UTHM
Universiti Tun Hussein Onn Malaysia

UNIVERSITI TUN HUSSEIN ONN MALAYSIA
(TAKE HOME)
FINAL EXAMINATION
SEMESTER II
SESSION 2019/2020

COURSE NAME	:	BIOMEDICAL ENGINEERING AND APPLICATIONS
COURSE CODE	:	BEU 41503
PROGRAMME CODE	:	BEJ
EXAMINATION DATE	:	JULY 2020
DURATION	:	3 HOURS
INSTRUCTION	:	ANSWER **ALL** QUESTIONS **OPEN BOOK EXAMINATION**

THIS QUESTION PAPER CONSISTS OF **TWO (2)** PAGES

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Q1   (a)   Summarize about Biomedical Engineering.

(4 marks)

(b)   Identify and mention any **FOUR (4)** Biomedical Engineering Societies.

(4 marks)

(c)   Mention any **TWO (2)** points to become biomedical engineer in their career.

(2 marks)

Q2   (a)   Appraise about the Rehabilitation and categorize it.

(5 marks)

(b)   Summarize the purpose of wearable monitoring technology and give **THREE (3)** examples of its types.

(5 marks)

Q3   Illustrate the **FIVE (5)** main classes of antibodies (immunoglobulin) and isotypes using appropriate figures.

(10 marks)

Q4   Explain the following basic parameters in Ultrasound measurement:

(a) Pulsed Sound

(2 marks)

(b) Duration

(2 marks)

(c) Spatial Pulse Length

(2 marks)

(d) Pulse Repetition Period

(2 marks)

(e) Duty Factor

(2 marks)

Q5   Summarize any **FIVE (5)** of the following terms commonly used in the area of monitoring, processing, and evaluation:
(i)   Availability
(ii)   Performance
(iii) Decision Making
(iv)   Baselining
(v)   Prediction
(vi)   Automation
(vii) Autonomic Computing.

(10 marks)

-END OF QUESTIONS –

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