Courses » Teaching And Learning in Engineering (TALE)

Unit 3 - Week 2: Outcomes and Cognition

Quiz 2

The due date for submitting this assignment has passed. Due on 2019-03-13, 23:59 IST.
As per our records you have not submitted this assignment.

1) Identify PEOs from the following:  1 point

- Specify, select and formulate environmental engineering systems
- Solve problems of social relevance applying the knowledge of electrical and electronics engineering, and/or pursue higher education and research
- Engage in lifelong learning, career enhancement and adopt to changing professional and societal needs
- Create, select, and apply modern engineering and IT tools to complex engineering activities with an understanding of their limitations

No, the answer is incorrect.
Score: 0

Accepted Answers:

Solve problems of social relevance applying the knowledge of electrical and electronics engineering, and/or pursue higher education and research
Engage in lifelong learning, career enhancement and adopt to changing professional and societal needs

2) Complex engineering problems are characterized two of the following features  0 points

- Have no obvious solutions
- Have complex mathematical models
- Have significant consequences
- Have possibly many component parts or sub-problems

No, the answer is incorrect.
Score: 0

Accepted Answers:

Have no obvious solutions
Have possibly many component parts or sub-problems

3) PO1 is “Apply the knowledge of mathematics, science, engineering fundamentals, and engineering specialization to the solution of complex engineering problems.” Which of the following statements are true with regard to addressing PO1 by majority of engineering programs?  1 point

- Majority of engineering courses do not address this outcome
- End of the chapter problems will moderately address PO1
- Assessment in many institutions includes solving complex engineering problems
- Majority of courses belong to either Basic Sciences or Engineering Sciences which do not address engineering problems directly
No, the answer is incorrect.  
Score: 0

Accepted Answers:
End of the chapter problems will moderately address PO1
Majority of courses belong to either Basic Sciences or Engineering Sciences which do not address engineering problems directly

4) PO2 is “Identify, formulate, research literature, and analyse complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences”. Which two of the key components of PO2 are not addressed by the core courses of engineering programs?

☐ Understanding principles and theories of engineering problems
☐ Problem identification
☐ Understanding how to linearize a non-linear problem
☐ Formulating identified problems

No, the answer is incorrect.  
Score: 0

Accepted Answers:
Problem identification
Formulating identified problems

5) PO6 is “Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice”. PO6 can be effectively addressed through two of the following activities

☐ Explore the relationships of products and services to people/society in a variety of contexts
☐ Course on Intellectual Properties and Patents
☐ Course on national health policy
☐ Courses on technology-society interaction

No, the answer is incorrect.  
Score: 0

Accepted Answers:
Explore the relationships of products and services to people/society in a variety of contexts
Courses on technology-society interaction

6) PO9 is “Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.” PO9 is important because

☐ Every engineer is a citizen
☐ Every organization is a unique technology-people interface
☐ All engineering activities are group activities
☐ Every engineer has to work the direction of a boss

No, the answer is incorrect.  
Score: 0

Accepted Answers:
All engineering activities are group activities

7) PO10 is “Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.” PO10 can be effectively addressed through two of the following activities

☐ Give adequate weightage to the quality of writing project report
☐ Making one group of students to make a presentation to students from other branches
☐ Interact with fellow students through group exercises
☐ Commenting on technical presentations by fellow students

No, the answer is incorrect.  
Score: 0
8) PO12 is “Recognize the need for, and have the preparation and ability to engage in independent and life-long learning (LLL) in the broadest context of technological change.” PO12 can be effectively addressed through two of the following activities

- Requiring students to take responsibility for their own learning
- Making students do a group activity
- Helping students to understand their own learning processes
- Making students write 2-minute papers in some courses

No, the answer is incorrect.
Score: 0

Accepted Answers:
Requiring students to take responsibility for their own learning
Helping students to understand their own learning processes

9) What cognitive level the given activity belongs to?
“Derive an expression for energy stored in inductor”

- Analyse
- Apply
- Remember
- Evaluate

No, the answer is incorrect.
Score: 0

Accepted Answers:
Remember

10) What cognitive level the given activity belongs to?
“Solve a given recurrence equation using divide and conquer strategy”

- Analyse
- Apply
- Remember
- Understand

No, the answer is incorrect.
Score: 0

Accepted Answers:
Apply