Colab

BSBPMG531 ASSESSOR GUIDE

Manage project time

Assessment 1 of 6

Short Answer Questions

Version 1.0

Assessment Details

Task overview

This assessment task consists of eight (8) short answer questions. Read each question carefully before typing your response in the space provided.

Additional resources and supporting documents

To complete this assessment, you will need:

- Access to your learning materials.
- Access to a computer and Internet.
- Access to Microsoft Word (or a similar program

Assessment Information

Submission

You are entitled to three (3) attempts to complete this assessment satisfactorily. Incomplete assessments will not be marked and will count as one of your three attempts.

All questions must be responded to correctly to be assessed as satisfactory for this assessment.

Answers must be typed into the space provided and submitted electronically via the LMS. Hand-written assessments will not be accepted unless previously arranged with your assessor.

Reasonable adjustment

Students may request a reasonable adjustment for assessment tasks.

Reasonable adjustment usually involves varying:

- the processes for conducting the assessment (e.g. allowing additional time)
- the evidence gathering techniques (e.g. oral rather than written questioning, use of a scribe, modifications to equipment)

However, the evidence collected must allow the student to demonstrate all requirements of the unit.

Refer to the Student Handbook or contact your Trainer for further information.

Question 1

Research the following estimating techniques to determine task duration and resource effort:

- Bottom-up estimating
- Top-down estimating
- Analogous estimating and
- Parametric estimating.

Complete the following table to explain how each can be applied to determine a task's duration and resource effort within a project. Give one (1) advantage and one (1) disadvantage of each technique.

(Approximate word count: 100-200 words each)

Assessor Instructions

The student must:

- Describe four (4) of the following estimating techniques:
- Explain how each technique is applied to determine the duration and resource effort of the task
- Provide one (1) advantage and one (1) disadvantage for each technique listed.

Question 1			
Estimating technique	**How it is applied to determine the duration and resource effort of a task**	**One advantage of the technique**	**One disadvantage of the technique**
Bottom-up estimating	To analyse from the bottom up, the larger tasks are broken or decomposed into smaller, detailed tasks or activities, and the time needed to complete each of these smaller chunks is estimated. The estimation from each task is then totalled for the whole plan. This technique is often used when the requirements for discrete, smaller work tasks are known and added together for the whole project. The people's commitment to meeting timelines relies on the team member feeling free to negotiate and accurately estimate a fair and	The student must list one advantage, which may include: ▪ The estimate of time for each smaller task is likely to be more accurate than analogous or parametric estimates ▪ It can be used in any industry ▪ People in the project feel involved, take ownership and are more likely to commit in full as they work on their small part of the whole to confirm their estimates	The student must list one disadvantage, which may include: • Bottom-up takes more time to complete than other techniques • The project manager needs to wait until they know who will be on the project team before starting bottom-up estimating • The underlying assumption is the project consists of the sum of all the tasks. Integration of tasks or overarching tasks may be ignored The cost estimation is based on the duration estimation – both rely on resourcing. An error in resourcing estimation

Question 1			
Estimating technique	**How it is applied to determine the duration and resource effort of a task**	**One advantage of the technique**	**One disadvantage of the technique**
	reasonable time rather than forcing the time on them.		would flow over to inaccurate time and cost estimates
Top-down estimating	To analyse from the top down, the major elements of the projects are identified, and an estimate of the work and resourcing for each is made, enabling the development of an overview of the expected timeline. Then high-level chunks are estimated and decomposed into smaller chunks or work packets with estimated times based on information from previous similar tasks or projects, experiences or expert judgement. This technique considers data from completed projects, including mitigated and unmitigated risks and scope creep. This minimises the risk of overlooking costs, resources or work activities. Top-down estimates are generally used in the initial stages of a project until the WBS are clearly set down, and schedules and budgets are then clearly defined from this. This method is often used in tandem with bottom-up estimating. Where the results of these two techniques agree, a level of confidence in the accuracy of the estimates by the project sponsor and other persons involved usually occurs.	The student must list one advantage, which may include: ▪ Useful for an overview of estimates, strategic decision making and in the initial stages of projects to develop accurate duration and cost estimates, where the information to make informed decisions is not available ▪ Useful for validation purposes ▪ Generally, it takes less time and effort to produce	The student must list one disadvantage, and may include: ▪ Tasks are not clearly defined ▪ Less reliable duration and cost estimates
Analogous estimating	Analogous estimation is when the time it took to complete a similar task/s in another project or how a problem was dealt with is used to estimate the time for the current situation. Simply, it compares	The student must list one advantage, which may include: ▪ Simple, fast and quick technique without the	The student must list one disadvantage, and may include: ▪ Project manager does not record the cost, duration and other project

Question 1			
Estimating technique	**How it is applied to determine the duration and resource effort of a task**	**One advantage of the technique**	**One disadvantage of the technique**
	current and past projects to estimate time and cost. The project manager and the team's experience and judgement are used to estimate time and cost. It is a common technique during the initial stages of a project.	heavy amount of calculations ▪ Less costly and not time-consuming ▪ Accurate as it is based on historical data from previous projects an organisation may have been involved in ▪ Useful for projects where estimates are required, but there is not an abundance of information, and decisions have to be made on whether a project is worth undertaking ▪ The organisation's success rate for project completion is expected to be high as this technique is based on past project data and information	parameters at the end of the project ▪ Less accurate than other techniques Accuracy may be questioned unless there is a history of the same or very similar project
Parametric estimating	This is a mathematical technique. Parametric estimating is where the estimate of time is based on past experience, available data, metrics, and statistics. It uses the relationship between variables to calculate the cost or duration. It enables tracking the final estimate and how it might change depending on the initial parameters. It also helps to analyse the estimated deviation from the average to see its effect. The parametric estimate is determined by taking one deliverable – the unit cost or duration – and multiplying it by the number of units	The student must list one advantage, which may include: ▪ More accurate than analogous estimation ▪ Less impact on the project	The student must list one disadvantage, which may include: ▪ Published rates may not be widely accepted or published ▪ The measurement must be scalable to be accurate ▪ Time-consuming as a need to calculate units

Question 1			
Estimating technique	**How it is applied to determine the duration and resource effort of a task**	**One advantage of the technique**	**One disadvantage of the technique**
	(deliverables) required for the project or activity. There are often published rates for specific tasks that project managers might use. This is common in the construction industry.		

Question 2

Explain the process for identifying the critical path.

(Approximate word count: 50-100 words)

Assessor Instructions

The student must describe the process for identifying the critical path for a project.

Question 2
Accept variations of the following: The process for identifying a critical path includes the following steps: • First, specify each activity or task needed to complete the project (these are detailed in the WBS). • Sequence the activities (by understanding the dependencies between tasks) • Draw the network diagram - this is a graphical representation of the project • Estimate task/activity durations • Identify the critical path (the longest route through the network) • Use the critical path as a monitoring tool, as well as a planning tool, and update it throughout the project

Question 3

a) Explain what time management methodologies mean and why they are important in project management. (Approximate word count: 50 words)

Assessor Instructions

The student must show they understand how their definition can be expanded and applied to time.

Question 3a

Accept variations of the following:

Time management methodologies ensure time is used as efficiently and effectively as possible. The methodologies ensure resources are allocated and used efficiently and work tasks are planned to use the available time effectively. Time management methodologies make sure work tasks progress in a systematic and ordered manner supported by budget and resources.

b) Complete the following table to describe the time management methodology GTD, bottom-up estimating and three-point estimating. For each methodology, include their capabilities, limitations, application and outcomes.

(Approximate word count: 100-200 words)

Assessor Instructions

The student must describe time management **methodologies GTD, bottom-up estimating and three-point estimating** and their capabilities, limitations, application and outcomes.

An example is provided below.

Question 3b				
Methodology	**Description & application**	**Capability**	**Limitation**	**Desired outcome**
GTD Getting Things Done	GTD is a framework for tracking and organising what you need to do, should, or are considering doing. The principles behind the methodology are: • Record the tasks to do, keeping a focus on the big picture/project rather than keeping the ideas in the head • Break down the tasks recorded into smaller chunks or steps so as not to be overwhelmed by the big overall project • Let the GTD capture, keep and organise ideas so they	It is composed of five steps: collect (capture everything), process (clarify into concrete actions), organise (put things in their right place, e.g. calendar, file), review (look over and revise lists frequently) and do (engage so the work on important things gets done). The advantage of the system is it can put a person in control of project tasks without the stress associated with completing things on time and as needed	It may take some time to get started and, for some people, difficult to implement.	Keep staff and team members organised and productive to concentrate on the most critical task in a project. Manage workflow through the elimination of mental distractions and anything else that might be a block to productivity.

Question 3b				
Methodology	**Description & application**	**Capability**	**Limitation**	**Desired outcome**
	can be acted on when required or at a later time			
Bottom-up estimating	Larger tasks are broken or decomposed into detailed, smaller tasks or activities, and the time needed to complete each one is estimated. The estimation from each task is then totalled for the whole plan. This method is often used when the requirements for discrete, smaller work tasks are known and added together for the whole project. The commitment from the people to meet timelines relies on team members feeling free to negotiate and accurately estimate a fair and reasonable time rather than have the time forced on them.	• The estimate of time for each smaller task is likely to be more accurate than analogous or parametric estimates • It can be used in any industry	• Bottom-up takes more time to complete than other techniques • The project manager needs to wait until they know who will be on the project team before starting bottom-up estimating • The underlying assumption is the project consists of the sum of all the tasks. Integration of tasks or overarching tasks may be ignored • The cost estimation is based on the duration estimation – both rely on resourcing. An error in resourcing estimation would flow over to inaccurate time and cost estimates	Provide accurate costs or duration of a project.
Three-point estimating or PERT (Program	Three-point estimating is a technique where three estimates are	• The estimate considers the risk in the task or activity and	• May provide inaccurate estimates if the assumptions	Estimates time using a three-point estimate.

Question 3b				
Methodology	**Description & application**	**Capability**	**Limitation**	**Desired outcome**
Evaluation and Review Technique)	calculated – one for the best scenario or the fastest an activity can be completed or the amount of work the task might take if the positive risks identified occur (O for optimistic), one for the worst scenario, that is the longest time for the activity or the amount of work if the negative factors were taken into account (P for pessimistic), and one for the most likely case or the required delivery date (ML or BG – best guess – for most likely). The team members provide, usually in discussion or as a brainstorming exercise, their best guess for all three – optimistic, pessimistic and most likely for their deliverables. **Steps**: ▪ Each team member assigned to a task identifies in tandem with other team members or the project manager the positive and negative risks involved in the task	therefore provides a better commitment from team members – shows the project manager and team have considered the amount of time the task will take, given there are risks involved • Provides useful information concerning risk for each task and enables an opportunity for corrective action before work on the task commencing	the data is based on are inaccurate or the information is subjective • Can be time-consuming as it is quite detailed • Can be confusing if different people see optimistic, most likely and pessimistic in different ways • Requires detailed information that may not be available at the beginning of the project • Often the duration is underestimated rather than accurately estimated or overestimated, leading to project problems such as the project falling behind, or the budget being unable to cope with extended deadlines or increased resourcing	

Question 3b				
Methodology	**Description & application**	**Capability**	**Limitation**	**Desired outcome**
	▪ The values are determined in hours or days by asking questions like: 'How long will the project take if all goes well and there are no risks, problems or issues?" ▪ The team member then makes three estimates (O, P and ML). E is the estimated time for completion ▪ The estimated time is calculated using the 3-point formula that is E = (O + ML + P)/3, i.e. a simple mean (triangular estimate) is required ▪ The weighted mean or PERT estimate (the formula is E = (O + 4ML + P)/6) is from the three estimates the team members provide and reflects the amount of risk in the task and the severity of the impact of the optimistic and pessimistic risks.			

Question 3b				
Methodology	**Description & application**	**Capability**	**Limitation**	**Desired outcome**
	The four are derived as there is more chance of the most likely happening than not. Dividing by 6 to find the average is arrived at by adding the 4 from the ML and the 2 other parts of the formula (P and O) If the variance is to be calculated, the formula used is P – O/6			

Question 4

a) Explain what is meant by a time management tool.

(Approximate word count: 20-50 words)

Assessor Instructions

Student responses will vary but must show how their definition from question 6 is applied to time.

Question 4a
The following is an example only. Accept variations of the following. A time management tool is an instrument used to carry out a task, facilitate an activity or chase an end result to ensure it occurs over and is completed within the allocated time.

b) Describe the following three (3) tools used to schedule time throughout the life cycle of a project:

- Action plan
- Gantt chart
- Critical path method

For each tool, include two (2) capabilities, two (2) limitations, where the tool might be used, and the desired outcome.

(Approximate word count: 100-200 words)

Assessor Instructions

The student is to describe the action plan and Gantt chart tools and **two** of their own choice used in project time management. They must include the following in the description:

- Two capabilities
- Two limitations
- The desired outcome of using the tool

Ensure the student describes project time management **tools.** Accept variations of the following.

Question 4b				
Tool	**Description**	**Capability**	**Limitation**	**Desired outcome**
Action plans	A list of all the tasks needed to finish a project, task or meet an objective Action plans clarify the objectives and timescales It identifies a performance measure against which success can be measured	Provides a framework for thinking about how to complete a project efficiently Keeps tasks in a logical order so none are missed Can see tasks; therefore, easy to delegate responsibilities and jobs or outsource as required A structured plan to reach the desired end goal Provides a foundation of time and effort and therefore helps users to prioritise tasks	Tasks may be missed Elaborate planning may lead to a false sense of security so that people do not think outside the box but take what is on the list as the only thing to do Managers may feel that as long as they work to the action plan, everything in the project is progressing satisfactorily The plan sets dates that need to be met, which can be stressful and prove demanding for some	To list all the tasks necessary to complete a project, task or meet an objective Revise the to-do list so that there is a preprepared list to be used for similar tasks or projects in the future or be used by others to create consistency in outcomes
Gantt charts	A horizontal bar chart showing the start, duration and finish of a project or parcel of work Each bar shows the period over which a task or particular parcel of work is to be completed	Enables thoughts to be organised and plan out how tasks are to be completed Shows other team members and managers a person understands the time implications of a project	Need to be constantly updated Requires the ability to change the chart easily and frequently The bar size is not an indication of the amount of work for a particular task	A means to manage time and visually see project progression so the project can be completed on time as desired To monitor the project to see if on schedule and, if not, to take

		Helps to work out the critical path for a project where it must be completed by a particular date Useful for managing the dependencies between tasks	The bar size does not indicate the resource level required to complete a task	remedial action to put it back on track
Critical Path Method	The critical path is the greatest number of successive tasks required to complete a project successfully. Tasks on this path are known as 'critical activities' because their delays cause a delay for the whole project.	Allows project managers to Accurately estimate the total project duration Identify task dependencies, resource constraints and project risks Prioritise tasks and create realistic project schedules.	Requires complex calculations. Does not apply to all project types, such as creative projects. Does not provide good insight into resource constraints affecting project scheduling.	Identifies all the tasks to be completed in a project, then determines the tasks that must be done on time and those that can be delayed if needed and how much float or slack you have.

Question 5

Describe a project life cycle and explain the different phases.

(Approximate word count: 200-300 words)

Assessor Instructions

The student must clearly describe a project life cycle.

A project life cycle is a sequence of phases a project moves through from when it begins to when it is closed.

Question 5
The students' responses may vary in several phases and the life cycle sequence. This is acceptable so long as the following information is included. Accept similar variations of the following. The four phases/stages of the project life cycle are: • **Start-up/initiation phase**. This phase is where the project aim is defined. Conceptual aspects of the project are agreed upon, and a business case is developed and approved. A project charter is developed, including the project purpose, vision and goals, detailing the scope of work, naming the project sponsor and stakeholders, and project timelines. Project management tools may be selected, and a feasibility study may be undertaken on solutions in terms of risks, financial commitment and benefits • **Organising and planning phase**. Planning consists of strategic planning, which covers the approach to the project as a whole, and implementation planning, covering ways to apply the decisions from the strategic planning are pursued. The project is broken into manageable areas of work and planned

in terms of time, cost and resources. Roles and responsibilities are communicated to relevant persons, risks are identified and mitigated, and contingency plans created

- **Execution phase**. This phase is where the decisions and work agreed to in the planning phase are implemented. Deliverables are built to ensure requirements are met. This phase also includes managing, controlling and monitoring resources, project performance, risk management and progress. Status meetings are held, reports presented, project schedule updated, and project plans modified as needed
- **Closing the project phase**. This is the last phase – the official close of the project. Resources are reassigned, project documents organised, and inventory taken of all deliverables. The project may be handed off to the client or team handling the day-to-day operations. A post-review is carried out, and learning is documented for continuous improvement in project management. Stakeholders and other relevant parties are informed of any issues and the success or not of the project.

Question 6

Describe the four (4) steps involved in managing changes to the project baseline.

(Approximate word count: 100 words)

Assessor Instructions

The student responses may vary. An example is provided. Accept variations of the following.

Question 6	
Step 1	Complete a change request (either email or template), including a description of the change, the reason for the change and the impact on the schedule baseline
Step 2	Change requests are submitted as per organisational and project procedures, usually to the project sponsor
Step 3	The change request is approved/not approved. If approved, appropriate updates to the schedule, WBS and any other time management documents are made
Step 4	The change to the schedule and associated documents are communicated according to organisation procedures to all relevant stakeholders

Question 7

a) Describe what a project baseline means and its purpose in project management.

(Approximate word count:100 words)

Assessor Instructions

Question 7a
The student must include in their response reference to: • A project baseline is the original version of a plan that is approved. It is used to measure performance throughout the project's life and to analyse the value of the project.

There are three project baselines: scope, time (schedule) and cost (budget), and the interaction between these determines the parameters of the overall project baseline.

- A project baseline must be documented and controlled. It should not be changed without following formal change control procedures

b) Explain procedures for managing project schedule baselines, establishment and variance.

(Approximate word count: 100-200 words)

Assessor Instructions

Question 7b

The student must refer to the following in their response:
• Before scheduling or budgets are established, the scope must be determined
• Without a scope, there is no start or end point to the project or known deliverables
• Once the scope is known, further breakdown to understand the project activities can be determined by creating a work breakdown structure
• Before variance tracking can be put in place, cost and schedule baselines must also be established
• The cost baseline is the approved budget against which cost performance is measured; the schedule baseline is the approved timeline against which scheduling performance and reporting are made
• Procedure to establish a schedule and cost baseline including:
  ○ Developing a schedule by preparing a WBS
  ○ Identifying resources for each task, including constraints and how much time human resources can be realistically assigned to tasks
  ○ Estimating the length of time to complete a task
  ○ Estimating the cost of the task (monetary or resourcing) needed to complete the task and identifying any fixed costs
  ○ Determining the dependencies
  ○ Determining the critical path
  ○ Developing the cost baseline – used against time to measure performance in terms of cost at a particular stage in the project (cost by time budget)

c) Explain what is meant by variance in project management.

(Approximate word count: 20-50 words)

Assessor Instructions

An example is provided. Accept variations of the following.

Question 7c
Variance is a measurable change to a known baseline, such as the schedule baseline. It is the difference between what is expected and what actually occurs or is accomplished.

d) Explain what is meant by a positive and a negative variance as they relate to the schedule of a project.

(Approximate word count: 20-50 words)

Assessor Instructions

An example is provided. Accept variations of the following.

Question 7d
A positive variance occurs when the project moves ahead of its scheduled tasks and activity timelines. A negative variance occurs when the project activities are running late or not being completed.

e) A project manager has been given a fixed completion date and project cost, which cannot be altered. However, the latest review of activities shows the project is behind time. List three impacts that this might have on the project.

(Approximate word count: 20-50 words)

Assessor Instructions

Question 7e
The student must list three impacts, and may include: Additional resources may need to be allocated to tasks so they can be finished on time or reduce the task duration Additional resources may result in increased cost, which in turn affects the cost baseline As the project budget is fixed, there may be a need to request a reduction in the number of deliverables for the project affecting the scope baseline Other suggestions of reasonable impacts.

Question 8

Explain work breakdown structures (WBS) and how they apply to project schedules.

(Approximate word count: 20-50 words)

Assessor Instructions

The student is to describe and explain work breakdown structures and their application to project schedules.

Accept variations of the following:

Question 8
A work breakdown structure defines a project's required tasks and activities and shows their relationships. A WBS is a tool that articulates the scope of work and provides the basis for estimations to aid discussion about the project.

Assessment checklist:

Students must have completed all questions within this assessment before submitting. This includes:

1	Eight (8) short answer questions are to be completed in the spaces provided.	☐

Congratulations, you have reached the end of Assessment 1