

BSB51415 Diploma of Project Management



Constraint Management

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Version control & document history

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INTRODUCTION

Assessment is a difficult process – we understand this and have developed a range of assessment kits, such as this, to facilitate a seamless process for both the assessor and the learner being assessed.

There are a number of characteristics of assessment, ranging from *subjective assessment* (which is based on opinions and feelings), to *objective assessment* (which is based clearly on defined processes and specific standards). Nearly all assessment involves a mixture of both types of assessment because it is almost impossible to eradicate the subjectivity humans carry into the process of assessing. The goal in developing and implementing these assessment kits is to work towards the objective end as far as possible and to reduce the degree of opinions and feelings present.

WHAT IS COMPETENCY BASED ASSESSMENT

The features of a competency based assessment system are:

- It is focused on what learners can do and whether it meets the criteria specified by industry as competency standards.
- Assessment should mirror the environment the learner will encounter in the workplace.
- Assessment criteria should be clearly stated to the learner at the beginning of the learning process.
- Assessment should be holistic. That is it aims to assess as many elements and/or units of competency as is feasible at one time.
- In competency assessment a learner receives one of only two outcomes – competent or not yet competent.
- The basis of assessment is in applying knowledge for some purpose. In a competency system, knowledge for the sake of knowledge is seen to be ineffectual unless it assists a person to perform a task to the level required in the workplace.
- The emphasis in assessment is on assessable outcomes that are clearly stated for the trainer and learner. Assessable outcomes are tied to the relevant industry competency standards where these exist. Where such competencies do not exist, the outcomes are based upon those identified in a training needs analysis.

Definition of competency

Assessment in this context can be defined as:

- The fair, valid, reliable and flexible gathering and recording of evidence to support judgement on whether competence has been achieved. Skills and knowledge (developed either in a structured learning situation, at work, or in some other context) are assessed against national standards of competence required by industry, rather than compared with the skills and knowledge of other learners.

THE BASIC PRINCIPLES OF ASSESSING NATIONALLY RECOGNISED TRAINING

Developing and conducting assessment, in an Australian vocational education and training context, is founded on a number of basic conventions:

The principles of assessment

- Assessment must be valid
 - Assessment must include the full range of skills and knowledge needed to demonstrate competency.
 - Assessment must include the combination of knowledge and skills with their practical application.
 - Assessment, where possible, must include judgements based on evidence drawn from a number of occasions and across a number of contexts.
- Assessment must be reliable
 - Assessment must be reliable and must be regularly reviewed to ensure that assessors are making decisions in a consistent manner.
 - Assessors must be trained in national competency standards for assessors to ensure reliability.
- Assessment must be flexible
 - Assessment, where possible, must cover both the on and off-the-job components of training within a course.
 - Assessment must provide for the recognition of knowledge, skills and attitudes regardless of how they have been acquired.
 - Assessment must be made accessible to learners through a variety of delivery modes, so they can proceed through modularised training packages to gain competencies.

- Assessment must be mutually developed and agreed upon between assessor and the assessed.
- Assessment must be able to be challenged. Appropriate mechanisms must be made for reassessment as a result of challenge.

The rules of evidence (from *Training in Australia* by M Tovey, D Lawlor)

When collecting evidence there are certain rules that apply to that evidence. All evidence must be valid, sufficient, authentic and current;

- Valid
 - Evidence gathered should meet the requirements of the unit of competency. This evidence should match or at least reflect the type of performance that is to be assessed, whether it covers knowledge, skills or attitudes.
- Sufficient
 - This rule relates to the amount of evidence gathered. It is imperative that enough evidence is gathered to satisfy the requirements that the learner is competent across all aspects of the unit of competency.
- Authentic
 - When evidence is gathered the assessor must be satisfied that evidence is the learner's own work.
- Current
 - This relates to the recency of the evidence and whether the evidence relates to current abilities.

THE DIMENSIONS OF COMPETENCY

The national concept of competency includes all aspects of work performance, and not only narrow task skills. The four dimensions of competency are:

- Task skills
- Task management skills
- Contingency management skills

REASONABLE ADJUSTMENT

Adapted Reasonable Adjustment in teaching, learning and assessment for learners with a disability - November 2010 - Prepared by - Queensland VET Development Centre

Reasonable adjustment in VET is the term applied to modifying the learning environment or making changes to the training delivered to assist a learner with a disability. A reasonable adjustment can be as simple as changing classrooms to be closer to amenities, or installing a particular type of software on a computer for a person with vision impairment.

Why make a reasonable adjustment?

We make reasonable adjustments in VET to make sure that learners with a disability have:

- the same learning opportunities as learners without a disability
- the same opportunity to perform and complete assessments as those without a disability.

Reasonable adjustment applied to participation in teaching, learning and assessment activities can include:

- customising resources and assessment activities within the training package or accredited course
- modifying the presentation medium learner support
- use of assistive / adaptive technologies
- making information accessible both prior to enrolment and during the course
- monitoring the adjustments to ensure learner needs continue to be met.

Assistive / Adaptive Technologies

Assistive / adaptive technology means 'software or hardware that has been specifically designed to assist people with disabilities in carrying out daily activities' (World Wide Web Consortium - W3C). It includes screen readers, magnifiers, voice recognition software, alternative keyboards, devices for grasping, visual alert systems, digital note takers.

IMPORTANT NOTE

Reasonable adjustment made for collecting candidate assessment evidence must not impact on the standard expected by the workplace, as expressed by the relevant Unit(s) of Competency. E.g. If the assessment was gathering evidence of the candidates competency in writing, allowing the candidate to complete the assessment verbally would not be a valid assessment method. The method of assessment used by any reasonable adjustment must still meet the competency requirements.

THE UNITS OF COMPETENCY

The units of competency specify the standards of performance required in the workplace.

This assessment addresses the following unit of competency from **BSB51415 Diploma of Project Management**:

BSBPMG511 – Manage Project Scope

1. Conduct project authorisation activities
2. Define project scope
3. Manage project scope control process

BSBPMG512 – Manage Project Time

1. Determine project schedule
2. Implement project schedule
3. Assess time management outcomes

BSBPMG514 – Manage Project Cost

1. Determine project costs
2. Monitor and control project costs
3. Complete cost-management processes

BSBPMG513 – Manage Project Quality

1. Determine quality requirements
2. Implement quality processes
3. Implement project quality improvements

For complete copies of the above unit of competency:

Download them from the TGA website: www.training.gov.au

ASSESSMENT REQUIREMENTS

The assessment requirements specify the evidence and required conditions for assessment.

Each unit of competency can be unbundled to reveal three key assessment components:

- Performance Evidence - describes the subtasks that make up the element of the unit
- Knowledge Evidence - describes the knowledge that must be applied in understanding the tasks described in the elements
- Assessment Conditions - describes the environment and conditions that assessments must be conducted under

The associated assessment tool in this kit covers all of these components as detailed in the matrix to follow:

Assessment Activities	Units of competency			
	BSBPMG511	BSBPMG512	BSBPMG514	B SBBPMG513
Written Questions	✓	✓	✓	✓
Case Studies	✓	✓	✓	✓

BSBPMG511 – Manage Project Scope

This unit describes the skills and knowledge required to determine and manage project scope. It involves obtaining project authorisation, developing a scope management plan, and managing the application of project scope controls.

It applies to individuals responsible for managing and leading a project in an organisation, business or as a consultant.

Performance evidence

1. complete project authorisation activities
2. collaborate with stakeholders to produce a scope-management plan
3. implement scope-management plan according to procedures
4. review and document scope-management implementation and recommend improvements.

Knowledge evidence

1. identify components of a project scope-management plan
2. describe factors likely to impact the project scope
3. explain formal change-control processes
4. describe methods for measuring work outcomes and progress against plan
5. describe methods for segmenting and documenting a work breakdown structure
6. identify and describe problem areas likely to be encountered in scope management
7. explain procedures for reporting scope change
8. explain project life cycle and the significance of scope management
9. identify project management tools used for managing scope
10. outline roles and responsibilities of project manager in relation to project planning
11. identify types of project initiation documentation.

Assessment conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the management and leadership – project management field of work and include access to:

1. workplace documentation used to document and manage project scope
2. examples of feedback from project stakeholders regarding management of project scope
3. case studies and, where possible, real situations
4. interaction with others.

BSBPM512 – Manage Project Time

This unit describes the skills and knowledge required to manage time during projects. It involves determining and implementing the project schedule, and assessing time management outcomes.

It applies to individuals responsible for managing and leading a project in an organisation, business, or as a consultant.

Performance evidence

1. develop a project schedule using project management tools and techniques
2. implement, analyse and monitor a project schedule
3. conduct a review of project scheduling and recommend improvements for the future.

Knowledge evidence

1. explain estimation techniques to determine task duration and resource effort
2. explain procedures for identifying critical path
3. explain procedures for managing project baselines, establishment and variance
4. summarise project life cycle phases and describe each phase
5. explain best-practice time management methodologies, their capabilities, limitations, applications and outcomes
6. summarise key tools for project scheduling
7. explain work breakdown structures and application to project schedules.

Assessment conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the management and leadership – project management field of work and include access to workplace documentation, including:

1. examples of project schedules, reports and feedback from project stakeholders regarding time management
2. case studies and, where possible, real situations
3. interaction with others.

BSBPMG514 – Manage Project Cost

This unit describes the skills and knowledge required to identify, analyse and refine project costs to produce a budget, and to use this budget as the principal mechanism to control project cost.

It applies to individuals responsible for managing and leading a project in an organisation, business, or as a consultant.

Performance evidence

1. work closely with others to determine resources against budgetary frameworks
2. prepare a budget and cost-management plan for a project
3. monitor costs across a project's life cycle including solving cost variations and analysing possible alternatives
4. record expenditure, create accurate financial reports and review cost-management processes.

Knowledge evidence

1. explain appropriate budgeting processes, tools and techniques
2. describe methods and tools for costing and cost analysis
3. explain strategies for managing costs and their application in different situations
4. outline processes for reviewing costs against outcomes
5. summarise key organisational policies and procedures applicable to this role.

Assessment conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the management and leadership – project management field of work and include access to:

1. workplace documentation, including budgets and other financial documents
2. case studies and, where possible, real situations.

BSBPMG513 – Manage Project Quality

This unit describes the skills and knowledge required to manage quality within projects. It involves determining quality requirements, implementing quality control and assurance processes, and using review and evaluation to make quality improvements in current and future projects.

It applies to individuals responsible for managing and leading a project in an organisation, business, or as a consultant.

Performance evidence

1. work with others to decide a project's quality requirements
2. document a quality-management plan
3. implement quality control and assurance processes for a defined project using a range of tools and methodologies
4. review outcomes and recommend process improvements.

Knowledge evidence

1. explain quality management theory
2. explain relevant standards that apply in the organisation
3. describe quality assurance and control techniques, key tools and methodologies
4. describe roles and responsibilities of quality management personnel
5. explain methods for managing continuous improvement.

Assessment conditions

Assessment must be conducted in a safe environment where evidence gathered demonstrates consistent performance of typical activities experienced in the management and leadership – project management field of work and include access to:

1. project documentation including quality criteria, evidence of quality monitoring and improvement practices
2. case studies or, where possible, real situations
3. Interaction with others.

ASSESSMENT METHODS

There are five (5) Assessment Workbooks for the course. This is **Workbook 2**.

Theory Workbooks

The Theory Workbooks contain two assessment methods:

1. **Written Questions** – A set of generic and workplace questions testing the student's general knowledge and understanding of the general theory behind the unit.
2. **Case Studies** – A set of hypothetical questions to test the student's analytical skills in project problem solving. Students will be provided with a set of project management documents to analyse.

Workbook 1 – The Project Life Cycle

Workbook 2 – Constraint Management

Workbook 3 – Human Resource Management

Workbook 4 – Risk Management

Workbook 5 – Integration Management

Project Practical Assessment

Each unit of competency will be assessed practically, requiring the collation of evidence to demonstrate the student's skill, plus a suitable observer to verify the student's ability.

RESOURCES REQUIRED FOR ASSESSMENT

Assessor to provide:

- Case studies and simulations
- Information about work activities

The student to provide:

- Computer with internet access, Microsoft Word, Adobe Acrobat Reader
- Access to email

INSTRUCTIONS TO ASSESSOR

This is a compulsory assessment to be completed by all students. This assessment tests the student's ability to understand the underpinning generic knowledge related to this unit of competency

The assessor guide provides model answers to all the questions. Where answers are required, this is specified in the question to avoid ambiguity. The model answer will be in these cases provide a complete list of possible answers that are considered acceptable. For instance if a question requires the student to list three options, then their response must include three of the items listed in the model answer.

***Note to assessors:** contact details are requested from observers in the feedback forms in case you will have to call them to verify content of the feedback forms.*

IMPORTANT REMINDER

Candidates must achieve a satisfactory result to ALL assessment tasks to be awarded COMPETENT for the units relevant to this cluster.

INSTRUCTIONS TO STUDENT

The Written Questions Assessment covers generic underpinning knowledge of basic project management terms and concepts. These questions are all in a short answer format. The longer questions requiring creative thought processes are covered in the case studies assessment. **You must answer all questions using your own words.** However, you may reference your learner guide, *Guide to the Project Management Body of Knowledge (PMBOK Guide)*, and other online or hard copy resources to complete this assessment.

Some questions cover processes you would be likely to encounter in a workplace. Ideally, you should be able to answer these questions based on the processes that are currently in place in your workplace. If this is not the case, then answer the questions based on processes that should be implemented in your workplace.

If you are currently managing a project, you may answer these questions based on your own workplace. Otherwise, consider what you should do if you were managing a project.

ASSESSMENT WORKBOOK COVERSHEET

WORKBOOK:	Workbook 2
TITLE:	Constraint Management
FIRST AND SURNAME:	
PHONE:	
EMAIL:	

Please read the Candidate Declaration below and if you agree to the terms of the declaration sign and date in the space provided.

By submitting this work, I declare that:

- I have been advised of the assessment requirements, have been made aware of my rights and responsibilities as an assessment candidate, and choose to be assessed at this time.
- I am aware that there is a limit to the number of submissions that I can make for each assessment and I am submitting all documents required to complete this Assessment Workbook.
- I have organised and named the files I am submitting according to the instructions provided and I am aware that my assessor will not assess work that cannot be clearly identified and may request the work be resubmitted according to the correct process.
- This work is my own and contains no material written by another person except where due reference is made. I am aware that a false declaration may lead to the withdrawal of a qualification or statement of attainment.
- I am aware that there is a policy of checking the validity of qualifications that I submit as evidence as well as the qualifications/evidence of parties who verify my performance or observable skills. I give my consent to contact these parties for verification purposes.

Name :

Signature:

Date:

WRITTEN QUESTIONS

Part 1 – Project Scope

1. Which of the following are project initiation documentation required at the start of the project?

Select all that apply.

Mapping: BSBPMG511 KE11

LG: Learner Guide 2, page 17

☐	a. Communications log
☒	b. Project plan
☐	c. Work Breakdown Structure (WBS)
☐	d. Gantt Chart
☒	e. Project charter
☐	f. Risk management

2. Which of the following are components of a project scope-management plan?

Select all that apply.

Mapping: BSBPMG511 KE1

LG: Learner Guide 2, Scope Management Plan, page 28 - 31

☒	a. Project deliverables
☐	b. Project staff assignments
☐	c. Change request
☒	d. Project justification
☒	e. Product description
☐	f. Performance reports
☒	g. Project objectives
☐	h. Project funding requirements
☐	i. Quality metrics
☐	j. Budget forecasts

3. In your own words, discuss how project time and cost affect the project scope. Do not exceed 100 words.

Mapping: BSBPMG511 KE2

LG: Learner Guide 2, page 13

Marking guide

Student must, in his/her own words discuss how project time and cost affect the project scope. Wording may vary, however, responses must be the same in thought and meaning with the benchmark answer provided below. Each discussion must not exceed 100 words.

Project scope, time, and cost, are fully inter-related and that the triple constraint dictates any adjustments made to any of these will impact the other. For instance, if there is a request from the project owner or sponsor for a scope change in the middle of a project, the other two attributes (cost and time) will be affected in some manner. As an added example, if the schedule appears to be tight and the project manager determines that the scoped requirements cannot be accomplished within the allotted time, both cost AND time are affected.

4. Which of the following are events or problem areas relating to project scope that could trigger the need for a formal change request?

Select all that apply.

Mapping: BSBPMG511 KE3 (p), KE6 (p)

LG: Learner Guide 2, page 131

☒	a. The deliverables may not meet quality requirements.
☐	b. Grammatical and typo errors are found in the project initiation documents.
☒	c. The deliverables may not be what the client wanted, even though they were covered in the project plan.
☒	d. The stakeholder considers the change request and advises the project manager.
☐	e. Observance of non-working holidays affecting project time.
☒	f. Additional quality requirements (such as new legislation or changes in standards) will render the deliverables non-compliant.
☒	g. Failure of equipment needed to produce the deliverables.
☐	h. Missing documentations in the project's information system.
☒	i. Raw materials are no longer available.
☒	j. Supplier or contractor closing business.

5. Which of the following are procedures that typically must be followed under change control processes?

Select all that apply.

Mapping: BSBPMG511 KE3 (p)

LG: Learner Guide 2, page 133

Source: PMBOK Guide 4th Ed., Perform Integrated Change Control, page 93

☐	a. Project manager seeks advice from supervisor regarding changes in cost.
☐	b. Project manager assigns a project team member to recalculate for the critical path.
☒	c. Project manager provides the change request to the appropriate stakeholder for approval.
☒	d. The stakeholder considers the change request and advises the project manager.
☒	e. The project manager updates the project plan and other documentation where required.
☒	f. Project manager drafts the change request.
☐	g. Project manager delegates the authority to the project team members in advising other stakeholders of the changes.
☒	h. The project manager advises relevant stakeholders (sponsor, team members, etc.) of the changes.
☒	i. Details of the proposed change to be communicated to the project manager.
☐	j. The project sponsor and owner may automatically terminate the project contract.

6. The following are methods of measuring work outcomes and progress against plans. Match each method to its correct description.

Write the letters that correspond to your answers in the spaces provided.

Mapping: BSBPMG511 KE4

LG: Learner Guide 2, page 148

	Method	Description
<i>c</i>	Units completed	a. Also known as the 'steps' method, this is used for projects that involve subtasks that need to be completed in an orderly fashion.
<i>a</i>	Incremental milestones	b. In this method, tasks that are being calculated tend to occur over a longer duration time and include multiple subtasks, where subtasks can have different units of measurements.
<i>d</i>	Start / finish	c. This method is used when project tasks are done repeatedly. Assuming that each task is completed at the same amount of time, resources and effort, each task is counted and totaled.
<i>b</i>	Weighted or equivalent units	d. This method is used to determine the percentage of the work completed and the percentage of the work that is still yet to be completed.

7. Which of the following are activities involved in decomposition of the total work project?

Select all that apply.

Mapping: BSBPMG511 KE5 (p)

LG: Learner Guide 2, page 24

Source: PMBOK Guide 4th Ed., Create WBS: Tools and Techniques: Decomposition page 118.

☐	a. Summarise project tasks in the form of a written report.
☒	b. Identify and analyse the deliverables and related work.
☒	c. Structure and organise the work breakdown structure (WBS).
☐	d. Arrange the smallest project tasks to form an aggregate representation of the total project task
☒	e. Decompose the upper work breakdown structure (WBS) levels into lower level detailed components.
☐	f. Calculate duration and resource effort for each project task.
☒	g. Develop and assign identification codes to the WBS components.
☐	h. Inspect whether work and deliverables meet requirements and product acceptance criteria.
☐	i. List resources required for each project task.
☒	j. Verify that the degree of decomposition of the work is necessary and sufficient.

8. List three (3) ways in which the Work Breakdown Structure (WBS) can be created.

Mapping: BSBPMG511 KE5 (p)

LG: Learner Guide 2, page 24

Source: PMBOK Guide 4th Ed., Create WBS: Tools and Techniques: Decomposition page 118.

- a.
- b.
- c.

Marking guide

Student must list three (3) ways in which the Work Breakdown Structure (WBS) can be created. Although wording may vary, responses must be the same in thought and meaning with benchmark answers provided.

- *Using phases of the project life cycle as the first level of decomposition, with the product and project deliverables inserted at the second level;*
- *Using major deliverables as the first level of decomposition*
- *Using subprojects which may be developed by organisations outside the project team such as the contracted work.*

9. The following are some problem areas in scope management. In your own words, briefly discuss each problem area.

Do not exceed 100 words for each discussion.

Mapping: BSBPMG511 KE6 (p)

LG: Learner Guide 2, page 138

Marking guide

Student must, in his/her own words, discuss the following problem areas in scope management. Wording may vary, however, student's responses must be the same in thought and meaning with the benchmark answers provided below. Each discussion must not exceed 100 words.

Problem areas	Discussion
Scope creep	<i>Project managers tend to add additional work especially in small scale scope changes. Scope creep refers to what happens when a project accepts a large number of small changes. When all of these small changes are combined, the project team will realise that the additional work from these small changes has accumulated, affecting the project time and budget.</i>
Sponsor / project owner approval	<i>Project managers will typically receive requests for changes from end-users, stakeholders, or client managers, and project managers will be obligated to accept all these requests. End-users, stakeholders, or client managers (unless delegated with authority by the Project Sponsor) cannot approve these scope-change requests. Many projects face this problem because scope-changes are made without proper approval, which should really come from the Project Sponsor. Other stakeholders may approve the scope change requests but only if the Project Sponsor has delegated the authority to them.</i>
Project team accountability	<i>Project team members usually interact with the client. The members are the ones who field scope-change requests often. Therefore, they must understand the importance scope-change management. The project team members must detect scope changes when they occur and refer them back to the project manager. If they take on the extra work themselves, there is a good likelihood that their activities will be delayed and jeopardise the entire project.</i>

10. In your own words, discuss the significance of scope management.

Do not exceed 150 words.

Mapping: BSBPMG511 KE8 (p)

LG: Learner Guide 2, page 16 - 17

Marking guide

Student must, in his/her own words, discuss the significance of scope management. Wording may vary, however, student's response must be the same in thought and meaning with benchmark answers provided below. Student's discussion must be 100 – 200 words in length:

Effective scope management is important as it ensures that project team members fully understand the scope of the project, while agreeing on how the project goals will be met.

Scope management helps avoid the problems and challenges that a project potentially face with every growing scope and unruly requirement list. Project scope defines what is or is not included in the project, and controls what gets added or removed as the project is executed. Scope management establishes control processes to address factors that may result in project change during the project life-cycle.

Without defining the project scope, the cost or time that the project will take up cannot be estimated. At times, due to the lack of communication, scopes may need change. This directly affects the cost and disturbs the schedule of the project which in turn leads to losses.

11. The *PMBOK Guide* outlines the following processes in project scope management. List one (1) tool or technique used in each process.

Mapping: BSBPMG511 KE9

LG: Learner Guide 2,

Source: PMBOK Guide 4th Ed. Project Scope Management, pages 107, 114, 118, 124

Marking guide

Student must list one (1) tool or technique for each process in project management. Benchmark answers are provided below for each process.

Project Scope Management	Tool or technique
Collect requirements	Student must list one (1) of the following: • <i>Interviews</i> • <i>Focus groups</i> • <i>Facilitated workshops</i> • <i>Group creativity techniques</i> • <i>Group decision techniques</i> • <i>Questionnaires and surveys</i>
Define scope	Student must list one (1) of the following: • <i>Expert judgement</i> • <i>Product analysis</i> • <i>Alternatives identification</i> • <i>Facilitated workshops</i>
Create WBS	• <i>Decomposition</i>
Verify scope	• <i>Inspection</i>
Control scope	• <i>Variance analysis</i>

12. Consider the roles and responsibilities of the project manager in project planning. List five (5) roles of the project manager in project planning and list at least one responsibility for each of these roles.

Mapping: BSBPMG511 KE10 (p), BSBPMG513 KE4 (p)

LG: Learner Guide 2, page 15

Marking guide

Student must list the four (4) roles of the project manager in project planning and list at least one (1) responsibility for each of these roles. Wording and sequencing may vary; however, student's response must be the same in thought and meaning with the benchmark answers provided.

Roles (list five (5))	Responsibilities (List at least one (1) for each role)
<i>Understanding the project</i>	Sample answer includes, but not limited to: <i>The project manager must fully understand and know the reason why the project is initiated, what are key stakeholders expectations, and deliverables of the project</i>
<i>Scope management</i>	Sample answer includes, but not limited to: <i>The project manager must ensure that he/she had taken down all the requirements and turned them into work packages that will soon be deliverables.</i>
<i>Time management</i>	Sample answer includes, but not limited to: <i>The project manager is responsible for scheduling the project and come out with the schedule baseline.</i>
<i>Cost management</i>	Sample answer includes, but not limited to: <i>The project manager is responsible for coming out with the cost baseline.</i>
<i>Quality management</i>	Sample answer includes, but not limited to: <i>The project manager must define what good quality means in your project from your stakeholders and plan the QA and QC activities to achieve them.</i>

Part 2 – Project Time

- The following are estimation tools and techniques used in determining duration. Match each tool and technique to its correct description.

Write the letters that correspond to your answers in the spaces provided.

Mapping: BSBPMG512 KE1 (p)

LG: Learner Guide 2, page 32

Source: PMBOK Guide 4th Ed., Estimate Activity Durations: Tools and Techniques, page 149

	Estimation tools and techniques	Description
<i>b</i>	Analogous estimating	a. This technique uses a statistical relationship between historical data and other variables to calculate an estimate for activity duration.
<i>a</i>	Parametric estimating	b. This uses parameters such as duration, budget size, weight, and complexity, from a previous, similar project, as the basis for estimating the same parameter to measure for a future project. This technique relies on the actual duration of previous, similar projects as the basis for estimating the duration of the current project.
<i>e</i>	Three-point estimating	c. This is guided by historical information. It provides duration estimate information or recommended maximum activity durations from prior similar projects. This can also be used to determine whether to combine methods of estimating and how to reconcile differences between them.
<i>c</i>	Expert judgement estimating	d. Contingencies are accounted for into the overall project schedule to account for schedule uncertainties.
<i>d</i>	Reserve analysis	e. This technique uses a mathematical formula to determine a weighted average of estimates. It uses the formula: $Te = \frac{To + 4 \times Tm + Tp}{6}$.

2. The following are estimation tools techniques used in determining activity resource. Match each to its correct description.

Write the letters that correspond to your answers in the spaces provided.

Mapping: BSBPMG512 KE1 (p)

LG: Learner Guide 2, pages 32 - 33

Source: PMBOK Guide 4th Ed., Estimate Activity Resource: Tools and Techniques, page 144 - 145

	Estimation tools and techniques	Description
<i>d</i>	Expert judgment	a. Several companies or organisations routinely distribute updated production rates and unit costs of resources for an extensive array of labour trades, material, and equipment for different countries and geographical locations within countries.
<i>e</i>	Alternative analysis	b. In this technique, when an activity cannot be estimated with a reasonable degree of confidence, the work within the activity is decomposed into more detail. The resource needs are estimated. These estimates are then aggregated into a total quantity for each of the activity's resources.
<i>a</i>	Published estimating data	c. This tool has the capability to help plan, organise, and manage resource pools and develop resource estimates.
<i>b</i>	Bottom-Up estimating	d. This technique is often required to assess the resource-related inputs to this process. Any group or person specialised with knowledge in resource planning and estimating can provide such expertise.
<i>c</i>	Project management software	e. These include using various levels of resource capability or skills, different, size or type of machines, different tools (hand versus automated), and make-or-buy regarding the resource.

3. In identifying the critical path, the following parameters need to be determined for each task. Discuss each parameter.

Do not exceed fifty (50) words for each discussion.

Mapping: BSBPMG512 KE2

LG: Learner Guide 2, page 67

Marking guide

Student must discuss each of the following parameters that are determined for each project task in identifying the critical path. Wording may vary, however, student's responses must be the same in thought and meaning with the benchmark answers provided below. Student's discussion must not exceed fifty (50) words.

Parameter	Discussion
ES	<i>The earliest time at which the task can start, given that any predecessor tasks must be completed first.</i>
EF	<i>The earliest start time for the task plus the time required to complete the task.</i>
LF	<i>The latest time at which the task can be completed without delaying the project.</i>
LS	<i>The latest finish time minus the time required to complete the task.</i>

4. Which of the following statements accurately explain the process of developing the project schedule, including the schedule baseline?

Select all that apply.

Mapping: BSBPMG512 KE3 (p)

LG: Learner Guide 2, page 37

Source: PMBOK Guide 4th Ed., 'Develop Schedule', page 152

☒	a. Developing the schedule is the process of analysing activity sequences, durations, resource, requirements, and schedule constraints to create the project schedule.
☒	b. The project schedule and schedule baseline are developed or established using the activity lists, activity attributes, project scope statement as the bases.
☒	c. Entering the activities, durations, and resources into the scheduling tool generates the schedule baseline.
☐	d. Tools and techniques used in developing the project schedule and schedule baseline include decomposition of the total project work.
☐	e. Developing the schedule baseline starts and ends in the planning phase of the project.

5. Schedule control is the process of monitoring the status of the project to update project progress and manage changes to the schedule baseline.

Which of the following are processes that are involved in schedule control?

Select all that apply.

Mapping: BSBPMG512 KE3 (p)

LG: Learner Guide 2, page 37

Source: PMBOK 4th Ed., 'Control Schedule' Page 160

☒	a. Determining the current status of the project schedule.
☐	b. Defining activities or specific actions to be performed to produce project deliverables
☒	c. Influencing the factors that create schedule changes
☐	d. Decomposing total project work into its lowest levels.
☒	e. Determining that the project schedule has changed
☐	f. Estimating duration and resource effort for the project.
☒	g. Managing the actual changes as they occur.

6. Consider the methods used in project time management.
 - a. In your own words, discuss the application/use of the Gantt Chart. Do not exceed fifty (50) words.
 - b. List three (3) project data generated from the Gantt Chart.
 - c. List three (2) limitations of the Gantt Chart.

Mapping: BSBPMG512 KE5 (p)

LG: Learner Guide 2, page 154

Source:

Marking guide

Student must:

- a. In his/her own words, discuss the application/use of the Gantt Chart. Student's discussion must not exceed fifty (50) words.
- b. List three (3) project data generated from the Gantt Chart.
- c. List three (3) limitations of the Gantt Chart.

Although wording may vary, responses must be the same in thought and meaning with the benchmark answers provided.

- a.
Useful for planning and scheduling projects. They help assess how long a project should take, determine the resources needed, and plan the order in which tasks are completed. They're also helpful for managing dependence between tasks.
- b.

Student's responses may include but not limited to:

- *Project duration*
- *Resources needed*
- *Order of tasks*
- *tasks dependencies / relationship between the tasks*
- *visual outline of the project schedule.*
- *progress of the project*

c.

Student's responses may include but not limited to:

- *The format (e.g. MS Project) is not common, so the project manager often needs to PDF the Gantt chart to distribute it.*
- *The area of the Gantt chart page is very large and often difficult to print.*
- *The progress of each task is very subjective, so a project manager can be tempted to exaggerate the progress of a task to make the Gantt chart look better.*
- *The Gantt chart is only as useful and accurate as the information the project manager puts into it. If the project manager incorrectly guesses the duration of a task along the critical path, then the entire duration of the project could be blown out.*

7. Consider the methods used in project time management.
- In your own words, discuss the application/use of the Critical Path Method. Do not exceed fifty (50) words.
 - List three (3) project data generated from the Critical Path Method.
 - Discuss the limitation of the Critical Path Method. Do not exceed fifty (50) words.

Mapping: BSBPMG512 KE5 (p)

LG: Learner Guide 2, page 154

Source:

Marking guide

Student must:

- In his/her own words, discuss the application/use of the Critical Path Method. Student's discussion must not exceed fifty (50) words.
- List three (3) project data generated from the Critical Path Method.
- In his/her own words, discuss the limitations of the Critical Path Method. Student's discussion must not exceed fifty (50) words.

Although wording may vary, responses must be the same in thought and meaning with the benchmark answers provided.

a.

The critical path method (CPM) is a step-by-step project management technique to identify activities on the critical path. It is an approach to project scheduling that breaks the project into several work tasks, displays them in a flow chart, and then calculates the project duration based on estimated durations for each task. It identifies tasks that are critical, time-wise, in completing the project.

b.

Student's responses may include but not limited to:

- Parameters of each task: Earliest Start, Earliest Finish, Latest Start, Latest Finish*
- Critical path*
- Activities on the critical path*
- Critical elements in the project*

c.

For large and complex projects, there'll be thousands of activities and dependency relationships. Without software it can be mighty difficult managing this. To make matters worse, if the plan changes during project execution then the precedence diagram will have to be redrawn. Fortunately, we do have relatively cheap software that can handle this with ease.

8. The following are tools and techniques used in project scheduling. Match each tool and technique to its correct description.

Write the letters that correspond to your answers in the spaces provided.

Mapping: BSBPMG512 KE6

LG: Learner Guide 2, page 35

Source: https://www.mindtools.com/pages/article/newPPM_71.htm

PMBOK 4th Ed. 'Develop Schedule: Tools and Techniques', page 157

	Project scheduling tools and techniques	Description
<i>b</i>	Schedule network analysis	a. This is the process of looking at all of the activities that must be completed, and calculating the 'best line' – or critical path – to take so that you'll complete the project in the minimum amount of time. The method calculates the earliest and latest possible start and finish times for project activities, and it estimates the dependencies among them to create a schedule of critical activities and dates.
<i>a</i>	Critical Path Analysis	b. This is a graphic representation of the project's activities, the time it takes to complete them, and the sequence in which they must be done. Project management software is typically used to create these analyses. Common formats for this include Gantt Charts and PERT Charts
<i>d</i>	Schedule compression	c. They expedite the scheduling process by generating start and finish dates based on the inputs of activities, network diagrams, resources, and activity durations.
<i>c</i>	Automated scheduling tools	d. This tool helps shorten the total duration of a project by decreasing the time allotted for certain activities. It's done so that you can meet time constraints, and still keep the original scope of the project.

9. Which of the following statements accurately explain the work breakdown structure (WBS) including its application in project schedules?

Select all that apply.

Mapping: BSBPMG512 KE7

LG: Learner Guide 2, page 23 – 27, 37

Source: PMBOK Guide 4th Ed.

☒	a. Work breakdown structure (WBS) is the subdivision of project deliverables and project work into smaller, more manageable components.
☐	b. The work breakdown structure (WBS) identifies project personnel who are responsible for each project task.
☒	c. Work breakdown structure (WBS) helps define activities of the project which provide the basis for estimating, scheduling, executing, and monitoring and controlling the project work.
☐	d. The work breakdown structure (WBS) is used to represent the full project scope of the project.
☒	e. The work breakdown structure provides the relationships among all components of the project and the project deliverables.
☒	f. The work breakdown structure (WBS) is used as the basis for the scope baseline which is used in identifying activities or specific actions to be performed to produce of the project deliverables.
☐	g. Project work at lowest levels are not included in the work breakdown structure (WBS)

Part 3 – Project Cost

1. The following are processes involved in project cost management including budgeting the cost of the project. In your own words, discuss each.

Do not exceed fifty (50) words for each discussion.

Mapping: BSBPMG514 KE1 (p), KE2 (p)

LG: Learner Guide 2, page 83

Source: PMBOK Guide 4th Ed., Project Cost Management, page 168 - 188

Marking guide

Student must, in his/her own words, discuss the following processes involved in project cost management. Each discussion must not exceed fifty (50) words.

Estimating costs	<i>Estimating the costs is the process of developing an approximation of the monetary resources needed to complete the project activities. Cost estimates are a predication that is based on the information known at a given point in time. It includes the identification and consideration costing alternatives to initiate and complete the project.</i>
Determine budget	<i>Determining the budget is the process of aggregating the estimated costs of individual activities or work packages to establish an authorised cost baseline, which includes all authorised budgets, but excludes management reserves.</i>
Control cost	<i>Controlling costs is the process of monitoring the status of the project to update the project budget and managing changes to the cost baseline. Updating the budget involves recording actual costs spent to date.</i>

2. The following are different tools and techniques used in cost management. Match each to its correct description.

Write the letters that correspond in the spaces provided.

Mapping: BSBPMG514 KE1 (p), KE2 (p), KE3, KE4 (p)

LG: Learner Guide 2, page 83 – 84

Source:

	Strategy	Description
<i>b</i>	Analogous estimating	a. This is used to establish both the contingency reserves and the management reserves for the project with regards to cost.
<i>c</i>	Parametric estimating	b. This strategy uses the values of costings from a previous, similar project as the basis for estimating the same parameter or measure for a current project. This is used when the current project is similar to a previous one in terms of defined parameters.
<i>e</i>	Cost aggregation	c. This uses a statistical relationship between historical data and other variables to calculate and estimate for cost. This technique is used to produce higher levels of accuracy depending upon the sophistication and underlying data built into the model. Estimates made through this project can be applied to the whole project or to segments of a project.
<i>a</i>	Reserve analysis	d. These are used to develop mathematical models to predict total project costs.
<i>d</i>	Historical relationships	e. Cost estimates are combined by work packages in accordance with the Work Breakdown Structure. The work package cost estimates are then combined for the higher component levels of the WBS and ultimately for the entire project.
<i>g</i>	Earned value management	f. In this technique cost performance measurements are used to assess the magnitude of variation to the original cost baseline.

<i>f</i>	Variance analysis	g. This is commonly used as a performance measurement. It integrates project scope, cost, and schedule measure to help the project management team assess and measure project performance and progress.
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3. List four (4) processes which are followed in monitoring the project costs against outcomes to ensure that additional expenses are not incurred.

Mapping: BSBPMG514 KE4 (p)

LG: Learner Guide 2, page 84

Source:

- a.
- b.
- c.
- d.

Marking guide

Student must list four (4) processes that are followed to monitor project costs against outcomes and to ensure that additional expenses are not incurred. Wording and sequence may vary, however, student's responses must be the same in thought and meaning with the benchmark answers provided below.

- *Effective tool for managing the project finances (could be a spreadsheet or financial management software package).*
- *Sending invoices on a regular (or monthly) basis.*
- *Paying invoices promptly.*
- *Checking incoming invoices against contracts, quotes, agreements, etc.*

4. You are appointed as one of the Project Managers of Bigger than Big Corporation. As one of the Project Managers, it is essential that you have a full understanding of the organisation's policies and procedures relevant managing projects within Bigger than Big.

Review Bigger than Big Corporation's [Project Management Policy and Procedures](#) (username: cstclearner password: CstcPty@123).

- a. In your own words, discuss the organisation's Project Management Policy, including its background, purpose, and its scope.
- b. In your own words, discuss the organisation's Project Management Procedures including their purpose and scope.
- c. In your own words, list and discuss the Project Phases prescribed in the organisation's Project Management Procedures.

Do not exceed 100 words for each discussion.

Mapping: BSBPMG514 KE5

BSBWOR501 KE4

Marking guide

Student must

- a. In his/her own words, discuss the organisation's Project Management Policy, including its background, purpose, and its scope.
- b. In his/her own words, discuss the organisation's Project Management Procedures including their purpose and scope.
- c. In his/her own words, list and discuss the Project Phases prescribed in the organisation's Project Management Procedures.

Wording may vary, however, student's response must be the same in thought and meaning with the benchmark answers provided. Each discussion must not exceed 100 words.

- a.
Bigger Than Big is committed to the adoption of a standard approach to project management that reflects the Mission and Values of the company and the consistent use of project management procedures and templates to facilitate the implementation of strategic priorities.
This policy establishes a company-wide approach to the initiation, planning, implementation and closure of projects. It describes the minimum requirements for the governance and management of projects across Bigger Than Big Corporation.
This policy applies to projects at Bigger Than Big. A project is usually positioned within a program of work. Projects within a program will typically have shared objectives that are linked to the organisational unit plan.
- b.
This Bigger than Big Project Management Procedure articulates the Bigger Than Big Project Management Policy and the Project Management Lifecycle by defining the processes that are performed throughout the life of a project to ensure the efficient and effective management of projects.
The Project Management Procedure applies to projects in the Bigger Than Big. A project is a body of work with distinct start and end dates that progresses through defined phases and adheres to a formal project management methodology. It results in the transformation of a business function and/or delivery of one or more outcomes.
- c.
The Pre-Initiate Phase builds the foundation of a project.
The Initiate Phase begins the process of determining how the project will be executed.
The Plan Phase provides further detail about how the project will be conducted.
The Implement Phase focuses on the process of determining how the project outputs will be delivered.
Close Phase is the formal closure of the delivery component of the project.

Part 4 – Project Quality

1. In your own words, discuss each of the following key concepts in Quality Management.

Do not exceed 100 words for each discussion.

Mapping: BSBPMG513 KE1 (p)

LG: Learner Guide 2, page 111

Marking guide

Student must, in his/her own words the following key concepts in Quality Management. Wording may vary, however, response must be the same in thought and meaning with the benchmark answers provided below. Each discussion must not exceed 100 words.

Key Concepts in Quality Management	Discussion
Customer satisfaction	<i>Customer satisfaction is a key measure and indicator of the project's quality. Keep in mind that project quality management is primarily concerned with the product of the project and the management of the project.</i> <i>If the customer is not satisfied by the product produced by the project or it did not meet their needs or if the way the project was run didn't meet their expectations, then the customer is very likely to consider the project quality as poor, regardless of what the project manager or team thinks.</i> <i>As a result, not only is it important to make sure the project requirements are met, managing customer expectations is also a critical activity that you need to handle well for your project to succeed.</i>
Prevention over inspection	<i>The Cost of Quality (COQ) includes money spent during the project to avoid failures and money spent during and after the project because of failures. These are known as the Cost of Conformance and the Cost of Nonconformance.</i> <i>The cost of preventing mistakes is usually much less than the cost of correcting them.</i>

Continuous improvement	<i>Continuous improvement is a concept that exists in all of the major quality management approaches such as Six Sigma and Total Quality Management (TQM). In fact, it is a key aspect of the last concept, prevention over inspection.</i> <i>Continuous improvement is simply the ongoing effort to improve your products, services, or processes over time. These improvements can be small, incremental changes or major, breakthrough type changes.</i> <i>From a project perspective, this concept can be applied by analyzing the issues that were encountered during the project for any lessons learned that you can apply to future projects. The goal is to avoid repeating the same issues in other projects.</i>
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2. In your own words, discuss the difference between Quality Assurance and Quality Control.

Do not exceed 100 words.

Mapping: BSBPMG513 KE1 (p)

LG: Learner Guide 2, page 106

Marking guide

Student must, in his/her own words, discuss the difference between Quality Assurance and Quality Control. Wording may vary, however, response must be the same in thought and meaning with benchmark answers provided. Student's response must not exceed 100 words.

Quality Assurance is the testing of processes in producing the product. The planned and systematic activities implemented in a quality system so that quality requirements for a product or service can be fulfilled.

Quality Control is the testing of the end result products to uncover defects and reporting to management to make the decision to allow or deny product release.

3. The following are standards that could apply in various projects. In your own words, discuss each standard. Do not exceed fifty (50) words for each discussion.

Mapping: BSBPMG513 KE2

LG: Learner Guide 2, page 112

Marking guide

Student must, in his/her own words, discuss each of the following standards that could apply in various projects. Each discussion must not exceed fifty (50) words.

People standards	<i>The requirements of the people working in the project. This will be covered more in the HR section later in the course, but people standards include qualifications and experience. For instance, if part of the project you are managing involves underwater welding on an oil rig, then the people involved need to have appropriate diving and welding tickets. They will also need regular professional development and fitness testing.</i>
Process standards	<i>These are the standards for the processes in delivering the project, involving quality assurance auditing. For example, in a software development project, the processes by which the coding is programmed and rolled out can be audited to ensure it runs effectively, and integrates well with other parts of the project.</i>
Product / service standards	<i>These are the standards that look at the end product, involving quality control standards. For example, a project involving the development of a prototype household electrical appliance will need to comply with the Australian/New Zealand Standard for Wiring Rules (AS/NZS 3000:2007).</i>

4. The following are quality assurance and control methods, techniques and tools. Match each to its correct description.

Write the letters that correspond to your answers in the spaces provided.

Mapping: BSBPMG513 KE3 (p)

LG: Learner Guide 2, page 113

Source: BSBPMG513A 'Methods, Tools, and Techniques'

	Methods, tools, techniques	Description
<i>h</i>	Benchmarking standards	a. This is a distribution of dots comparing two variables. If the two variables are completely independent you would expect the dots to be evenly distributed randomly across the graph. If there is a strong relationship though, the graph will show a straight line or a mathematical curve going through it.
<i>g</i>	Brainstorming sessions	b. These are graphical representations showing a visual impression of the distribution of data. Usually it shows the frequency up the Y axis of the bar graph and the measuring variable along the X axis.
<i>d</i>	Control charts	c. It is a graph where the X axis is time dependent. This allows you to look for time-based cycles in processes.
<i>d</i>	Flowcharts	d. These are also known as Shewhart charts or process-behaviour charts. These charts are used to statistically measure the quality characteristics of a process are under control. This is based on a statistical analysis where a centre line is drawn for the mean of the output, then an upper control limit and a lower control limit is created either side of the centre line. The process is then measured over a period of time and the results plotted on the graph. Once the graph has been created, it can be analysed to test the stability of the process and also any cycles of errors.

<i>b</i>	Histograms	e. It is very similar to a histogram, but it includes a line over the graph indicating the cumulative distribution of the results.
<i>e</i>	Pareto charts	f. A diagram that represents a process. It shows the steps visually as a series of boxes with arrows in between them showing the work flow. Rectangular boxes represent tasks and diamond shaped boxes represent decision points, where the flow can split into two or more directions.
<i>c</i>	Run charts	g. It occurs when a group meets and is presented with a scenario where they creatively come up with a range of solutions.
<i>a</i>	Scatter grams	h. These may be dictated to by legislation through Federal, State or Local Government regulations, and may be dictated by industry bodies.

5. List five (5) responsibilities of the project manager in quality management.

Mapping: BSBPMG513 KE4 (p)

LG: Learner Guide 2, page 110

- a.
- b.
- c.
- d.
- e.

Marking guide

Student must list five (5) responsibilities of the project manager in relation to quality management. Wording may vary; however, student's responses must be the same in thought and meaning with the benchmark answers provided. Student's response must include five (5) of the following:

- *Determining the quality standards for the project deliverables.*
- *Determining the quality standards for the project processes.*
- *Documenting all the required standards in the project plan.*
- *Ensuring all organisational quality requirements are met for the delivery of the project.*
- *Leading, or at least coordinating, project QA and QC activities.*
- *Conducting, or coordinating, project audits.*
- *Coaching and mentoring project team members as needed to assist in achieving the project quality objectives.*
- *Reporting of quality outcomes to project sponsor (and other stakeholders if relevant).*

6. The following are methods used in managing continuous improvement. In your own words, discuss each method.

Do not exceed fifty (50) words for each discussion.

Mapping: BSBPMG513 KE5

LG: Learner Guide 2, page 112

Marking guide

Student must, in his/her own words, discuss each of the following methods used in managing continuous improvement. Wording may vary; however, responses must be the same in thought and meaning with the benchmark answers provided. Each discussion must not exceed fifty words.

Six Sigma	<i>It is a set of techniques and tools for process improvement. It seeks to improve the quality of the output of a process by identifying and removing the causes of defects and minimizing variability in manufacturing and business processes.</i>
Lean Six Sigma	<i>It is a methodology that relies on a collaborative project team effort to improve performance by systematically removing waste; combining lean manufacturing/lean enterprise and Six Sigma to eliminate the eight kinds of waste Time, Inventory, Motion, Waiting, Over production, Over processing, Defects, and Skills (abbreviated as 'TIMWOODS').</i>
Total Quality Management	<i>It is a comprehensive and structured approach to project management that seeks to improve the quality of products and services through ongoing refinements in response to continuous feedback.</i>

CASE STUDY

Instructions to Assessor

This assessment supports the industry requirement of inheriting a project that has issues. In real life project team members are more likely to enter a project whilst it is in progress and contains some 'baggage' than they are to enter a project at the start. This assessment demonstrates the student's problem solving abilities in such a situation.

A separate case study is provided for each subject. The case study will be based on a fictitious company and scenario. It will include a number of questions and all supporting documentation containing the information to answer the questions will be supplied.

Instructions to Student

These case studies are hypothetical situations which will not require you to have access to a workplace, although your past and present workplace experiences may help with the responses you provide. You will be expected to encounter similar situations to these in future as you work in a project team environment.

In the real world you are likely to encounter the situation where you enter a project, taking over from another project manager. The documentation that is handed over to you is not necessarily up to scratch, and there could be serious issues with the project. This assessment captures that real life scenario.

The case studies are the first part of dealing with "multiple complex projects" required in all the units of this subject. The other assessment covering this requirement is the practical assessment. When you have completed the case studies you will be able to commence the practical assessment which covers the generic skills needed to function as an effective project team member. This assessment on the other hand covers the application of the underpinning knowledge and background theory.

Introduction

You have been appointed as a project management consultant to the project team at Awesome Landscapes Pty Ltd. Specifically, you are required to provide independent advice on seeing their current project throughout its entire lifecycle.

You have already provided advice to Awesome Landscapes in the previous workbook.

Today is 24 July 20xx. The project will shortly progress into the implementation stage. You have now been provided with up-to-date project documentation below, including an updated Project Plan. The project steering committee have reviewed the Project Plan, but they wish to have you conduct an independent evaluation of the project prior to signing it off.

As part of your consultancy services, you will be assisting the team in addressing issues around project constraints by answering the questions that follow this scenario.

The documents you need to complete the succeeding tasks can be accessed through the following links:

[Project Charter version 2 \(.pdf\)](#)

[Project Plan version 2 \(.pdf\)](#)

[Project Gantt Chart version 2 \(.mpp\)](#)

[Project Gantt Chart version 2 \(.pdf\)](#)

[Project Network Diagram version 2 \(.pdf\)](#)

(username: cstclearner password: CstcPty@123)

Note: These documents were generated in year 2016. For the purpose of this assessment, refer to ‘2016’ as the current year and ‘2017’ as the succeeding year.

1. List the three (3) project deliverables in Phase 1.

Mapping:

BSBPMG511 PC2.2 (p)

BSBPMG512 PC1.1 (p)

- a.
- b.
- c.

Marking guide

Student must list all three (3) deliverables below. Although wording may vary, responses must be the same in thought and meaning with the benchmark answers provided.

- *Removal of vegetation in areas being cleared and replanting/maintaining the plants for replanting in phase 3.*
- *Access roads through the existing forest for builders to access each building site.*
- *Retaining walls to provide stability around the buildings. Includes three additional retaining walls as per updated site plan.*

2. Discuss the project constraints in terms of scope, time, cost, and quality.

Mapping:

BSBPMG511 KE2 (p), PC2.1 (p)

Marking guide

Student must discuss the project constraints in terms of scope, time, cost, and quality. Although wording may vary, responses must be the same in thought and meaning with the benchmark answers provided.

Scope	<i>The scope listed in the inclusions and exclusions must be adhered to. The scope is restricted to the landscaping functions of the construction project as another company is responsible for the construction. BSBPMG511 PC2.1 (p)</i>
Time	<i>Project must work around the construction project. Construction of the chalets to begin on 24 September so the retaining walls need to be ready by then. The planting and landscaping must occur during the decorating and furnishing of the chalets between 7 January and 11 March when marketing will begin.</i>
Cost	<i>Fixed budget of \$550,000 paid by Massive Eco-development Corporation in four instalments to fund for the entire project.</i>
Quality	<i>The construction project is being done in an environmentally sensitive area requiring special Council constraints. All building and landscaping must be done to the approved building permit, and all work must be completed as per the developed plans and procedures listed in the quality plan.</i>

3. Review the project schedule as set out in the Project Plan and the Gantt Chart. Arrange the following tasks in the proper sequence as dictated in Phase 3 of the critical path.

Write 1 – 12 in the spaces provided; where 1 go first and 12 go last.

<i>Mapping: BSBPMG512 PC1.1 (p), PE1 (p)</i>	
8	Remove weeds
11	Plant additional plants
2	Move gravel to car park
1	Expand car park
12	Remove greenhouses
9	Plant plants from greenhouses
3	Seal car park
6	Soil preparation
7	Add boulders
5	Construct stone paving pathway
10	Purchase additional plants
4	Landscape over old access roads

4. Review the Project Plan. The change request has outlined one change in the scope of the project.
 - a. What is the change in scope?
 - b. How does this change in scope impact the overall duration of the project?
 - c. How does this change in scope impact the quality aspect of the project?

Mapping: BSBPMG511 KE3 (p)

Marking guide

Although wording may vary, response must be the same in thought and meaning with the benchmark answer provided:

- a.
Addition of three new retaining walls for additional chalets.
- b.
It has not changed the overall duration of the project as more staff have been put on to work in the affected tasks preventing any change in the duration of the task.
- c.
It doesn't affect any of the quality standards.

5. Why does the change request only list one change in project cost, yet when you look at the financial tables the costs seem to have increased in numerous parts of the project not even related to the item in the change request?

Do not exceed 100 words.

Mapping: BSBPMG514 PC3.3 (p), PE3 (p)

Marking guide

Although wording may vary, response must be the same in thought and meaning with the benchmark answer provided:

There is a change in scope that requires additional retaining walls to be built. This requires additional cost in retaining wall boulders, and in labour/contractor cost. Commencing the project one week early requires additional time (and therefore cost) to the project management of the project. These costs are all indirect costs and have been accounted for in the tables.

6. Who is responsible for working out these impacts of what initially seemed to be such a simple change, and ensuring all affected stakeholders understand the impact of such a change?

Mapping: BSBPMG511 PC1.3 (p)

Marking guide

Underlined words below are required in the student's response:

Sam Ng, Project Manager, Awesome Landscapes Pty Ltd

7. Access and review the Gantt Chart version 2.
- What important tasks are not included in the project Gantt Chart?
 - Discuss why these tasks must be included in the Gantt Chart? Keep your discussion within 100 – 200 words in length.

Mapping: BSBPMG512 PC1.3 (p), PE1 (k), PE3

Marking guide

Although wording may vary, response must be the same in thought and meaning with the benchmark answer provided, and must be within 100 – 200 words in length:

- The underlined phrase is required in the student's response.
The site quality audits should be included in the Gantt chart.
- Student's response must be 100 – 200 words in length.
The appendices in the quality plan show the project manager needs to conduct a number of QC audits on the deliverables, and should also conduct some QA audits on the work the landscaping team and the contractors are performing. This needs to be done to ensure the site supervisor is meeting their responsibilities in meeting compliance requirements as outlined in the quality plan. Given the quality plan is very specific about what needs auditing, the Gantt chart should show exactly when the audits are to be held so the site supervisor can avail themselves. The Council audits should also be included in the Gantt chart to ensure the site supervisor and project manager are on site as well.

8. List the three (3) personnel who signed off on the change request.

Mapping: BSBPMG511 PC1.3 (p)

- a.
- b.
- c.

Marking guide

Student must list all three (3) personnel below (underlined words are required in the student's responses:

Susan Wills (Program Manager, Massive Eco-Development Corporation).

Stephen Lyons (Planning Manager, Cascade Peaks Shire Council).

Kim Nguyen (Director, Awesome Landscapes Pty Ltd)

9. What is the total increase in cost of the project as a result of this change request?

Mapping: BSBPMG514 PE4 (p)

Marking guide

Answer: \$17,900.00

10. List five (5) exclusions under Stage 2 – Building Support of the Scope Management Plan.

Mapping: BSBPMG511 PC2.1 (p)

- a.
- b.
- c.
- d.
- e.

Marking guide

Student must list any five (5) from the following. Although wording may vary, student's responses must be the same in thought and meaning with the benchmark answers provided.

- *Monitoring and maintaining partially and fully constructed buildings.*
- *Monitoring and maintaining the main road.*
- *Creation of additional retaining walls.*
- *Onsite security (this is provided by the chalet development project).*
- *Any building, decorating or furnishing of the chalets.*
- *Installation of utilities.*
- *Installation of service points at either road or chalet end.*
- *Provision or delivery of utility raw materials or installation equipment.*
- *Testing of the utilities (this will be done by the building contractors when the cables and pipes have been laid, but before they are buried.*
- *Weather damage.*
- *Installation of pipes and tanks.*
- *Construction of septic system buildings or other infrastructure.*
- *Provision or delivery of pipes and tanks.*
- *Purchase and maintenance of additional native plants to replace any that had perished.*
- *Removal of additional plants or weeds from the building sites.*

11. Review the Project Plan. Does it follow the change management procedure? Explain your reasoning.

Do not exceed 50 words.

Mapping: BSPMG511 PC3.3 (k)

Marking guide

Although wording may vary, student's responses must be the same in thought and meaning with the benchmark answer provided.

No. The only part of the procedure that wasn't followed was the change register in the project plan. Sam forgot to fill it in.

12. Access and review the Gantt Chart version 2. It shows double bars for each task.

- What do the coloured bars  represent?
- What do the grey bars  represent?
- Why do the grey and coloured bars do not match up in the Gantt chart?

Mapping: BSBPMG512 PC1.3 (k), PC3.1 (k), PE2 (k), PE3 (k)

Marking guide

Although wording may vary, student's responses must be the same in thought and meaning with the benchmark answer provided.

- The coloured bars on top represent the current project schedule.*
- The grey bars represent the project baseline, the project schedule determined at the start of the project.*
- The two bars do not match up as the project schedule has changed as a result of the change request.*

13. Assuming the project runs on schedule, list two (2) tasks that should be in progress if Sam was to visit the site on Monday 22 August.

Do not include the task 'Project Management'.

Mapping: BSBPMG512 PC1.3 (p), PC3.1 (p), PE2 (p)

- a.
- b.

Marking guide

Student must list two (2) tasks that should be in progress if Sam was to visit the site on Monday 22 August, assuming the project runs on schedule. Although wording may vary, student's responses must be the same in thought and meaning with the benchmark answer provided:

- *Move plants to glasshouse*
- *Delivery of granite boulders*

Student must not include the task 'Project Management'.

14. If Sam was to visit the site on Thursday, 22 September, he will see that two (2) tasks are in progress, namely:
- a. Construction of retaining walls.
 - b. Install and compact soil behind walls.

According to the procedure documents, these two activities cannot happen at the same time. The retaining wall has to be built first. Once construction is completed, the soil needs to be added behind. Why are these two tasks in progress on the same day?

Mapping: BSBPMG512 PC1.3 (p), PC3.1 (p), PE2 (p), PE3 (p)

Marking guide

Although wording may vary, student's responses must be the same in thought and meaning with the benchmark answer provided:

There are numerous retaining walls to be built, so one retaining wall can be built on 22 September, but another one that has already been complete can be filled in and compacted at the same time.

15. According to the Gantt Chart, if there is a delay in the completion of Task 57 'Construct stone paving walkway',
- Which tasks, if any, are immediately delayed?
 - Will this delay push out the completion of the project? Why or why not?
 - Discuss how this could affect the resourcing of the project.
 - List one (1) risk that could arise from this issue.

Mapping: BSBPMG512 PC1.3 (p), PC2.3, PC3.1 (p), PE2 (p), PE3 (p)

Marking guide

Although wording may vary, student's responses must be the same in thought and meaning with the benchmark answer provided:

- Task 59 'Erect signs' and Task 62 'Soil preparation'*
- Yes, because task 57 is on the critical path.*
- Resources committed to these tasks may be allocated to other tasks in this (or other) projects. A delay in these tasks may affect their ability to complete other scheduled tasks.*
- Student must list one (1) risk that could arise from this issue. Sample answer includes but not limited to:

Resources committed to other tasks/other project may not be able to complete their tasks due to other commitments.

16. What is the total budget for the project expenditure?

Mapping: BSBPMG514 PE3 (p)

\$462,153.00

17. Sam is very concerned about the cash flow of the project.
- What is the problem?
 - What would you suggest be done to rectify the cash flow issue?

Mapping: BSBPMG514 PC3.3 (p), PE4 (p)

Marking guide

Although wording may vary, student's responses must be the same in thought and meaning with the benchmark answer provided:

a.

The first payment from Massive Eco-development will be delayed to the point that the project will go in the red about \$240,000 by the time the payment goes into a bank account.

b.

The solution to this would be to raise a change request that would allow for earlier payment of the first invoice so the initial payment funds would appear in Awesome Landscapes' bank account before the start of the project to absorb the start of project spending.

18. Discuss whether Awesome Landscapes should seek increased funding from Massive Eco-development Corporation to absorb some or all of these cost increases.

Your discussion must be 200 – 300 words in length.

Guidance:

The change requests have incurred extra expense, yet the funding to be paid by Massive Eco-development Corporation has not changed.

If you believe Awesome Landscapes should seek increase funding from Massive Eco-development Corporation, provide a strong argument for your case. If not, explain your reasoning.

Mapping: BSBPMG514 PC3.3 (p)

Marking guide

Student must discuss whether Awesome Landscapes should seek increased funding from Massive Eco-development Corporation to absorb some or all of these cost increases. Although wording may vary, student's responses must be the same in thought and meaning with the benchmark answer provided. Student's discussion must be 200 – 300 words in length.

- *Yes – there is a strong case for increased funding.*
- *Although Massive Eco-development has stipulated a fixed price contract and Awesome Landscapes is expected to absorb any cost increases, they should seek additional funding to cover the additional scope of the construction of three additional retaining walls. These extra retaining walls are going to result in a significant cost increase.*
- *Awesome Landscapes should also seek additional funding to cover the huge increase in the cost of road gravel. However, Massive Eco-development Corporation may turn down their request as it isn't a change in scope.*

19. Complete the following Audit Template with the standards determined in the previous question (Case Study Question 18). This will be given to an internal auditor to audit the financial processes at various points along the project.

Guidance: Complete only the fields highlighted in yellow. Do not complete the 'Assessment' and 'Comment' fields under 'Audit of Management of Project'.

Mapping: BSBPMG513 PC1.1 (p), PC2.1 (p)

Marking guide

Student must complete the following Audit Template. Although wording may vary, student's responses must be the same in thought and meaning with the benchmark answers provided in the template below.

Student is required to complete only those fields highlighted in yellow.

Quality Audit Template		
Project Name: <i>Cascade Peak Chalets Landscaping Project</i>		
Prepared by: <i>Student's name</i>		
Date:		
Project Manager: <i>Sam Ng, Awesome Landscapes</i>		
Project Phase:	Overall Project Status:	
Audit Date:	Audit Number:	Audit Leader:
Audit Team:		
Goal(s) of This Specific Audit: <i>To evaluate the financial systems for the project.</i>		
Audit of Management of Project:		
1. <i>Are contractual requirements of contractors evaluated prior to the payment of contract invoices?</i>	Assessment:	Comment:

2. <i>Are contract invoices eligible for payment paid on time?</i>	Assessment:	Comment:
3. <i>Are project purchases paid on time?</i>	Assessment:	Comment:
4. <i>Are invoices sent out to funding sources for the project on time?</i>	Assessment:	Comment:
5. <i>Is financial reporting to management done on time?</i>	Assessment:	Comment:
6. <i>Is there a calendar of upcoming payments and receipts?</i>	Assessment:	Comment:
7. <i>Is the calendar up to date with respect to project change requests?</i>	Assessment:	Comment:
8. <i>Is there a regular comparison between actual cashflow and predicted project cash flow?</i>	Assessment:	Comment:
9. <i>Have discrepancies between planned expenditure and actual expenditure been documented for review in future projects?</i>	Assessment:	Comment:
Overall Assessment of Management of Project:		
Recommended Action(s)/Lessons Learned Regarding Management of the Project: 1. 2. 3.		

Additional Audit Comments:

- 1.
- 2.
- 3.

Have you attached additional material(s)?

ye

n

Name(s) of attachment(s):

- 1.
- 2.

Audit Report Submitted To:**Date:**

20. Sam has provided you with the following audit from a previous project (landscaping the new Cascade Peak Shopping Centre). Evaluate the audit report below and answer the following questions:
- What was the cause of the unsatisfactory results?
 - What action would you recommend to prevent the issue coming up again in this project?

Mapping: BSBPMG513 PC1.1 (p), PC2.1 (P)

Marking guide

Student must evaluate the audit report below and answer the following questions. Although wording may vary, student's responses must be the same in thought and meaning with the benchmark answer provided.

- Poor communication between the project manager and the site supervisor, with a lack of the required detail in the task briefs.*
- Project manager needs to prepare the task briefs in enough advance time to ensure all the required detail is provided to the site supervisor.*

Quality Audit Template

Project Name: *Cascade Peak Chalets Landscaping Project*

Prepared by: *Sam Ng*

Date: *17 August 2015*

Project Manager: *Sam Ng, Awesome Landscapes*

Project Phase:

Implementation

Overall Project Status: *On schedule*

Audit Date: *17 August 2011*

Audit Number: *26*

Audit Leader: *Sam Ng*

Audit Team: *Sam Ng, John Cowley, Ann Deak.*

Goal(s) of This Specific Audit: *To evaluate the communication and reporting processes.*

Audit of Management of Project:		
1. Are tasks being communicated to site supervisor in a reasonable amount of time?	Assessment: Satisfactory.	Comment:
2. Are tasks being communicated to site supervisor of sufficient detail?	Assessment: Not satisfactory.	Comment: Tasks only being communicated as per Gantt chart. Site supervisor having to seek clarification regularly on requirements of tasks.
3. Are tasks being communicated by the site supervisor to the team members and contractors done in a reasonable amount of time?	Assessment: Not satisfactory.	Comment: Timing of communication can be improved if there wasn't the need for clarification of the details of the tasks.
4. Are tasks being communicated by the site supervisor to the team members and contractors of sufficient detail?	Assessment: Satisfactory.	Comment:
Overall Assessment of Management of Project: Tasks being communicated to the supervisor do not have the level of detail required by the site supervisor. In particular detailed plans are not provided with the task briefs. Some delays in commencing tasks have been experienced as the site supervisor has awaited clarification from the project manager.		
Recommended Action(s)/Lessons Learned Regarding Management of the Project: 1. Project manager to prepare task briefs in enough time to add the required level of detail. 2. Task briefs are to be supplied with all relevant attachments such as detailed plans.		

Additional Audit Comments:			
1.			
2.			
3.			
Have you attached additional material(s)?			☐ ye ☒ x ☐ n
Audit Report Submitted To: Kim Nguyen			Date: 24/08/2015

21. The quality plan is very weak on cost management. Write a Cost Management Plan (of 200 – 300 words) for managing the quality of the financial processes while the project is in progress.

Guidance: Your Cost Management Plan must cover the following quality objectives and criteria.

- a. Meeting with contractual requirements.
- b. Paying invoices on time.
- c. Ensure invoices are sent out in time.
- d. Ensuring financial reporting is done on time.
- e. Include a calendar of when payments are likely to be due.
- f. Comparison of actual cash flow against projected cash flow.

Mapping:BSBPMG514 PC1.4 (p), PE2 (p)

Marking guide

Student must write a 200 – 300 word plan for managing the quality of the financial processes whilst the project is in progress. Although wording may vary, student's response must include the following:

- a. Meeting with contractual requirements.*
- b. Paying invoices on time.*
- c. Ensure invoices are sent out in time.*
- d. Ensuring financial reporting is done on time.*
- e. Include a calendar of when payments are likely to be due.*
- f. Comparison of actual cash flow against projected cash flow.*

WORKBOOK CHECKLIST

When you have completed this workbook, please ensure you have completed all parts of it:

- ☐ **Written Questions**
 - ☐ **Part 1 – Project Scope**
 - ☐ **Part 2 – Project Time**
 - ☐ **Part 3 – Project Cost**
 - ☐ **Part 4 – Project Quality**
- ☐ **Case Study**

IMPORTANT REMINDER

Students must achieve a satisfactory result to ALL assessment tasks to be awarded COMPETENT for the unit relevant to this subject.

To award the student competent in the units relevant to this subject, the student must successfully complete all the requirements listed above according to the prescribed benchmarks.

End of Document