
UNIVERSITI SAINS MALAYSIA

First Semester Examination
Academic Session 2009/2010

November 2009

EAP 501/4 – Engineering Management

Duration : 3 hours
[Masa : 3 jam]

Please check that this examination paper consists of **FIVE (5)** printed pages before you begin the examination.

Instructions:

This paper consists of **SIX (6)** questions. Answer **FIVE (5)** questions only.

You may answer the question either in Bahasa Malaysia or English

Write the answered question numbers on the cover sheet of the answer script.

1. Assume that you are involved in a capacity-building program as a trainer. You superior has requested you to produce a training program for capacity development in the area of environmental protection and conservation. The content of this program must be based on the details of an organization' capability that has two pillars: Resource Base ("hard" capabilities) and Management Base ("soft" capabilities).

(.....marks)

2. Action-based research is "learning by doing" where a group of people identify a problem, do something to resolve it, determine the successful of their efforts were, and if not satisfied, try again. As an engineer, introduce this area to your staffs by giving examples in civil engineering industry.

(.....marks)

3. Establishment of technology promotion centers and the increased participation of end users in the decision making process for the expansion of civil engineering industry will improve the linkages between production sector and research institutions . What other programs can be implemented in developing this technology linkage?

(.....marks)

4. a) Identify **THREE (3)** key elements under each of the following management functions:
 - i) Planning
 - ii) Staffing

By using appropriate example, elaborate the meaning of each element as specified in (i) and (ii)

(8 marks)

- b) Identify **THREE (3)** common problems occurred in management

Explain briefly an example for each of the problem identified and how to solve them if you were the manager responsible

(12 marks)

...3/-

5. a) One of the **TEN (10)** commandments in Project Management is “Expect the Unexpected”. As a project manager, how would minimize the potential occurrences of the following events in an on-going project;
- i) Lack of human resource
 - ii) Poor communication between the top management and your sub-ordinates that causes project delay

(12 marks)

- b) Ethical is one of the professional skills required from managers. Explain how you prepare yourself towards
- i) Working collaboratively with barely known sub-ordinates
 - ii) Open mind situation where you also consider ideas from the sub-ordinates

(8 marks)

6. Many contemporary thinking that the introduction of Key Performance Indicators (KPI), Key Intangible Performance (KIPs) and Key Results Areas (KRAs) in the Malaysian public sector is in fact business process reengineering. However, as with other new strategies introduced, there is a great danger that the uncold and lasting damage to the organization when used and implemented rashly and indiscriminately as a blunt cost cutting tool is always the case due to the three main using namely lack of understanding, indepth Study and motivation.

Discuss in detail, from the management point of view, how the three using above should be tackled so that dramatic improvement in performance in the Malaysian public services is achieved.

(20 marks)

7. Using appropriate examples, discuss in detail the various tasks Strategic Management that could be adopted by an organization which is at the brink of a collapse due to the failure of establishing the right business objectives.

(20 marks)