KYPJ
KOLEJ YAYASAN
PELAJARAN JOHOR

KOLEJ YAYASAN PELAJARAN JOHOR
FINAL EXAMINATION

COURSE NAME	:	PENGURUSAN KEJURUTERAAN
COURSE CODE	:	DKE 1042
EXAMINATION	:	OCTOBER 2018
DURATION	:	2 HOURS

INSTRUCTION TO CANDIDATES

1. This examination paper consist of **SIX (6)** QUESTIONS. Answer **ALL** questions in the answer booklet provided.

2. Candidates are not allowed to bring any material to examination room except with the permission from the invigilator.

3. Please check to make sure that this examination pack consist of:
   i. Question Paper
   ii. Answer Booklet

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*This examination paper consists of **6** printed pages including front page*

This paper contains of **SIX (6)** questions. Answer **ALL** questions in the Answer Booklet.

*Kertas soalan ini mengandungi **ENAM(6)** soalan. Jawab **SEMUA** soalan di dalam buku jawapan yang disediakan.*

QUESTION 1 / SOALAN 1

(a) Give the definition of management. State the **four (4)** main functions of management with its definition in the correct sequence.

*Berikan definisi tentang pengurusan. Nyatakan **empat (4)** fungsi utama pengurusan beserta definisi mengikut turutan yang betul.*

(10 Marks / *Markah*)

(b) Based on Mintzberg's Managerial Roles, state the **three (3)** informational role with an examples of identifiable activities description.

Berdasarkan Peranan Pengurusan Mintzberg, nyatakan tiga (3) peranan informasi bersama contoh huraian aktiviti yang dikenal pasti.

(6 Marks / *Markah*)

QUESTION 2 / SOALAN 2

(a) Define strategic goals and plans, tactical goals and plans, and operational goals and plans.

Terangkan matlamat dan rancangan strategik, matlamat dan rancangan taktikal, dan matlamat dan rancangan operasi.

(8 Marks / *Markah*)

(b) Explain briefly **four (4)** steps activities in management by objectives (MBO) to an organization. Draw the diagrams of model of the MBO process to illustrate your explanation.

*Terangkan secara ringkas **empat (4)** langkah aktiviti-aktiviti dalam pengurusan penetapan objektif kepada sesebuah organisasi. Lukis gambarajah model proses bagi menunjukkan penjelasan anda.*

(10 Marks / *Markah*)

QUESTION 3 / SOALAN 3

(a) Define all **five (5)** element in a model of the communication process.

Terangkan semua **lima (5)** elemen dalam model proses komunikasi.

(5 marks / Markah)

(b) State **three (3)** steps in the control process of the organization.

Nyatakan **tiga (3)** peringkat proses kawalan dalam sesebuah organisasi.

(3 Marks / Markah)

QUESTION 4 / SOALAN 4

(a) State **three (3)** implementation technique of Total Quality Management (TQM) in an organization.

Nyatakan **tiga (3)** teknik perlaksanaan Pengurusan Kualiti Menyeluruh (PKM) dalam sesebuah organisasi.

(3 Marks / Markah)

(b) List **three (3)** changing philosophy of control from bureaucratic control and decentralized control. Table the answer.

Senaraikan **tiga (3)** perubahan falsafah kawalan dari kawalan birokratik dan kawalan tak berpusat. Kotakkan jawapan.

Bureaucratic control	Decentralized control

(6 Marks / Markah)

(c) List **three (3)** positive factors to quality program success.

Senaraikan **tiga (3)** faktor positif untuk kejayaan kualiti program.

(3 Marks / Markah)

QUESTION 5 / SOALAN 5

Hydro Company manufactures **two (2)** types of plastic drinking bottle as part of its full line of drinking products. Two primary machines are required to manufacture the bottles. The processing times (in hours) on the two machines for the two products are given in the **Table 1** below along with the per-unit profit on each bottle and the monthly capacity of each machine in hours.

*Syarikat Hydro menghasilkan **dua (2)** jenis produk botol minuman plastik yang merupakan sebahagian dari keluaran produk minuman syarikat tersebut. Dua mesin utama diperlukan bagi menghasilkan kedua jenama botol tersebut. Masa pemprosesan (dalam jam) ke atas kedua mesin untuk dua produk adalah diberi dalam **Jadual 1** di bawah bersama keuntungan setiap unit botol dan keupayaan bulanan setiap mesin dalam jam.*

Model/ Model	Machine 1 Time / Masa Mesin 1 (hours / jam)	Machine 2 Time / Masa Mesin 2 (hours / jam)	Profit Per-Unit / Keuntungan Seunit
A	4	3	RM1.50
B	1	2	RM1.00
Capacity / Keupayaan	640 hours / month	600 hours / month	

Table 1/ Jadual 1

According to the information of market demand, the manager decided model B should not be produced more than 200 units per month. The manager of the company always thinks of a strategy to increase the profit of the company to a maximum.

Berdasarkan maklumat permintaan pasaran, pengurus syarikat membuat keputusan keluaran Model B tidak melebihi 200 unit sebulan. Pengurus sentiasa memikirkan strategi untuk meningkatkan keuntungan ketahap maksimum.

a. State **two (2)** basic assumptions of linear programming that should be taken for this into consideration.

*Nyatakan **dua (2)** andaian asas yang perlu diambil kira bila menggunakan penyelesaian pengaturcaraan linear.*

(6 Marks / *Markah*)

b. graphically illustrate the feasible region and apply the iso-profit line procedure to indicate which corner point produces the optimal solution.

Tunjukkan dalam graf kawasan tersaur dan gunakan prosedur garis kos untuk menentukan titik penyelesaian optimum.

(5 Marks / *Markah*)

c. Determine the optimum total should be produced and the maximum profit.

Tentukan jumlah optima yang dihasilkan dan keuntungan maksimum.

(10 Marks / *Markah*)

QUESTION 6 / SOALAN 6

Gigahertz Company was awarded to supply the electrical parts component for an automobile manufacturer company. In order to maximize the profit, the company planned to reduce its inventory cost by introducing the Economic Order Quantity (EOQ) model. The annual demand is 18,000 units; the setup or ordering cost is RM 245 per order; and the holding cost per unit per year is RM 8.82.

Syarikat Gigahertz telah dianugerahkan untuk membekal komponen elektrik bagi sebuah syarikat pemasangan automobil. Dalam usaha untuk meningkatkan keuntungan, syarikat membuat perancangan untuk mengurangkan kos inventori dengan memperkenalkan model Kuantiti Pesanan Ekonomik (KPE). Permintaan tahunan ialah 18,000 unit; kos pesanan ialah RM 245 setiap pesanan; dan kos pegangan setahun ialah RM 8.82 setiap unit.

a. Determine the optimal number of unit per order.

Tentukan bilangan pesanan optima bagi setiap pesanan.

(6 Marks / *Markah*)

b.   What is the expected time between orders? (Assuming company working day is 270 day a year)

Berapakah selang masa antara pesanan? (Andaian hari bekerja syarikat ialah 270 hari setahun.

(6 Marks / *Markah*)

c.   Determine the total annual inventory cost.

Tentukan jumlah kos inventori tahunan.

(6 Marks / *Markah*)

d.   In an underestimated demand condition, the demand is increased from original   demand   by 25%.   Using the same Q from (a) above, how much the percentage annual   inventory   cost   increased?   What   is   the conclusion from this   result?

Dalam keadaan permintaan luar jangkaan, permintaan bertambah sebanyak 25% dari   permintaan asal. Menggunakan nilai Q yang sama dari (a) di atas berapakah peningkatan   peratusan kos inventori tahunan? Apakah kesimpulan dari keputusan yang diperolehi?

(7 Marks / *Markah*)

END OF QUESTION PAPER / KERTAS SOALAN TAMAT