



**UNIVERSITI TUN HUSSEIN ONN MALAYSIA**

**FINAL EXAMINATION  
(ONLINE)  
SEMESTER II  
SESSION 2020/2021**

COURSE NAME : VALUE MANAGEMENT  
COURSE CODE : MPC 11303  
PROGRAMME CODE : MPC  
EXAMINATION DATE : JULY 2021  
DURATION : 3 HOURS  
INSTRUCTION : ANSWER ALL QUESTIONS  
**OPEN BOOK EXAMINATION**

THIS QUESTION PAPER CONSISTS OF **THREE (3) PAGES**

**TERBUKA**  
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- Q1** (a) Function analysis is an established technique for understanding the functionality that is required from the project. This can then be compared with the alternative costs of providing such functionality using any of the proposals under investigation. A function analysis breaks down the primary function(s) of the project or value problem into a hierarchy of more and more detailed function statements. Such a statement is a verb–noun combination describing an action and the object of that action. Function statements should be kept abstract rather than made specific so as not to pre-judge acceptable solutions.

*(Source: RICS, 2017)*

Outline with examples **FOUR (4)** function analysis that have been classified at four different levels.

(12 marks)

- (b) Wall Finishes Problem: Most of the finishes of facade for SOCSO buildings are of plaster and paint except for SOCSO Kuala Lumpur which is of aluminium cladding. It is common to see that the wavy surface of plaster due to poor workmanship. Since this problem is common in Malaysia, SOCSO decided to have the external walls of the new buildings roughen with mortar prior to painting. With this kind of finishes, the texture could hide the uneven plastering surface on the large surface. The only problem is that repair of the surface should any defects occur would be a bit more difficult. Another issue with the external wall is an efflorescent (whitish bleeding) spotted on the wall surface which occurred due to chemical reaction of the wall materials and high moisture content on the wall prior to painting process.

*(Source: Suffian, 2013)*

Propose a Function Analysis System Technique (FAST) diagram to propose solutions to address these wall finishes problems.

(13 marks)

- Q2** Value engineering (VE) is often done by systematically following a multi-job job plan and organized plan of action in assuring the implementation of the recommendations by several group of related technical or expert team. Because the VE process contains many elements and phases, such as team work, functional analysis, "brainstorming", and cost-worth analysis, unless a review conducted for a particular project includes these and other related elements and phases, it is not considered to be VE. Hence, the Job Plan is a systematic and organized plan of action for conducting a VE analysis and assuring the implementation of the recommendations

*(FHA USA, 2017)*

Justify the VE Job Plan on key considerations associated with each of the six phases of job plan.

(25 marks)

- Q3** Value Based Management is an approach to organizational leadership in work. It says that organizations should define what they consider value to be, then focus on maximizing it. Organizations usually define value as shareholder value. The influence on human behavior is at the heart of Value Based Management (VBM). Human behavior in construction is linked to the activities required to build. Both of these include the project manager's work and craftsmanship.

*(Source: The World of Work Project, 2021)*

Illustrate the VBM framework which shows its relationship with human behavior participation.

(25 marks)

- Q4** The net return and risks of a construction project are two critical factors that influence its ultimate success and the value it provides. Construction project success cannot be achieved in the absence of thorough risk assessment and proactive risk management during the valuation and implementation stages. Risk identification is an important part of the Value Management (VM) process at each review stage, and responding to risks at each review is an important part of achieving project value.

Propose a risk assessment process that shows the effectiveness of coordination between value management and risk management in a construction project.

(25 marks)

**-END OF QUESTIONS-**