what is critical path
The critical path in project management is the longest sequence of activities that must be finished on time to complete the entire project. It determines the earliest time by which the project can be completed.

why is it called critical path
Because it has the least amount of slack or float. If something changes in the critical path it can change the time taken to complete the project.

PDCA
(plan–do–check–act or plan–do–check–adjust) is an iterative four-step management method aimed to improve processes and mitigate the risk of recurring mistakes.
PLAN - hypothesise, test, results
DO - test the hypothesis in controlled environment
CHECK - Review analysis, evaluate metrics
ACT - Implement the revisions

CPI
The Cost Performance Index (CPI) is a method for calculating the cost efficiency and financial effectiveness of a specific project through the following formula: CPI = earned value (EV) / actual cost (AC).

process groups
Initiation, planning, execution, monitoring and controlling, closing

parameters in risk management
- Risk likelihood
- Risk Consequence
- Threshold to trigger management activities

Knowledge area in sequence, types of quality, CoQ
Knowledge areas - 1. Project integration management

2. Project scope management
3. Project time management
4. Project cost management
5. Project quality management
6. Project resource management
7. Project communications management
8. Project risk management
9. Project procurement management
10. Project stakeholder management

Types of quality?
Project quality management is broken down into three main processes: Quality Planning, Quality Assurance, and Quality Control.

Qualitative risk analysis vs quantitative risk analysis
Qualitative Risk Analysis is Subjective
The most obvious difference between qualitative and quantitative risk analysis is their approach to the process.

Qualitative risk analysis tends to be more subjective. It focuses on identifying risks to measure both the likelihood of a specific risk event occurring during the project life cycle and the impact it will have on the overall schedule should it hit.

The goal is to determine severity. Results are then recorded in a risk assessment matrix (or any other form of an intuitive graphical report) in order to communicate outstanding hazards to stakeholders.

Quantitative Risk Analysis is Objective
Quantitative risk analysis uses verifiable data to analyze the effects of risk in terms of cost overruns, scope creep, resource consumption, and schedule delays.

In layman’s terms, quantitative risk analysis assigns a numerical value to extant risks — risk A has a 40% chance of occurring, based on quantifiable data (fluctuations in resource costs, average activity completion time, logistics etc.) and a 15% chance of causing a delay of X number of days. It’s entirely dependent upon the quantity and accuracy of your data.

Is starting chocolate business operation or a project
operation

How to decide whether to take up a project. Which knowledge area is used to decide that

Which tool is used to show all the parts of a project
WBS