



UNIVERSITY OF JOHANNESBURG

June 2015

COURSE: Aesthetics for Engineers

TIME: 90 minutes

QUESTION PAPER: 1

MARKS: 50

SUBJECT CODE: CPS3A02

EXAMINER: 1. A.D. Erasmus

MODERATOR: 2. Prof R. Winkler

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

1. ANSWER **ALL** THE QUESTIONS IN SECTION A
 2. ANSWER **ONE** QUESTION FROM SECTION B.
 3. CLEARLY INDICATE WHICH QUESTION YOU ARE ANSWERING
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SECTION A

1. Explain why it is important that engineers need to be sensitive about aesthetic values. (5)
2. Explain the mimetic aspect of works of arts according to Aristotle. (5)
3. Characterize the elements of an aesthetic experience according to Kant (5)
4. Explain the difference between aesthetic values and functional values. (5)
5. Explain how environmental aesthetics can or should play a central role when we deal with environmental problems. (5)

TOTAL (25)

SECTION B

Answer **one** of the following two questions:

1. Explain aesthetics and how it is related to the engineering profession.
 - a. Define and explain what aesthetics is.
 - b. Explain how and why aesthetics and engineering are related.
 - c. Explain the importance of aesthetic values for engineers.
 - d. Explain how engineers can benefit from aesthetics.

(25)

2. Explain the relation between aesthetic values and engineering design.
 - a. Explain the difference between aesthetic values and functional value.
 - b. Explain why aesthetic values are difficult to define and to identify in engineering activities.
 - c. Explain the difference between aesthetic architecture and functional building.
 - d. Explain the notions of efficiency, economy, and elegance and their relation to software engineering.

(25)

TOTAL (25)

GRAND TOTAL (50)