



University of Technology
Department of Applied Sciences
Final Examination 2017-2016
First Attempt

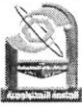


Subject : حقوق الانسان
Branch : الرياضيات والتقانات والفيزياء
Examiner : شيرزاد احمد

Class : 1st year
Time : 3 hours
Date :

- س1: تكلم ما تعرفه عن العهدان الدوليان الخاصان بحقوق الانسان.
- س2: تكلم ما تعرفه عن الاتفاقية الاوربية لحقوق الانسان.
- س3: اشرح بالتفصيل ما تعرفه عن الاعلان العالمي لحقوق الانسان مع ذكر بنوده.
- س4: تكلم ما تعرفه عن مجلس حقوق الانسان.
- س5: اشرح بالتفصيل ما تعرفه عن حقوق الانسان في حضارة وادي الرافدين.

ملاحظة: اجب عن اربعة اسئلة فقط.



Subject: Engineering graphics
Branch: Applied physics
Examiner: Dr.Odai N. Salman

Class: Third class
Time: 3 hours
Date:

Note: answer only **four** questions.

Q1: Write the steps of drawing the objects as in figure 1. (Radius of circle = 3.25, hatch type = predefined, Hatch pattern = Steel)

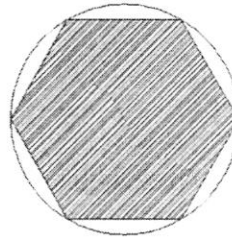


Fig. 1

(10 marks)

Q2: Finish the side view drawing of a bolt (Figure 2) by adding polylines. Illustrate your answer by graphs.

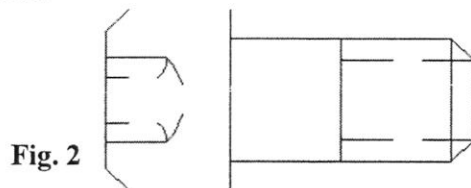


Fig. 2

(10 marks)

Q3: write the steps of create simple 3D a table stand from 2D object as shown in Figure 3.

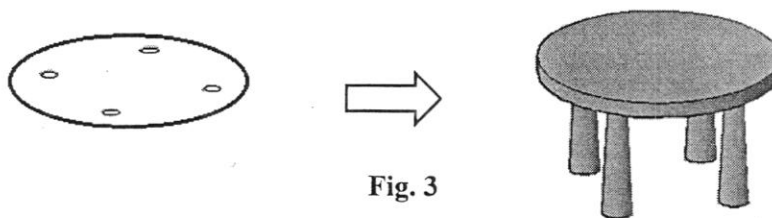


Fig. 3

(10 marks)

Q4: Describe how you can use the sweep tool to create the surface of a mold from 2D object as shown in Figure 4.

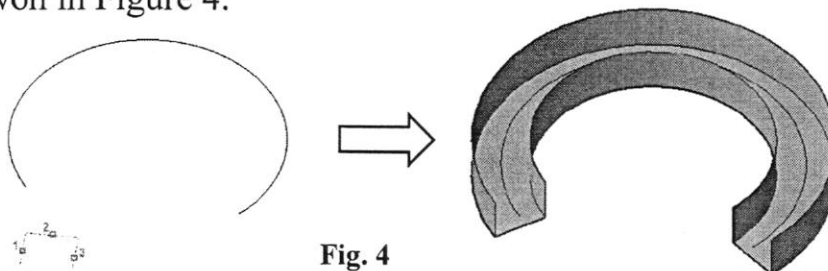


Fig. 4

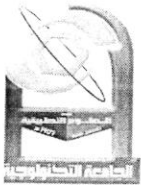
(10 marks)

Q5: Mention the function of each of the following tools:

- Extrude
- Loft
- Revolve
- Sweep

(10 marks)

Good luck



University of Technology
Department of Applied Sciences
Final Examination 2016/2017



Subject: Mathematics
Branch: Applied physics branch
Examiner: D. Atheer Ibrahim Abdali

Class: 1st year
Time: 3 hour
Date: 2017

Note answer Four questions only

Q1 \ (a) Graph and find the domain and range for the following function

$$y = f(x) = \frac{x+3}{x-2} ? \quad [7.5 \text{ marks}]$$

(b) Evaluate $\int_0^2 \sqrt{4-x^2} dx$ [10 marks]

Q2 \ (a) Evaluate $\lim_{x \rightarrow \infty} \frac{x^2+2x+3}{2x^2+3}$ [7.5 marks]

(b) Evaluate $\int \frac{x+2}{x^3+3x^2+2x}$ [10 marks]

Q3 \ (a) Find the inverse for the following matrix $A = \begin{bmatrix} 4 & 3 & 7 \\ -2 & 5 & 3 \\ 4 & 0 & 1 \end{bmatrix}?$ [7.5 marks]

(b) Evaluate $\int_0^{\ln(3)} x^2 e^x dx$ [10 marks]

Q4 \ (a) find $\frac{dy}{dx}$ if $y = t \sin t$ and $x = \sec t^2$? [10 marks]

(b) Find the area bounded by $y = x^2$ and $y = 20 + x$ [7.5 marks]

Q5 \ (a) Solve the System of linear equation by *Grammer Rule*?

$$X - 2Y + 3Z = 9$$

$$2X + 4y - 2Z = 2 \quad [10 \text{ marks}]$$

$$3X + y - Z = 4$$

(b) Find the Volume generated by revolving the area enclosed by the functions $y = \sqrt{x}$, $x = 2$, $y = 0$ about x-axis ? [7.5 marks]

Good luck