168. You’re managing a software project. Your team has discovered a problem, and as a result you’ve requested a change. The change will cost the project an extra three weeks, but without it several stakeholders might have problems with the final product. What’s the NEXT thing that you should do?
   A. Instruct the team to make the change
   B. Call a meeting with each stakeholder to figure out whether or not to make the change
   C. Don’t make the change because it will delay the project
   D. Document the change and its impact, and put it through the change control system
169. Which of the following is NOT part of the Contract Closure process?
   A. Obtaining formal acceptance of all deliverables from all stakeholders
   B. An audit to verify that all of the legal obligations have been met
   C. Making sure all invoices have been paid
   D. Writing down lessons learned

170. Which of the following are valid ways to breakdown the work in a WBS?
   A. By risk or quality metric
   B. By product feature or unit of work
   C. By project phase or project deliverable
   D. By charge code or initial estimate

171. Which of the following is an output of Direct and Manage Project Execution?
   A. Work performance information
   B. Statement of Work
   C. Preliminary Scope Statement
   D. Contract

172. You are working on a construction project. You, your team, and your senior manager all feel that the work is complete. Your stakeholders have communicated their final acceptance of the project. You are now meeting with your team to update the organizational process assets with a record of knowledge gained about the project to help future project managers with their projects. This is BEST described as _____.
   A. Project records
   B. Lessons learned
   C. Project management information system (PMIS)
   D. Work performance information

173. Which of the following tools is used to document the lessons that were learned when the contract was administered?
   A. Procurement audit
   B. Quality audit
   C. Buyer-conducted performance review
   D. Contract review
174. You are managing a project to build a new wing onto a local school building over a summer break. One night, the school and your construction site are destroyed by a tornado. Your client demands that you continue work despite the disaster, but you consult the contract, and find a clause that states that you are not responsible for any more work. This is referred to as _____.
   A. An "act of God" clause
   B. Mitigation
   C. An ex parte communication
   D. A force majeure clause

175. A project manager is running into problems with the team. People are repeatedly running into trouble over seemingly small problems: who takes notes at meetings, what dress is appropriate for the office, who people need to notify when they take a day off. The problems started out small, but as more people run into more problems the situation is rapidly escalating. This situation is most likely caused by a lack of _____.
   A. Ground rules
   B. Sensitivity training
   C. Common courtesy
   D. A reward system

176. Which of the following BEST describes when you perform the Monitor and Control Project Work process?
   A. As soon as every deliverable is completed
   B. Continuously throughout the project
   C. At scheduled milestones or intervals during the project
   D. At the end of every project phase

177. Which of the following is NOT an output of Monitor & Control Project Work?
   A. Requested changes
   B. Recommended defect repair
   C. Recommended preventive and corrective actions
   D. Approved changes
178. You are the project manager of a software project. Two developers, Bill and Alfredo, are having an argument about how to implement a feature. Bill thinks that it’s more important that the project get done quickly, so he’s suggesting that you re-use some work that’s been done on a previous project to get started. Alfredo thinks that that work doesn’t apply to this project and will just waste time. Bill is almost always right about these things and he’s very influential on the team, so it’s important that you keep him happy. What should you do?

A. Since you do want to get the project done quickly, you side with Bill
B. Call a meeting to hear both sides of the situation and decide in favor of the solution that is best supported by objective evidence.
C. Side with Alfredo. It could end up taking longer in the end.
D. Call a meeting in private with Bill to hear more about his position

179. Which of the following is NOT an example of a deliverable?

A. Parametric estimating
B. Project Management Plan
C. Project Schedule
D. Work Breakdown Structure

180. Which is NOT an input to the Create WBS process?

A. Project Scope Statement
B. WBS Dictionary
C. Organizational Process Assets
D. Scope Management Plan

181. Which of the following is the correct order of actions that you take during the Closing processes?

A. Get formal acceptance, release the team, write lessons learned, close the contract
B. Write lessons learned, release the team, get formal acceptance, close the contract
C. Get formal acceptance, close the contract, write lessons learned, release the team
D. Get formal acceptance, write lessons learned, release the team, close the contract

182. At the beginning of the project, you hold a meeting with all of the stakeholders in your project in order to figure out how everyone will communicate as the work goes on. Which of the following terms best describes that meeting?

A. Kick off meeting
B. Qualitative Analysis
C. Status meeting
D. Communication Plan meeting
183. You are managing a project with 23 team members and six key stakeholders. Two team members identify a problem with the current approach. Addressing that problem will require changes to the project plan and its subsidiary plans. One of the stakeholders previously indicated that any delays are unacceptable, and your team members tell you that it’s possible the change could cause the team to miss at least one critical deadline. What is the BEST way to deal with this situation?

A. Deny the change because any delays are unacceptable
B. Gather consensus among the team that you should make the change before approaching the stakeholders, so that they can see the team supports making the change.
C. Analyze the impact that the change will have on the work to be done, the schedule and the budget.
D. Make the change to the project plan and subsidiary plans, and ask the team to implement the change.

184. You have been asked to select between three projects. Project A has a net present value of $54,750 and will take six months to complete. Project B has a net present value of $85,100 and will take two years to complete. Project C has a net present value of $15,000 and a benefit cost ratio of 5:2. Which project should you choose?

A. Project A
B. Project B
C. Project C
D. There is not enough information to decide

185. Which of the following is a defect?

A. A mistake made by a team member on the job
B. A change that the team needs to make in how they do the work
C. A project management plan that does not meet its requirements
D. A change request that’s been rejected by the change control board

186. A project manager is faced with two team members who have conflicting opinions. One team member explains her side of the conflict, and presents a possible solution. But before the other team member starts to explain his side of things, the project manager says, “I’ve heard enough, and I’ve decided to go with the solution I’ve heard.” This is an example of _____.

A. Withdrawal
B. Compromise
C. Smoothing
D. Forcing
187. As you determine the requirements, constraints and assumptions for the project you record them in which document?
   A. Project Scope Statement
   B. Project Management Plan
   C. Project Charter
   D. Communications Management Plan

188. You’ve been hired by a large consulting firm to evaluate a software project for them. You have access to the CPI and EV for the project, but not the AC. The CPI is .92, and the EV is $172,500. How much money has actually been spent on the project?
   A. $187,500
   B. $158,700
   C. $172,500
   D. There is not enough information to calculate the actual cost

189. Approved changes are implemented in which process?
   A. Monitor and Control Project Work
   B. Direct and manage project execution
   C. Integrated Change Control
   D. Develop Project Management Plan

190. You’ve been hired by a large consulting firm to lead an accounting project. You determine the needs of the project and divide the work up into work packages so that you can show how all of it fits into categories. What are you creating?
   A. A WBS
   B. A schedule
   C. A Project Scope Statement
   D. A contract

191. Over half of conflicts on projects are caused by _____.
   A. Bad habits, defects, technology
   B. Budget, carelessness, personalities
   C. Technology, money, personalities
   D. Resources, priorities, schedules
192. Which of the following is NOT a tool or technique of Risk Monitoring and Control?
A. Bringing in an outside party to review your risk response start
B. Revisiting your risk register to review and reassess risks
C. Using Earned Value analysis to find variances that point to potential project problems
D. Gathering the information about how the work is being performed

193. You work for a consulting company and your team has implemented an approved scope change on your project. You need to inform your client that the change has been made. What’s the best form of communication to use for this?
A. Formal written
B. Formal verbal
C. Informal written
D. Informal verbal

194. Which of the following is NOT typically found in a project charter?
A. Project requirements
B. Work packages decomposed into activities
C. Authorization for a project manager to work on a project
D. An initial set of schedule milestones

195. What are the strategies for dealing with positive risks?
A. Avoid, mitigate, transfer, accept
B. Transfer, mitigate, avoid, exploit
C. Exploit, share, enhance, accept
D. Mitigate, enhance, exploit, accept

196. In which process do you create the Risk Breakdown Structure?
A. Risk Identification
B. Risk Response Planning
C. Qualitative Analysis
D. Risk Management Planning

197. Your project just completed, and one of your subcontractors has sent you floor seats to the next big hockey game to thank you for your business. What is the BEST way to respond?
A. Thank the subcontractor, but politely refuse the gift
B. Thank the subcontractor, but do not give him preference in the next RFP
C. Ask for tickets for the entire team, so that it is fair to everyone
D. Report the subcontractor to PMI
198. A project manager discovers that a project problem has occurred. The problem was never discussed during risk planning activities or added to the risk register, and it will now cost the project money. What is the BEST response?

A. Don't take any action, just accept that there's a problem that the team did not plan for
B. Use the management reserve to cover the costs of the problem
C. Stop all project activity and approach senior management for advice
D. Add the risk to the risk register and gather information about its probability and impact

199. You are managing a large construction project that's been broken down into sub-projects (or phases). Each of these sub-projects is scheduled to take between three and six months to complete. At the end of each sub-project, you plan to go through the closing processes and document lessons learned. Which of the following BEST describes what you must do at the beginning of each sub-project or phase?

A. Develop the preliminary scope statement for the phase
B. Make sure you don't involve the team, to avoid introducing too much project management overhead
C. Use the Earned Value Technique to decide whether or not to finish the project
D. Release all resources from the project and contact sellers to renegotiate all contracts

200. Which of the following is NOT an output of the Manage Stakeholders process?

A. Deliverables
B. Approved corrective actions
C. Updates to the project management plan
D. Organizational process asset updates
1. **D** *(Only one person needs to approve the Project Management Plan and that’s the Project Manager)*

**Explanation:** It’s not enough that the Project Manager approves of the Project Management Plan; it needs to be approved by all of the stakeholders in the project. Everyone on the team should feel comfortable with the processes that are going to be used to do the work.

2. **C** *(Perform Quality Assurance)*

**Explanation:** Joe is doing root-cause analysis on process problems, that’s Quality Assurance. Remember, Quality control is when you are trying to find problems in your work products through inspection. Quality Assurance is when you are looking at the way your process affects the quality of the work you are doing.

3. **A** *(RACI matrix)*

**Explanation:** The RACI matrix shows roles and responsibilities on your project. RACI stands for Responsible, Accountable, Consult, Inform. Some people on your project will be responsible for activities, others might be accountable for them. The RACI matrix is a table that shows people and how they relate to the work that is being done.

4. **B** *(Update the scope and schedule baselines to reflect the approved change.)*

**Explanation:** When a change has been approved you always need to update the baseline and then implement the change. That way, you will be sure to track your performance versus new scope and schedule expectations and not the old ones.

5. **D** *(Inform the subcontractor that they must adopt a non-discriminatory policy or you will be forced to terminate the contract and find a subcontractor that does not discriminate against women.)*

**Explanation:** Sexism, racism or other discrimination should never be tolerated, no matter what the circumstances. You must separate your team from discriminatory practices, even if those practices are normal in the country where you’re working.

6. **A** *(The project scope management plan)*

**Explanation:** The project scope management plan is a really important tool in your project. It tells you exactly how you’ll create the project scope, define the WBS, verify that the work has been done, and make changes to the scope. But it doesn't tell you about specific assumptions that you and the team have made, or constraints on your project. To find those, you should look in the charter and preliminary scope statement - and talk to the stakeholders, because they’ll definitely tell you about constraints on your project.

7. **B** *(When defining the project scope)*

**Explanation:** Stakeholder Analysis is one of the tools and techniques of the Scope Definition process. And that shouldn’t really be a surprise. After all, the goal of stakeholder
analysis is to write down the needs of your stakeholders. And when is it most important to figure out what your stakeholders need? When you’re defining the scope of the project work!

8.  B  (Figure out the impact on the scope of the work and the cost before you write up the change request)
   Explanation: Just because the change will help the project’s time line doesn’t mean that it will be an overall benefit to the project. It’s important to check how the project will impact the other two constraints as part of your change request. Once you know all the facts about the change, the change control board can make an informed decision about how to proceed.

9.  D  (When the product is being designed)
   Explanation: The most expensive defects are the ones introduced when the product is being designed. This is a little counter intuitive at first, but it really makes sense once you think about how projects are run. If your team introduces a defect into a product while it’s being assembled, then they have to go back and fix it. But if there’s a flaw in the design, then you have to halt production and go back and figure out all the things that flaw affected. You may have to order new parts, reassemble components, and maybe even go back and redesign the product from the ground up.

10.  C  ($59,210)
     Explanation: This question is asking you to create a forecast using estimate to complete (ETC), which uses CPI to project how much money is likely to be spent for the rest of the project. The first step is to plug the numbers into the formula \( EAC = \frac{BAC}{CPI} \), which yields \( EAC = \frac{80,000}{.95} = $84,210 \). That’s how much money you’re likely to spend on the project. Now you can figure out ETC = EAC - AC = $84,210 - $25,000 = $59,210.

11.  A  (Taking a deliverable and breaking it down into the smaller work packages so that it can be organized and planned)
     Explanation: Decomposition is the main tool for creating the WBS. It just means breaking the work down into smaller and smaller pieces based on how your company does the work until it is small enough to categorize and organize hierarchically.

12.  D  (A product that satisfies the requirements of the people who pay for it.)
     Explanation: Quality management is all about making sure that the product you are building conforms to your customer’s requirements. If you have done a good job of gathering and understanding those requirements, all of the measurements you take on your project should help you see if what you are building will make your clients satisfied in the end.
13. C  (Communications Management Plan)

**Explanation:** The Communications Management Plan defines all of the processes that will be used for communication on the project.

14. B  (Work authorization system)

**Explanation:** The work authorization system is a part of your company’s Enterprise Environmental Factors, and it’s generally part of any change control system. It defines how work is assigned to people. If work needs to be approved by specific managers, the work authorization system will make sure that the right people are notified when a staff member’s work assignments change.

15. B  (Select the company with the lowest bid)

**Explanation:** There are a few really important ethical issues in this question. Your senior management was clear about the rules: go with the lowest bidder. And that’s what you should do. But on top of that, you shouldn’t choose your sellers based on perks that you’ll get - that’s called a bribe. And you should always refuse bribes.

16. D  (Quality audits)

**Explanation:** Quality audits are when your company reviews your project to make sure that you are following all of the processes in your company correctly. They are a tool of the Perform Quality Assurance process.

17. A  (Pay the police for private protection services, because it is customary in the country they are operating in)

**Explanation:** Some questions on the exam might ask you about how to operate in another country. In this case, the question is about whether or not something is a bribe. Clearly, if it’s a bribe, you can’t pay it. But is it? If a payment to a government official (or anyone else) is customary, then it’s not a bribe. You should go ahead and pay the police - as long as it’s acceptable and legal in that country.

18. C  (Confronting)

**Explanation:** Confronting means figuring out the cause of the problem and fixing it. That’s the best way to be sure that the right decision is made.

19. D  (Recommended Defect Repairs)

**Explanation:** The most important part of the Perform Quality Control process is that your team has to inspect each deliverable in order to verify that it meets its requirements. So what do you need to do that? Well, obviously you need the deliverables! And checklists are really useful too, because they help you inspect each deliverable. You need work performance information, because that tells you how well the team is doing the job. But Recommended Defect Repairs aren’t an input - they’re the output!
20. **B**  (Call a meeting with the client to understand exactly what is unacceptable in the product and try to figure out what went wrong along the way.)

**Explanation:** You can't do anything about the problem until you understand it. You should meet with the client to get a better understanding of what went wrong and why the product is not meeting their needs.

21. **A**  (Add the risk to the risk register and gather information about its probability and impact)

**Explanation:** Your risk register is one of the most important project management tools that you have - that's why you review it and go over your risks at every meeting. Any time you come across a new risk, the first thing you should do is document it in the risk register. It's really easy to lose track of risks, especially when you're running a big project. By adding every risk to the register, you make sure that you don't forget about any of them. So once you've identified the risk, what's the next step? You analyze the impact and probability of the risk! That's what the Qualitative Risk Analysis process is for. You shouldn't take any other action until you've analyzed the risk. The reason is that it might turn out that the risk is very unlikely, and there might be another risk with a higher probability and larger impact that deserves your attention.

22. **C**  (Templates)

**Explanation:** Tom is using a Template. As your company completes projects, the documents created along the way are stored in an Organizational Process Asset library. The WBS's from those past projects can be a great way to be sure that you are thinking of all of the work that you will need to do from the very beginning. Your project will never match the old WBS exactly, but there could be work packages listed there that you might not have thought of on your own but really are necessary in your project.

23. **A**  (It authorizes the project manager to work on the project)

**Explanation:** The project charter does several important things: it lays out the project requirements, describes an initial summary milestone schedule, documents the business case and identifies initial risks, assumptions and constraints. But the most important thing that a project charter does is that it identifies the project manager, and assigns him or her the authority necessary to get the job done.

24. **D**  (Call a meeting with the QA manager to try to figure out why he suggested those candidates and how the two of you can work together to find team members with suitable skills and interests for your team)

**Explanation:** You need to figure out the root cause of the problem if you are going to find a lasting solution to it. The best choice is to meet with the manager and understand why he offered the team members to you and what you can do to work together to find the right people for your team. It's possible that he has some information about those staff members that make them a good fit after all.
25. **A** (The project has reached the point of total assumption)

**Explanation:** The point of total assumption is the point at which the seller assumes the costs. In a fixed price contract, this is the point where the costs have gotten so large that the seller basically runs out of money from the contract and has to start paying the costs.

26. **D** (Formal written)

**Explanation:** All project reports must be communicated as formal written documents. Not only that, but anything that has to do with a contract DEFINITELY needs to be formal written.

27. **B** (Tell the team member not to use the software, and accept that the project will be late)

**Explanation:** As a certified project management professional, it’s your duty to respect copyrights. Purchased software is copyrighted, and you cannot use it without a license. Ever. If you don’t have the budget to buy it, you can’t use it.

28. **A** (The project is behind schedule and within its budget)

**Explanation:** If you want to evaluate how the project is doing with respect to the schedule and budget, you need to calculate CPI and SPI. The first step is to write down the information you have so far: BAC = $450,000, planned % complete = 45%, actual % complete = 40% and AC = $165,000. Now you can calculate PV = BAC x planned % complete = $450,000 x 45% = $202,500. And you can calculate EV = BAC x actual % complete = $450,000 x 40% = $180,000. Now you have the information you need to calculate CPI and SPI. CPI = EV / AC = $180,000 / $165,000 = 1.09, which is above 1.0 - so your project is within its budget. And you can calculate SPI = EV / PV = $180,000 / $202,500 = .89, which is below 1.0 - so your project is behind schedule.

29. **B** (There is not enough information to decide)

**Explanation:** Sometimes Scope Verification happens before Scope Control, and sometimes it happens afterwards -- and sometimes it happens both before AND afterwards. That actually makes a lot of sense when you look at what those two processes do, and how they interact with each other. You always perform some Scope Verification activities at the end of your project, because you need to verify that the last deliverable produced includes all of the work laid out for it in the Scope Statement. Most projects will almost certainly have gone through Scope Control before then. So it might seem like Scope Control always happens before Scope Verification. But you don’t just perform Scope Verification at the end -- you actually do it after every deliverable is created, to make sure that all the work for that deliverable was done. Not only that, but sometimes Scope Verification fails because your team didn’t do all of the work that was needed -- that’s why Requested Changes are an output of Scope Verification. And if those changes include scope changes, then your project will end up going through Scope Control again -- possibly for the first time in the project, if this is the first scope change you’ve had to make. So Scope Control
can happen before Scope Verification, but it can also happen afterward as well. That’s why there’s no prescribed order for those two processes: they can happen in any order.

30. D  (Consult the contract and follow its claims administration procedure)
Explanation: When there’s a dispute between a buyer and a seller, that’s called a claim. Most contracts have some language that explains exactly how claims should be resolved - and since it’s in the contract, it’s legally binding, and both the buyer and seller need to follow it. Usually it’s not an option to renegotiate a contract, especially at the end of the project after the work is complete, and lawsuits should only be filed if there are absolutely, positively no other options.

31. C  (Administrative closure means verifying that the project is complete or terminated; contract closure means verifying that the contract terms were satisfied)
Explanation: When you close out a project, there are two main things you need to do: administrative closure and contract closure. Administrative closure means working with the team to make sure that all of your project’s exit criteria are met. If the project was successful, then you need to make sure you have formal acceptance from the stakeholders, and that the product meets its requirements. If the project was terminated early, you still need to store the project documents. And in both cases you need to write lessons learned! Contract closure is what you do to make sure that your contract’s terms are satisfied. If your project went well, then this means making sure that payment was made and all of the clauses of the contract were adhered to. But even if the project got terminated, there may still be some contractual obligations that need to be met.

32. A  (Cost plus percentage of costs (CPPC))
Explanation: Cost-plus contracts are ones where the seller bills the buyer for any costs incurred on the project. A “Cost plus percentage of costs” (CPPC) contract is one where the seller agrees to pay a percentage of the total costs of the project. This is the riskiest kind of contract for the buyer, because if the costs get really high then they’re passed along to the buyer - and the seller doesn’t have any incentive to keep them down!

33. A  (Gold plating)
Explanation: Gold plating is when you or your team add more work to the project that was not requested by the sponsor or client. It is always a bad idea to gold plate a project because the impact is sometimes not immediately known. Sometimes, a feature that might seem really useful to your team is actually a detriment to the client. Gold plated features can also introduce bugs that slow down later development.
34. B  (Accept)
Explanation: This is an example of accepting a risk. The team can't do anything about the weather, so the project manager has accepted the fact that they could end up being delayed by it.

35. D  (On a watch list)
Explanation: A watch list is where you keep risks that don't have a high enough probability or impact to make it into the risk register but still need to be monitored. By recording the risk in a watch list, you will have a reminder to check to be sure that circumstances haven't changed as your project goes on. That should give you enough time to come up with a risk response strategy if circumstances change as time goes on.

36. C  (A bar chart that shows the order of tasks and their resource assignments)
Explanation: The Project Management Plan is not a bar chart (or a Gantt chart). It’s the collection of all of the planning documents you create through all of the knowledge areas within the five process groups. It describes how your project will handle all of the activities associated with your project work.

37. D  (Scope verification)
Explanation: Scope Verification is the Monitoring & Controlling process for the Scope Management knowledge area. It doesn't have anything to do with planning out the scope of the project – you do it as you complete each project phase to make sure that your team has completed all of the project work. Stakeholder analysis and alternatives identification are both tools used in the Scope Definition process to write the Project Scope Statement. Of course, your Scope Statement will need to be approved before you can get to work as well.

38. B  (Cost aggregation)
Explanation: Cost Aggregation is used to build your budget, but it is not a tool for cost estimation. Bottom-up, Parametric, and Analogous estimation techniques are used for both cost and time estimates.

39. A  (At least seven consecutive measurements are either above or below the mean but within the control limits)
Explanation: A control chart is a really valuable tool for visualizing how a process is doing over time. By taking one measurement after another and plotting them on a line chart, you can get a lot of great information about the process. Every control chart has three important lines on it: the mean (or the average of all data points), an upper control limit and a lower control limit. There’s an important rule called the Rule of Seven that helps you interpret control charts. That rule tells you that if you find seven consecutive
measurements that are on the same side of the mean, there's something wrong. That’s because it’s extremely unlikely for seven measurements like that to occur - it’s much more likely that there’s a problem with your process. If you can figure out an improvement to fix that, you’ll have a lot fewer defects to repair later!

40. A  (You must stay within the speed limit, even if you lose the client)
Explanation: The PMP Code of Professional Conduct states that you must follow every law, no matter how trivial, and no matter how serious the consequences are. Any time that you see a question that asks about breaking a law, your answer should always be the choice that doesn't break it - no matter how minor the infraction, and how serious the consequences

41. D  (The staffing management plan for the project that the team is working on)
Explanation: The staffing management plan tells you everything that you need to know about when resources will be released from a project. Since the team you need for your project is currently on another project, that project’s staffing management plan will tell you when they will be released from that project and available for yours.

42. B  (At the start of each phase)
Explanation: If your project is broken up into phases, you should have a Kickoff meeting at the start of each phase. You use that meeting to talk about lessons learned from past projects and establish the way people will communicate as the project work goes on.

43. D  (Performance measurement)
Explanation: Performance measurement is what you’re doing when you look at the work that the team is performing in order to determine whether the project is ahead or behind schedule. A really good way to do that is to use schedule variance (SV) and schedule performance index (SPI) calculations.

44. C  (Write up the change request and take it to the change control board)
Explanation: Once you’ve figured out the impact of the change to your schedule, budget, and scope, the next step is to take the change request to the Change Control Board. If they approve your recommendation, then the request will be approved and you can update your baseline and implement the change.

45. A  (Constraints)
Explanation: When you work with a union then the union contract can have an impact on your project. That means you need to consider the union itself a stakeholder, and when you do your planning you need to make sure any union rules and agreements are considered as constraints.
46. **A** (Stakeholders on the CCB use expert judgment to evaluate the requested change for approval)

**Explanation:** A change control board (or CCB) is a group of people that approves or rejects changes. It usually includes the sponsor, which makes sense because the sponsor is the one funding the project. It’s not the project manager’s job to tell the CCB whether or not to approve a change – they use their expert judgment to figure out whether or not the change is valuable. It IS the project manager’s job to make sure the impact of the change on the triple constraint (time, scope and cost) is evaluated, but that impact analysis should happen BEFORE the change request is sent to the CCB.

47. **D** (War room)

**Explanation:** Co-location means that you have all of your team located in the same room. When you do this, you can increase communication and help them build a sense of community. Sometimes the room the co-located team meets in is called a war room.

48. **B** (You disclose the conflict of interest to your company, and make the selection based on objective criteria)

**Explanation:** Any time there’s a conflict of interest, it’s your duty to disclose it to your company. After that, you should always proceed based on your company’s policies. If there are no specific policies about that, then make sure that the conflict does not affect your decisions.

49. **D** (Stakeholder analysis was not performed adequately)

**Explanation:** Stakeholder analysis means talking to the stakeholders and figuring out their needs, and it’s something that you do when you’re defining the project scope. If there’s an important client who has needs that your project is supposed to fulfill, that client is always a stakeholder. And if your project is not meeting that client’s needs, then you didn’t do a good enough job when you were performing stakeholder analysis!

50. **B** (Project management methodology)

**Explanation:** The project management methodology describes the process that you use to manage your project. It really doesn’t have anything to do with closing the project. The other three answers, however, do! You need project closure documents to show that the project really was closed out. You gather all of the project files together so that they can be archived. And formal acceptance documentation is what you get from your customer that tells you they’ve approved the final product.

51. **C** (The project Scope Statement, WBS and WBS dictionary)

**Explanation:** The scope baseline is made up of the Project Scope Statement and the WBS and the WBS Dictionary. The WBS Dictionary is considered a supporting document to the WBS, so if the WBS were to change, then the dictionary would, too.
52. **B**  
**((-50%) to +100%)**  
**Explanation:** A rough order of magnitude (ROM) estimate is an estimate that is very rough. Typically, you should expect a ROM estimate to be anywhere from half (-50%) to twice (+100%) the actual result. That means that if your ROM estimate for a project is 6 months, then you should expect the actual project to be anywhere from 3 months to 12 months. (That’s what it means for your estimate to be within an order of magnitude.)

53. **D**  
**(Develop preliminary scope statement)**  
**Explanation:** It’s pretty easy to remember which processes are in the Initiating group, because there are only two of them! But more importantly, it’s useful to know what you need to do when you initiate a project. First the project charter needs to be created, which authorizes the project manager to do the work. And then you need to develop the preliminary scope statement, which gives an initial overview of the work that needs to be done so that you can start planning.

54. **A**  
**(Projectized)**  
**Explanation:** Mary is working for a projectized organization. In those companies, the project manager has authority over the team as well as the project.

55. **C**  
**(The project must yield a 15% reduction in part cost)**  
**Explanation:** It’s very hard to figure out whether or not your project is successful unless you can measure that success. That’s why you need to come up with goals that have numbers attached to them – which is what quantifiable means. Of all four answers, only answer C has a goal that you can actually measure.

56. **C**  
**(Quality Management plan)**  
**Explanation:** Customer satisfaction is an important part of modern quality management. Remember, customer satisfaction is about making sure that the people who are paying for the end product are happy with what they get. But the way that you make sure that your customers are happy is by meeting their needs - and you do that by ensuring the product the team builds meets the customer’s requirements. That’s what quality management is all about, and it’s an important reason that you do quality management.

57. **D**  
**(The project is profitable)**  
**Explanation:** Customers can be satisfied even when a project is not profitable - customer satisfaction isn’t always about money. Rather, customer satisfaction is about making sure that the people who are paying for the end product are happy with what they get. When the team gathers requirements for the specification, they try to write down all of the things that the customers want in the product so that you know how to make them happy. Some requirements can be left unstated, too. Those are the ones that are implied by the customer’s explicit needs. In the end, if you fulfill all of your requirements, your customers should be satisfied.
58. A  (Project Constraints)

Explanation: Since the project absolutely must be completed in 7 months for it to be worth doing, the deadline is a constraint. It must be met for the project to be considered successful.

59. D  (Good relations with coworkers and managers)

Explanation: Herzberg's Motivation-Hygiene Theory states that people need things like good working conditions, a satisfying personal life, and good relations with the boss and coworkers - these are called “hygiene factors.” Until people have them, they generally don’t care about “motivation factors” like achievement, recognition, personal growth, or career advancement.

60. B  (Resource histogram)

Explanation: The Resource Histogram is a bar chart that shows your staffing needs over time. If you need more testers in the end of the project than you do while you’re building a product, for example, you can forecast how many you will need and what their skill level needs to be from the beginning. That way, you’ll be sure that they’re available when you need them.

61. A  (By taking additional actions, you increase the potential reward without reducing its probability)

Explanation: There are four things you can do with any opportunity. You can exploit it by making sure you do everything you can to take advantage of it. You can share it by working with another company in a way that gives you a win-win situation. You can enhance it by figuring out a way to increase its value. Or, if there’s no way to take advantage of it, you can just accept it and move on. In this case, taking additional actions that will increase the potential reward is enhancing the opportunity.

62. C  (Also called Deming Cycle, it’s a method of making small changes and measuring the impact before you make wholesale changes to a process)

Explanation: The Plan-Do-Check-Act cycle is a way of making small improvements and testing their impact before you make a change to the process as a whole. It comes from W. Edwards Deming’s work in process improvement.

63. B  (Lessons learned from previous projects)

Explanation: Lessons learned are part of the organizational process assets, not enterprise environmental factors. Your company’s enterprise environmental factors tell you about how your company typically does business - like how your company’s departments are structured, and the regulatory and industry environment your company operates in. An important enterprise environmental factor that you’ll run across when you’re planning a project is the work authorization system. That’s your company’s system to determine who is supposed to be working on what, and when the work should get done.
64. A  (CV)
Explanation: The cost variance (CV) is the difference between the amount of money you planned on spending and the total that you’ve spent so far. This should make sense - if your CV is negative, it means that you’ve blown your budget.

65. D  (Expert)
Explanation: Tom is using expert power. Since he’s been through this problem before, his team is more likely to accept his authority. Expert power is the best form of power to use when making project decisions. The team will respect decisions that are based on experience and expertise.

66. D  (Costs)
Explanation: It’s important to know that resources, schedules and priorities cause 50% of project problems and conflicts. Sure, it’s important for the PMP exam. But even more importantly, if you’re trying to confront a problem by looking for the root cause of a conflict, the odds are that you’ll find that cause in one of those three areas!

67. B  (Your document recommended actions and submit them to the change control board)
Explanation: Quality Audits are when your company reviews your project to see if you are following its processes. The point is to figure out if there are ways to help you be more effective by finding the stuff you are doing on your project that is inefficient or that causes defects. When you find those problem areas, you recommend corrective actions to fix them.

68. A  (Contributing to the project management body of knowledge)
Explanation: Any time you do coaching, mentoring, training or anything else to help others learn about project management, you’re contributing to the project management body of knowledge.

69. C  (You must work with the team to document the lessons learned)
Explanation: Even if a project is shut down before the work is completed, you still need to document the lessons learned and add them to the organizational process assets. In fact, if a project is terminated early, that’s probably the best time to do that! When a project goes seriously wrong, then there are always important lessons that you can learn – even if it wasn’t your fault!

70. A  (Look into the process that is being measured. There’s probably a problem there)
Explanation: Seven values on one side of the mean in a control chart indicate a problem with the process that is being measured.
71. **B**  (Delphi Technique)

Explanation: The Delphi technique is a way to get opinions and ideas from experts. This is a technique that uses a facilitator who uses questionnaires to ask experts about important project risks. They take those answers and circulate them - but each expert is kept anonymous so they can give honest feedback.

72. **D**  (Create the preliminary scope statement)

Explanation: Take a look at the answers to this question. What do you see? A list of processes - “Create WBS”, “Develop Project Management Plan”, “Develop Project Charter” and “Develop Preliminary Scope Statement”. So your job is to figure out which of these processes comes next. So what clues do you have to tell you where you are in the project lifecycle? Well, you’ve just been authorized to manage a new project. Since the project charter is what authorizes a project manager to work on a project, it means that the Develop Project Charter process has just been performed. So which process comes next? The first thing you do after the project charter is signed is perform the Develop Preliminary Scope Statement process.

73. **A**  ($3,400)

Explanation: The expected monetary value (or EMV) of the problems integrating the component is the probability (20%) times the cost ($3,000), but don’t forget that since it’s a risk, that number should be negative. So its EMV is 20% x $3,000 = -$600. The savings from not having to build the component from scratch is an opportunity. It has an EMV of 40% x $10,000 = $4,000. Add them up and you get -$600 + $4,000 = $3,400.

74. **A**  (Avoidance)

Explanation: The best thing that you can do with a risk is avoid it – if you can prevent it from happening, it definitely won’t hurt your project. The easiest way to avoid a risk is to cut it out of your project entirely; in this case, getting rid of the subcontractor avoids the risk.

75. **B**  (Work package ID and name, Statement of Work, Responsible Organization, Schedule Milestones, Quality Requirements, Code of Account Identifier, Required Resources, Cost Estimate)

Explanation: The WBS Dictionary always corresponds to an entry in the WBS by name and Work Package ID. So that’s the easiest way to cross reference the two. The Statement of Work describes the work that will be done. The Responsible Organization is the team or department who will do it. Schedule Milestones are any set dates that will affect the work. The Quality Requirements describe how we will know if the work has been done properly. The Resource and Cost Estimates are just a list of how many people will be needed to do the work and how much it will cost. Answer A couldn’t be right because net present value doesn’t have anything to do with individual work packages. The other options mention Earned Value and Monte Carlo Analysis which have nothing to do with scope management as well.
76. **A**  (Confront the issue, even though one team member is hesitant)

**Explanation:** The best way to resolve any problem is to confront the issue - because “confronting” means figuring out the source of the problem and then resolving the root cause of the conflict. Any time you have an opportunity to confront the problem, you should do it. Remember, one of the most important things that a project manager does is make sure that team conflicts get resolved. Sometimes questions are worded so that the word “confronting” sounds negative. Even when it is, it’s still the best approach to resolving conflicts!

77. **D**  (Theory X)

**Explanation:** Tom is a Theory X manager. He believes that employees need to be watched all of the time and that all of his team members are selfish and unmotivated.

78. **A**  (WBS dictionary)

**Explanation:** The WBS Dictionary is the companion document to the WBS. It gives all the details that you know about each work package in the WBS including estimates and billing information.

79. **A**  (The project is ahead of schedule and within budget)

**Explanation:** This is a calculation question that’s asking you to use SPI and CPI to evaluate your project. Luckily, it’s easy to do that! First calculate SPI = EV / PV = $15,000 / $12,000 = 1.25 - so your project is ahead of schedule. Then calculate CPI = EV / AC = $15,000 / $11,000 = 1.36 - so your project is within its budget.

80. **B**  (Perform Quality Control)

**Explanation:** Whenever you use any of the seven basic tools of quality to examine the results of an inspection of your product, you are performing Quality Control. If you were examining the process your company uses to build multiple projects, you would be performing Quality Assurance.

81. **C**  (Withdrawal)

**Explanation:** Withdrawal happens when someone gives up and walks away from the problem, usually because they’re frustrated or disgusted. If you see a team member doing this, it’s a warning sign that something’s wrong.

82. **A**  (The more expensive it is to repair.)

**Explanation:** The reason we work to do quality planning up front is that it is most expensive to deal with problems if you find them late in the project. The best case is when you never inject the defects in the first place, then it doesn’t cost anything to deal with them. Prevention is always better than inspection.
83. D  (You should not give her the time off)
Explanation: You must always follow your company’s policy - it’s your ethical duty as a project manager. You should find some other way to reward her that is not against your company’s rules.

84. B  (Expected monetary value analysis)
Explanation: Qualitative Risk Analysis is all about figuring out prioritizing each risk, and figuring out its probability and impact. It’s an important part of risk planning. But it’s not about coming up with specific numbers! That’s what Quantitative Risk Analysis is for - and EMV analysis is part of Quantitative (not Qualitative) analysis, because it’s where you assign numeric values to risks.

85. D  (Enhancing personal professional competence)
Explanation: The PMP Code of Professional Conduct tells us that an important part of any project manager’s career is enhancing personal professional competence. This means increasing your knowledge and applying it so that you can improve your ability to manage projects.

86. A  (Risk Urgency Assessment)
Explanation: A Risk Urgency Assessment is a tool of Qualitative Analysis. Risk Identification is all about finding risks. Qualitative Analysis is about ranking them based on what your team thinks their impact and probability will be for your project. (Quantitative Analysis, on the other hand, is about getting the numbers to back up your opinions.)

87. C  ((-$11,175))
Explanation: To calculate the expected monetary value (EMV) of a set of risks and opportunities, multiply each probability by its total cost and add them together. In this question, the cost of the risk is -$15,250 + -$20,000 = -$35,250, so its EMV is 40% x -$35,250 = -$14,100. The value of the opportunity is $4,500 and its probability is 65%, so its EMV is 65% x $4,500 = $2,925. So the total EMV for the two is -$14,100 + $2,925 = -$11,175.

88. B  (Ensure that the schedule baseline has been updated)
Explanation: Before you can close your project, there are a few things you need to do. Remember the acceptance criteria in the scope statement? Well, those criteria need to be met. And you need to get formal written acceptance from the customer. And every work item in the WBS needs to be completed.

89. A  (Using the payment system to process consideration as per terms of the contract)
Explanation: Once you’ve closed out a contract, it’s important to conduct a procurement
audit. This is where you go over everything that happened on the project to figure out the lessons learned, and look for anything that went right or wrong. However, consideration - or payment - is not part of an audit (unless there was a problem processing or paying it).

90. B  *(The staffing management plan)*

**Explanation:** The Staffing Management plan includes a “Reward and Recognition” section that describes how you’ll reward your team for good performance. It also contains training requirements and release criteria.

91. A  *(At least one point is outside the control limits)*

**Explanation:** A control chart is a really valuable tool for visualizing how a process is doing over time. By taking one measurement after another and plotting them on a line chart, you can get a lot of great information about the process. Every control chart has three important lines on it: the mean (or the average of all data points), an upper control limit and a lower control limit. Any time you find a data point that’s either above the upper control limit or below the lower control limit, that tells you that your process is out of control. And that’s a really useful thing to know! It tells you that you need to take a close look at the process and make some change to the way the team does their work.

92. A  *(Mitigate)*

**Explanation:** By buying the extra chemical stock, you are mitigating the risk.

93. B  *(Resource histogram)*

**Explanation:** A Resource histogram is just a way to visualize the number of people in each role that you will need on your project as time goes on. Once you have figured out your schedule and the order of activities, you figure out how many people it’s going to take to do the work and plot that out over time. Then you have a good idea of what the staffing needs of your project will be.

94. A  *(Stakeholder analysis)*

**Explanation:** Change control is how you deal with changes to your project management plan. And a change control system is the set of procedures that lets you make those changes in an organized way. A typical change control system includes a change control board, utilizes a project management information system, and ends with either approval or rejection.

95. D  *(Formal written)*

**Explanation:** Anytime you have any communication having to do with the contract, it’s always formal written communication.
96. **D** (Resource histogram)

   **Explanation:** One of the most important elements of the staffing management plan is the timetable, which tells you who will work on what, and when they will be released from the project. One of the most common ways of showing the timetable is the resource histogram (or staffing histogram). That timetable will let you know exactly when you plan to release your project resources.

97. **A** (Noise)

   **Explanation:** Noise is something that interferes with communication. It's not a communication type.

98. **B** (The company's organizational process assets)

   **Explanation:** Lessons learned from past projects are always part of a company's organizational process assets, and are usually stored in a process asset library. The other three answers are important project tools, but they're not where you find lessons learned.

99. **A** (Formal written)

   **Explanation:** Once your project team is done with the work, it's time to check the deliverables against the scope statement, WBS and scope management plan. If your deliverables have everything in those documents, then they should be acceptable to stakeholders. When all of the deliverables in the scope are done to their satisfaction, then you're done with the project! What comes next? Formal acceptance, which means you have written confirmation from the stakeholders that the deliverables match the requirements and the project management plan. Since this communication is a project document, it's formal written communication.

100. **A** (Procedures to managing changes to contracts)

   **Explanation:** The procedure for managing changes to a contract is found in the contract management plan. The other three answers - the business case, constraints and assumptions - are all things you typically find in a project charter.

101. **B** (Cost, schedule and scope)

   **Explanation:** The triple constraint is cost, schedule, and scope. Any change to one of those constraints affects the other two. It's important to balance all three constraints as a project manager.

102. **A** (The person who is responsible for the response plan for the risk.)

   **Explanation:** Every risk should have a risk owner listed in the register. That person is responsible for keeping the response plan up to date and make sure the right actions are taken if the risk does occur.
103. D  (Mitigation)
Explanation: Risk mitigation means taking some sort of action that will cause a risk, if it materializes, to do as little damage to your project as possible. Having team members spend time doing work to prepare for the risk is a good example of risk mitigation.

104. A  ($45,600)
Explanation: Sometimes you don’t need to do any calculations when you run across a question like this. The question asked you which number to use for a forecast of how much money you expect to spend on the rest of the project. Well, isn’t that the definition of ETC? Since you were given the value of ETC, you could just use that number!

105. B  (All of the work you will do to build the product)
Explanation: Product scope means the features and functions of the product or service being built. Project scope means the work that’s needed to build the product.

106. D  (10)
Explanation: It’s just easy to calculate the late finish (LF) of an activity in a network diagram. Look at the following activity, take its LS (late start), and subtract one. If there’s more than one following activity, use the one with the lowest LS. So for activity F in the question, the following activities are G, with an LS of 17, and H, with an LS of 11. So the LF of F is 11 - 1 = 10.

107. C  (In a one-on-one meeting with the team member.)
Explanation: Punishment power is exactly what it sounds like - you correct a team member for poor behavior. Always remember to do this one-on-one, in person, and in private! Punishing someone in front of peers or superiors is extremely embarrassing, and will be really counterproductive.

108. C  (Work with him to understand the current requirements and determine if he has new ones to add to the project)
Explanation: Since the CFO is affected by your project, that means he’s a stakeholder. The best thing you can do in this situation is get the new stakeholder’s opinion incorporated in the project up front. It’s important that all of the project stakeholders understand the needs and objectives that the project is meant to address. The worst case is to have the stakeholder’s opinion incorporated at the end of the project -- that could mean a lot of re-work or even an entirely unacceptable product.
109. A  (Create the change control system)
Explanation: An important part of initiating the project is identifying any constraints on the project, creating a list of initial project risks, and documenting assumptions that you’ve made so far. If you do this, it will make it much easier to plan your project later on. However, you don’t create the change control system in the Initiating phase - that’s something that you do as part of your project planning activities.

110. D  (Mitigating and Transferring)
Explanation: The Project Manager is mitigating the risk by backing up the data so that it doesn’t get lost. He is transferring it to the insurance company by insuring the company for the cost of re-keying the information.

111. B  (Hold a meeting with the client to figure out why he’s asking for the change)
Explanation: This project is not in good shape. The client has needs that aren’t being met, but there may not be enough time or money to meet them. What’s the project manager going to do? Well, the first thing that you should do any time you have a problem is try to figure out what’s causing it. All of the other answers involved taking some sort of action, and you should never take action until you’ve figured out the root cause of the problem.

112. D  (It’s a residual risk. You don’t need to plan a response strategy for it because you’ve already implemented all of the risk responses you can plan for.)
Explanation: Residual risks are risks that remain even after you have planned for and implemented all of your risk response strategies. They don’t need any further analysis because you have already planned the most complete response strategy you know in dealing with the risk that came before them.

113. A  (Forcing)
Explanation: The client is trying to command Rekha to do what he says even though she has good reasons for not doing it. He isn’t working to solve the problem, he’s just forcing the resolution to go his way.

114. C  (Constrained Optimization)
Explanation: Constrained Optimization doesn’t have anything to do with Scope Definition – it’s a kind of benefit selection method. The other answers are all tools of the Scope Definition process.
115. A  (A system to store contracts and project records for future project managers to reference)
Explanation: The records management system is one of the tools that you use in the Contract Closure process. It’s what you use to store your contracts and any related documents, so that future project managers can refer to them in future projects.

116. B  (Time & Materials)
Explanation: Time and Materials (T&M) contracts are used in labor contracts. In a T&M contract, the seller pays a rate for each of the people working on the team plus their material costs. The “Time” part means that the buyer pays a fixed rate for labor - usually a certain number of dollars per hour. And the “Materials” part means that the buyer also pays for materials, equipment, office space, administrative overhead costs, and anything else that has to be paid for.

117. A  (The cost of contracting another company to build part of the product.)
Explanation: Any activity that helps you find, prevent or fix defects in your product is included in the cost of quality. The activities you do to build the product don’t count towards that number.

118. D  (An attorney from your company’s competitor)
Explanation: A stakeholder is anyone who is affected by the cost, time, or scope of your project. And that includes unions - if you have team members who are in a union, then you always need to consider that union as a stakeholder and make sure their needs are met. However, you don’t need to consider the needs of your company’s competitors.

119. A  (Project scope statement)
Explanation: The Project Scope Statement builds on the Preliminary Scope Statement to define the scope of work for the project. The Project Scope Statement is where everyone comes to a common understanding about the work that needs to be accomplished on the project.

120. D  ($78,000)
Explanation: $230,000 x 0.70 = $ 138,000 savings, and $150,000 x 0.40 = -$60,000 expenses. Add them together and you get $78,000.

121. A  (Share)
The project manager is asking the other companies to help her make this opportunity happen and they can all share in the benefits of it.
122. C  (Report the person to PMI)
Explanation: If you discover that someone claims to have the PMP credential but is not actually certified, you must contact PMI immediately so that they can take action.

123. B  (Expert)
Explanation: The most effective type of power for a project manager is Expert power. That's when your team respects you because they know that you know what you are talking about.

124. C  (The Smith County project officer)
Explanation: Since the Smith County project officer is the sponsor, he's the person who is best suited to signing the charter. A project charter is typically approved and signed by the sponsor. Some projects are approved by key stakeholders, but they are never approved by project managers (since the project manager is only granted authority once the project is signed) or team members.

125. A  (Procurement management plan)
Explanation: Contract Administration is the Monitoring & Controlling process for Procurement Management. It's when you run into a change that has to be made to a specific contract. The key here is that it's only about one specific contract - every contract has its own way of dealing with changes, which is why you consult the Contract Management Plan (which deals with just that one contract), and not the Procurement Management Plan (which deals with the entire Procurement Management area.)

126. B  (Report the person to PMI)
Explanation: If you discover that someone claims to have the PMP credential but is not actually certified, you must contact PMI immediately so that they can take action.

127. A  (Analyze the change versus the Project Management plan to see what its impact will be.)
Explanation: You may get a question on the exam that asks what to do when you encounter a change. You always begin dealing with change by consulting the project management plan.

128. D  (The watch list)
Explanation: Sometimes you'll find that some risks have obviously low probability and impact, so you won't put them in your register. Instead, you can add them to a watch list, which is just a list of risks that you don’t want to forget about, but you don’t need to track as closely. You'll check your watch list from time to time to keep an eye on things.
129. B  (Quality)

Explanation: Every project, regardless of what is being produced or who is doing the work, is affected by the triple constraint of time, scope, and cost. Any time you make a change to one or more of these constraints, it can also affect the other two - and the change can also affect quality, which is NOT one of the constraints. That's why you need to pay attention to all three constraints if you want your project to do well.

130. C  (The project is ahead of its schedule and over its budget)

Explanation: When you're looking at CPI and SPI numbers, remember: lower = loser. If your CPI is below 1.0, then your project is over its budget. If the SPI is below 1.0, then the project is behind schedule. In this case, the project is ahead of schedule, since its SPI is above 1.0. But it's over its budget, because it's got a CPI that's below 1.0.

131. A  (Everyone will get a bonus of $500 if the project meets its quality goals, $500 if it meets its budget goals, and $600 if it comes in on time.)

Explanation: The key to a good bonus system is that it must be achievable and motivate everyone in the team to work toward it. If you are only rewarding one team member or a few people in the group, the rest of the team will not be motivated. Also, making the goals too aggressive can actually de-motivate people.

132. D  (136)

Explanation: The formula for lines of communication is n x (n-1) / 2. So the answer to this one is (17 x 16) / 2 = 136

133. D  (Linear programming)

Explanation: There are two kinds of project selection methods. Benefit measurement models, or comparative methods, are used to compare the benefits and features of projects. Mathematical models use complex formulas to determine which project has the most value to the company. You should get familiar with some of the more common comparative approaches to project selection, like murder boards, benefit-to-cost ratios and peer reviews.

134. B  (Refuse the offer and report the person to PMI)

Explanation: If you find out that someone is cheating on the PMP exam by distributing questions that are on it, you must report that person to PMI immediately. If that person is a PMP certified project manager, he or she will be stripped of his certification.

135. A  (The sponsor provides funding for the project)

Explanation: The project sponsor is the person (or people) that pays for the project. Sometimes this means the sponsor directly provides funding; other times, it means the sponsor is the person who signs the organizational approval to assign resources. Either
way, you can usually tell who the sponsor is by finding the person who can approve or deny the budget.

136.C  (Enhancing personal professional competence)
Explanation: An important part of any project manager’s career is enhancing personal professional competence. This means increasing your knowledge and applying it so that you can improve your ability to manage projects.

137.B  (In the Configuration Management System)
Explanation: The configuration management system is there to be sure that everybody on the team has the most updated version of all of the project documents. Whenever a project document is changed, it is checked into the Configuration Management System so that everyone knows where to go to get the right one.

138.A  (Reprimand Suzanne in private for her racist comment, and follow any company policies for reporting racismamong employees.)
Explanation: Project managers must have a “zero tolerance” policy on racist remarks, or any other cultural insensitivity. If there is an incident involving racism, sexism or any other kind of discrimination, your top priority is to correct that. Every company has a policy that guides how you handle this kind of situation, so a question involving racism will usually involve the company’s policy or HR department.

139.C  (Monitor and Control project work)
Explanation: An important part of making sure that your project goes well is keeping an eye on the work, and that’s what the Monitor & Control Project work process is for. It’s where you constantly evaluate the work being done, and any time you see a problem you recommend changes, defect repairs and preventive and corrective actions.

140.B  (Pareto Chart)
Explanation: Pareto charts plot out the frequency of defects and sort them in descending order. The right axis on the chart shows the cumulative percentage. This helps you figure out which root cause is responsible for the largest number of defects. The 80/20 rule states that 80% of defects are caused by 20% of the root causes you can identify. So if you do something about that small number of causes, you can have a big impact on your project.

141.B  (Scope verification)
Explanation: You need to make sure that what you’re delivering matches what you wrote down in the scope statement. That way, the team never delivers the wrong product to the customer. As you complete each deliverable, you work with the stakeholders and the sponsor to make sure that you did the right work.
142. D  (45)
Explanation: This is a simple application of the lines of communication formula: # lines = \(n \times (n - 1) / 2\). Don't forget to count yourself! There are a total of 10 people - 7 team members, two sponsors and the project manager. So the number of lines is \(10 \times 9 / 2 = 45\).

143. A  (Halo effect)
Explanation: The halo effect is when you put someone in a position they can't handle, just because they're good at another job. Just because Joe is a great programmer, that doesn't mean he'll be a good Project Manager.

144. C  (Resource histogram, Training Needs, Recognition and Rewards, and Release Criteria)
Explanation: The Staffing Management Plan always includes a Resource Histogram, so that should be your first clue about which one of these answers is right. The Resource Histogram shows what kind of resource is needed through each week of your project and how many staff members you need. When planning out your staffing needs, you need to take into account the training it will take to get them up to speed as well as the kinds of incentives you are going to offer for a job well done. Release criteria are important too, but they might not be familiar to you if you don't work in a consulting organization. You need to think about what each staff member needs to get done before they are released to work on other projects.

145. A  (A list of requested changes)
Explanation: The preliminary scope statement contains a preliminary version of the things you see in the scope statement. It shows you an initial description of the work that needs to be done, so that you can begin planning. It does not contain any changes yet, because when you write it, you haven't created any deliverables yet, so there's nothing to change.

146. C  (Smoothing)
Explanation: Smoothing is minimizing the problem, and it can help cool people off while you figure out how to solve it. But it's only a temporary fix, and does not really address the root cause of the conflict.

147. A  (It is always created by the project manager)
Explanation: The Project Charter is often created without the project manager’s involvement. Sometimes it is handed to the Project Manager by the sponsor or high level manager.
148. C  (Run Chart)
Explanation: Run charts tell you about trends in your project by showing you what your data looks like as a line chart. If the line in the chart were the number of defects found in your product through each quality activity, that would tell you that things were getting worse as your project progressed. In a run chart, you are looking for trends in the data over time.

149. A  (Monte Carlo analysis)
Explanation: Monte Carlo analysis is a way of seeing what could happen to your project if probability and impact values changed randomly.

150. D  (The work the team does must be better than they did on their last project)
Explanation: Saying that the work must be “better” is subjective. Requirements gathered in stakeholder analysis need to be quantifiable. That way, the team has a goal they can shoot for and you can always tell how close or far from it you are.

151. B  (Maslow’s Hierarchy of Needs)
Explanation: Maslow’s Hierarchy of Needs says that people have needs, and until the lower ones (like acceptance on the team, job safety or job security) are satisfied they won’t even begin to think about the higher ones (fulfilling their potential and making a contribution).

152. A  (Project managers time spent creating the project management plan)
Explanation: Cost of quality is what you get when you add up the cost of all of the prevention and inspection activities you are going to do on your project. It doesn’t just include the testing. It includes any time spent writing standards, reviewing documents, meeting to analyze the root causes of defects, rework to fix the defects once they’re found by the team - absolutely everything you do to ensure quality on the project.

153. B  (Fixed price (FP))
Explanation: A Fixed price (FP) contract means that the buyer pays one amount regardless of how much it costs the seller to do the work. A fixed price contract only makes sense in cases where the scope is very well known. If there are any changes to the amount of work to be done, the seller doesn’t get paid any more to do it.

154. A  (Lose-lose solution)
Explanation: A lot of people think compromise is a great way to handle conflicts. But any time there’s a compromise, it means that everyone needs to give up something. That’s why compromise is often called a lose-lose solution. It’s always better to confront the problem and fix the root cause of the conflict. You should only force people to compromise if that’s the only option.
155. D  (Transference)
Explanation: One effective way to deal with a risk is to pay someone else to accept it for you. This is called transference. The most common way to do this is to buy insurance.

156. B  (Plan Purchases and Acquisitions, Plan Contracting, Request Seller Responses, Select Sellers, Contract Administration, Contract Closure)
Explanation: The Procurement Management processes build on each other. First you need to plan out all of your procurement activities (Plan Purchases and Acquisitions). Then you go through several processes for each of the contracts: planning, finding potential sellers, figuring out which sellers will actually do the work, making sure the contract is performed, and then closing it out.

157. C  (Scope baseline)
Explanation: The scope baseline is not a particularly useful thing once a project’s done. A baseline is what you use to measure any changes to the project - whenever there's a change, you always want to compare it against the baseline. But once the project is done, the baseline isn’t necessary any more.

158. A  (ETC and VAC)
Explanation: Forecasting is a cost monitoring tool that helps you predict how much more money you’ll need to spend on the project. So which of the cost metrics would you use to do that? There are two useful numbers that you can use for forecasting. One of them is called Estimate to Complete (ETC), which tells you how much more money you’ll probably spend on your project. And the other one, Variance at Completion (VAC), predicts what your variance will be when the project is done.

159. B  (Work performance information)
Explanation: You create one of the most important outputs of your entire project when the team is doing the project work. Work Performance Information tells you the status of each deliverable in the project, what the team’s accomplished, and all of the information you need to know in order to figure out how your project’s going. But you’re not the only one who needs this - your team members and stakeholders need to know what’s going on, so they can adjust their work and correct problems early on.

160. D  (Kaizen)
Explanation: Kaizen is a Japanese word that means “improvement” - and it’s also a management technique that helps your company use problem-solving to constantly find new ways to improve. Kaizen focuses on making small improvements and measuring their impact. It’s a philosophy that guides management, rather than a particular way of doing quality assurance.
161. A  **(Correct the team members individually, and hold a training session for your team to help remove communications barriers)**

**Explanation:** The PMP Code of Professional Conduct requires cultural sensitivity to others. It’s unacceptable to belittle anyone based on how they speak, the way they dress, or any other aspect of their cultural background. If you see a member of your team doing this, it’s your responsibility to do what’s necessary to correct the behavior and prevent it from happening in the future.

162. C  **(Risk Identification)**

**Explanation:** Diagramming Techniques (including Ishikawa diagrams and Flowcharts) are a tool of the Risk Identification process. You use them to find the root cause of defects in Quality Management processes but they can also be useful in finding the risks that can lead to trouble in Risk Management.

163. D  **(Scope creep)**

**Explanation:** The project’s scope is changing every time the client is asked to verify the product - that’s scope creep. The best way to avoid that is to be sure that the Project Scope Statement that is written in the planning stages of the project is understood and agreed to by everyone on the project. Scope changes should never come late in the project; that’s when they cost the most and will jeopardize the team’s ability to deliver.

164. A  **(Organizational process assets)**

**Explanation:** Any time you hold a seminar, give a talk, write an article or help others learn about project management, you’re contributing to the project management body of knowledge.

165. B  **(Call the police)**

**Explanation:** If you discover that someone has broken the law, it is your duty to call the authorities and report that person. You need to do this, even if it seems like the offense is minor.

166. C  **(Project C has a BCR of 3:1)**

**Explanation:** When you’re asked to use benefit-to-cost (BCR) ratios to select a project, always choose the project with the highest BCR because that’s the project that gives you the most benefit for the least cost. An easy way to do it is to divide: Project A has a BCR of 5:2, and 5 / 2 is 2.5. Do that with all four projects, and you find that project C has the highest BCR.
167. B  (Legitimate, expert, reward, referent, and punishment)

Explanation: Legitimate power is the kind of power you have when you tell someone who reports to you to do something. Expert power is when your opinion carries weight because people know that you know what you’re talking about. Reward power is when you promise a reward for doing as you ask. Referent power is when people do what you say because of your association with somebody else. Punishment power is when people do what you say because they are afraid of the consequences.

168. D  (Document the change and its impact, and put it through the change control system)

Explanation: Every change request needs to be evaluated to determine whether or not it should be made. That’s what we do in the Integrated Change Control process – every change is analyzed to determine its impact. It’s then documented as a change request and put into the change control system. That’s where the stakeholders on the CCB determine if the change should be made.

169. A  (Obtaining formal acceptance of all deliverables from all stakeholders)

Explanation: By the time the Contract Closure procedure happens, you should have already gotten formal written acceptance for the deliverables. That’s what the Scope Verification process is for, and you verify that formal acceptance in the Close Project process.

170. C  (By project phase or project deliverable)

Explanation: The WBS work packages can be displayed by project phase or by project deliverable. It depends on how your company needs to see the work organized. If you use the same phased lifecycle for all projects, it can be easier to show all of the work as it breaks down within each phase. If you have various teams depending on the deliverables your team will produce, it can make sense to break the work down by project deliverable.

171. A  (Work performance information)

Explanation: The two main outputs of Direct and Manage Project Execution are Deliverables and Work Performance Information. Deliverables are the documents and other work products your project produces, and Work Performance Information is a name for all of the performance metrics and reports you can generate to track how your project is doing versus your plan.

172. B  (Lessons learned)

Explanation: Lessons learned are some of your most important organizational process assets. At the end of every project, you sit down with the project team and write down everything you learned about the project. This includes both positive and negative things. That way, when you or another project manager in your company plans the next project, you can take advantage of the lessons you learned on this one.
173. A (Procurement audit)
Explanation: Once you’ve closed out a contract, it’s important to conduct a procurement audit. This is where you go over everything that happened on the project to figure out the lessons learned, and look for anything that went right or wrong.

174. D (A force majeure clause)
Explanation: “Force majeure” is a kind of clause that you’ll see in a contract. It says that if something like a war, riot, or natural disaster happens, you’re excused from the terms of the contract.

175. A (Ground rules)
Explanation: Ground rules help you prevent problems between team members, and let you establish working conditions that everyone on the team can live with. You set up the ground rules for a project to help guide people in their interactions with each other. Make sure you discuss the ground rules with the team during the kick-off meeting!

176. B (Continuously throughout the project)
Explanation: One of the most important things that you do as a project manager is to constantly monitor the project for changes, and take the appropriate action whenever you make a change. But changes don’t happen on any sort of schedule - if they did, it would make project management a whole lot easier! That means you need to continuously monitor your project to figure out whether or not its plans and scope need to change.

177. D (Approved changes)
Explanation: The purpose of the Monitor & Control Project Work process is to look for potential problems and recommend responses. They don’t get approved until the Integrated Change Control process.

178. B (Call a meeting to hear both sides of the situation and decide in favor of the solution that is best supported by objective evidence.)
Explanation: You can’t know the answer to technical questions as well as your team. So, while it’s important to understand both sides of the issue, your job is to make sure that problems are confronted and fairly evaluated.

179. A (Parametric estimating)
Explanation: Parametric estimation is a tool for creating estimates. It’s not a deliverable.

180. B (WBS Dictionary)
Explanation: The WBS Dictionary is an output of the Create WBS process. It is created along with the WBS and gives all of the details about each work package in the WBS.
181. D  (Get formal acceptance, write lessons learned, release the team, close the contract)

Explanation: This question isn’t hard if you remember one really important fact: you need your team’s help when you’re writing the lessons learned. That’s why you can’t release the team until the lessons learned are documented and added to the organizational process assets. Also, the last thing you do on the project is close the contract. The reason for this is that you don’t want to have to wait for payment before releasing the team, because most contracts have payment terms that allow for some period of time before full payment is required.

182. A  (Kick off meeting)

Explanation: The Kick-off meeting gets all of the stakeholders together to explain how communication will go. That way, everyone knows who to talk to if things go wrong or they run into any questions.

183. C  (Analyze the impact that the change will have on the work to be done, the schedule and the budget.)

Explanation: Not every change needs to be made. Before you make any change, you always need to evaluate its impact on the triple constraint - time, cost and scope - and how those changes will affect the quality of the deliverables. Until you analyze that impact, there’s no way to know whether or not it makes sense to make the change.

184. B  (Project B)

Explanation: The idea behind net present value (or NPV) is that you can compare potential projects by figuring out how much each one is worth to your company right now. A project’s NPV is figured out by coming up with how much the project is worth, and then subtracting how much it will cost. If you’re asked to choose between projects and given the NPV of each of them, choose the one with the biggest NPV. That means you’re choosing the one with the most value!

185. C  (A project management plan that does not meet its requirements)

Explanation: It’s easy to get change, defects and corrective actions mixed up - they’re all words that sound suspiciously similar! Just remember: a defect is any deliverable that does not meet its requirements. A defect is NOT always caused by a mistake - defects can come from lots of sources, and team members errors only cause some defects. For example, plenty of defects are caused by equipment problems.

186. D  (Forcing)

Explanation: Forcing means putting your foot down and making a decision. One person wins, one person loses, and that’s the end of that.
187. A  (Project Scope Statement)

Explanation: The Project Scope Statement is where you figure out exactly what your stakeholders need, and turn those needs into exactly what work the team will do to give them a great product. Any constraints or assumptions that need to be made to determine the work need to be written down in the scope statement as well.

188. A  ($187,500)

Explanation: You can figure out the actual cost that was spent on a project, even if all you’re given are some of the project metrics. In this case, if you only have CPI and EV, you can figure out the AC by writing down the formula that has all three of them: CPI = EV / AC. Now flip the formula around: AC = EV / CPI = $172,500 / .92 = $187,500.

189. B  (Direct and manage project execution)

Explanation: Changes are found in Monitor and Control Project Work, they are approved in Integrated Change Control and implemented in Direct and Manage Project Execution. When you are monitoring and controlling the project work, you are always looking for changes that might need to be made to your plan and assessing their impact. Then you present those changes to the change control board for approval. If they approve, you implement them in the Direct and Manage Project Execution process – that’s where all the work gets done.

190. A  (A WBS)

Explanation: A Work Breakdown Structure is the best way to visualize all of the work that will be done on your project. It divides all of the work up into work packages and shows how it fits into higher-level categories. By looking at the WBS, you can communicate to other people just how much work is involved in your project.

191. D  (Resources, priorities, schedules)

Explanation: Over half of the conflicts on projects come from resources, priorities, and schedules. It can be tough to get resources assigned to projects, especially if they have skills that are in high demand. Sometimes multiple projects (and even roles within projects) are vying to get top priority. Finally, you probably don’t need to think too hard to remember a conflict about schedules on a project you’ve worked on – many projects start with overly aggressive deadlines that cause conflicts from the very beginning.

192. D  (Gathering the information about how the work is being performed)

Explanation: When do you gather work performance information? You do it when you’re reporting on the performance of the team - that’s why it’s a tool and technique of the Performance Reporting process. But that’s not something you do during Risk Monitoring and Control - Work Performance Information is an input to that process, which means it needs to be gathered BEFORE you start monitoring and controlling your risks.
193. A (Formal written)
Explanation: You should always use formal written communication when you are communicating with clients about changes in your project.

194. B (Work packages decomposed into activities)
Explanation: The project charter is created long before you start identifying work packages and activities. Those things are done as part of the project planning, which only happens after the project charter is completed.

195. C (Exploit, share, enhance, accept)
Explanation: Positive risks are opportunities that could happen on your project. The strategies for dealing with them are all about making sure that your project is in a position to take advantage of them or at least share in them with other projects if possible.

196. D (Risk Management Planning)
Explanation: The RBS is part of the Risk Management Plan. It's structured very similarly to an WBS. The RBS helps you to see how risks fit into categories so you can organize your risk analysis and response planning.

197. A (Thank the subcontractor, but politely refuse the gift)
Explanation: The PMP Code of Professional Conduct says that you’re not allowed to accept any kind of gift, not even if it’s after the project has finished. That would be the same thing as taking a bribe.

198. B (Use the management reserve to cover the costs of the problem)
Explanation: This is a tough situation for any project manager. You’ve got a problem that’s happened, and you didn’t plan for it. Now it's going to cost you money. What do you do? Well, you can’t just accept it and move on - that’s only something you do with risks that have no other option. You have options with a problem that happens during your project. And you can’t just go to the boss, because you’re the project manager and it’s your job to figure out what to do. There’s no use in doing risk planning, because you already know the probability (100%) and impact (the cost of fixing the problem). So what do you do? That’s where your reserve comes in. There are two kinds of reserves: a contingency reserve and a management reserve. The contingency reserve is what you use for “known unknowns” - you use it to pay for risks that you’ve planned for. But this situation isn't like that. That’s why you tap into the management reserve. That’s the money in the budget you set aside for “unknown unknowns” - problems that you didn’t plan for but which came up anyway.
199.A  (Develop the preliminary scope statement for the phase)

**Explanation:** When you have a project that’s broken up into sub-projects or phases, it’s important that you perform the Initiating processes at the beginning of the project. Answer B is the one that best describes something that happens during the processes in the Initiating group - developing the preliminary project scope statement.

200.A  (Deliverables)

**Explanation:** Explanation: This question looks hard, but it’s actually pretty easy if you remember that Manage Stakeholders is just an ordinary Monitoring & Controlling process - it’s the one for the Communications Management knowledge area. Once you know that, it’s easy to pick out the output that doesn’t fit! When you’re handling a change in a Monitoring & Controlling process, you update your project plan and organizational process assets, and you approve corrective actions. But you don’t create deliverables.