

P P SAVANI UNIVERSITY
P P SAVANI SCHOOL OF ENGINEERING
3rd Semester of B Tech Examination (2nd Internal Exam)

Subject: Critical Thinking, Creativity and Decision Making (SEPD2010)
Branches: CE/IT/CV/ME/CH

[Date: 24/09/2018, Monday]

[Time: 11 A.M. to 12 Noon]

[Total Marks: 30]

Instructions:

- Figures to the right indicate full marks.
- Use of scientific calculator is allowed.
- Draw neat and clean drawings & Assume suitable data if necessary.

Q.1 Answer the following:**(05)**

1. A man every day goes to office 2 hours late and comes after 2 hours. he goes to office by lift upto 9th floor and more 3 floors goes by walking but while returning he comes by lift from 12th floor, why?
2. Mr. Mahesh went to the Market with his Dog. He rode on a horse to the Market, yet walked. The horse's name was victory and dog was from South Africa. What is the Name of the Dog that went to the Market?
3. If I give you 4 tablets which contain 2 for fever and 2 for cold. All 4 have same size, shape and color, No cover. You have to take 1 cold and 1 fever tablet right now. How will you choose correctly?
4. If i remove one from eleven it becomes Ten and if i remove one from nine also becomes Ten. How?
5. If you write numbers from 1 to 100, how many 9s you will write?

Q.2.A What is the relation between Socratic Questioning and Conceptual Thinking? **(05)**
 Explain with apt examples.

Q.2.B What is Conceptual Thinking? What qualities will make you a Conceptual Thinker? As an Engineer, how it will help you in your career? **(05)**

Q.3 From the situation given below, identify the problem(s) and suggest possible solutions. What will be your decision?

You are part of a team that is preparing a presentation for a major conference. **(07)**
 The final meeting on the presentation is this morning at 9 a.m. There are four participants: Mayra, Juli, Janak and you. You arrive in the meeting room at 8:55 and Janak is there. Juli arrives at 9:02. You continue to wait for Mayra to arrive so you can begin. No one has heard from her. You are getting irritated and feeling anxious. At 9:10 you can feel your muscles tightening and breathing increasing. Janak and Juli are visibly angry and talking about how stressed they are. You NEED to get this done today. At 9:20, all of you are fidgeting and decide to begin. At 9:23, Mayra arrives with no apology or explanation.

Q.4.A *Research is the heart of Engineering discipline.* Considering the statement valid, (08)
answer the following questions.

1. What do you mean by research?
2. How you will justify the above statement?
3. Does critical thinking help in Research?
4. Which qualities are required by a Researcher?
5. According to you, what qualities you need to imbibe to be successful in your field?

Q.4.A *Engineers play a very important role in every walk of life. They convert knowledge of basic sciences into products. They are versatile minds who build bridges between sciences, technology and society.* (08)

- **Shri Pranab Mukherjee** on the occasion of the Engineers Conclave-2013

Elaborate the above extract of speech with proper justification and examples of your respective field.