

P P SAVANI UNIVERSITY

Third Semester of B. Tech. Examination
December 2018

SEPD2010 Critical Thinking, Creativity and Decision Making

17.12.2018, Monday

Time: 09:00 a.m. to 11:30 a.m.

Maximum Marks: 60

Instructions:

1. The question paper comprises of two sections.
2. Section I and II must be attempted in separate answer sheets.
3. Make suitable assumptions and draw neat figures wherever required.
4. Use of scientific calculator is allowed.

Section – I

Q – 1 Match the following:

[05]

- | | |
|----------------------------|---|
| (i) Applying | a) To gain opinion or feedback |
| (ii) Inductive Thinking | b) The ability to examine known relationships |
| (iii) Reflective Questions | c) Use the knowledge gained in new ways |
| (iv) Second Order Thinking | d) The engine that drives moral reasoning. |
| (v) Analytical Thinking | e) Conclusions are drawn from the data |
| | f) Thinking in terms of interactions, time, and system dynamics |

Q – 2 Attempt any Two.

[10]

- Q-2 (a) Define the term *Critical Thinking* and discuss the importance of it with suitable examples.
- Q-2 (b) Write a note on Bloom's Taxonomy with suitable example.
- Q-2 (c) Discuss any two types of Socratic Questioning with appropriate examples.

Q-3 (a) '21st Century Engineer should be critical thinker.' Justify the statement in your own words. [04]

Q-3 (b) 'People should be vegetarian'. Do you agree with the statement? Why? Write your arguments to support your point of view. [04]

OR

Q-3 (a) Discuss the role of Engineers in making India superpower by 2030. [04]

Q-3 (b) 'We need smart villages rather than smart cities'. Do you agree with the statement? Why? Write your arguments to support your point of view. [04]

Q – 4 Attempt any One.

[07]

- (i) "Positive attitude leads to creativity"- Discuss the said statement with appropriate justification.
- (ii) "Believe what you like, but don't believe everything you read without questioning it."- Discuss the said statement with appropriate justification.

Section - II

[05]

Q - 1 Answer the following: (Any Five)

- (i) Look at this series: 58, 52, 46, 40, 34,... What number should come next?
A) 26 B) 28 C) 30 D) 32
- (ii) Look at this series: 544, 509, 474, 439, ... What number should come next?
A) 404 B) 414 C) 420 D) 445
- (iii) Look at this series: QPO NML KJI ____ EDC What letter should be in blank?
A) HGF B) CAB C) JKL D) GHI
- (iv) Which word does NOT belong with others?
A) Book B) Index C) Glossary D) Chapter
- (v) Which word does NOT belong with others?
A) Heading B) Body C) Letter D) Closing
- (vi) Find the word that names a necessary part of the word: WEDDING
A) love B) church C) ring D) marriage
- (vii) Careful is to cautious as boastful is to _____.
A) arrogant B) humble C) joyful D) suspicious

Q - 2 Attempt any Two.

[10]

- Q - 2 (a) What is Socratic Questioning? How is it useful? Explain with apt examples.
- Q - 2 (b) What is Second Order Thinking? How is it different from First Order Thinking?
- Q - 2 (c) Discuss the strategies to develop Creativity.

Q - 3 (a) *Ethical Decline has been evident in each field of Engineering.* Discuss the statement with reference, examples of your branch. What will be your attitude for it in future? [04]

Q - 3 (b) I live four miles from work. My car gets 30 KM per liter. I want to use less fuel in my commute for financial and conservation reasons. Money is no object. ***What options do I have to reduce my fuel consumption?*** Provide minimum four options with explanation. [04]

OR

Q - 3 (a) *Engineers are required to attain All Round Skills to be employable in such a competitive world.* Provide the list of skills required to be employable with justification. [04]

Q - 3 (b) In Mahabharata, during a war with Arjuna, Karna's chariot wheel stuck in the mud. With Karna trying to retrieve his chariot wheel, armed with no weapons, Krishna commanded Arjuna to kill him now, because there may not be another opportunity. He dismissed all pleas for mercy by Karna, saying he lost all his opportunity to ask for mercy earlier, and that there was no need to discuss about virtues at this stage, since he too was unjust when it came to virtuousness. Arjuna killed Karna. ***Was it right moral decision to kill Karna in the said situation? What are your opinions with reference to Moral Reasoning?*** [04]

Attempt the following:

(i)

A toothpick is useful.

Useful things are valuable.

A toothpick is valuable.

If the first two statements are true, the third statement is.....

A) true

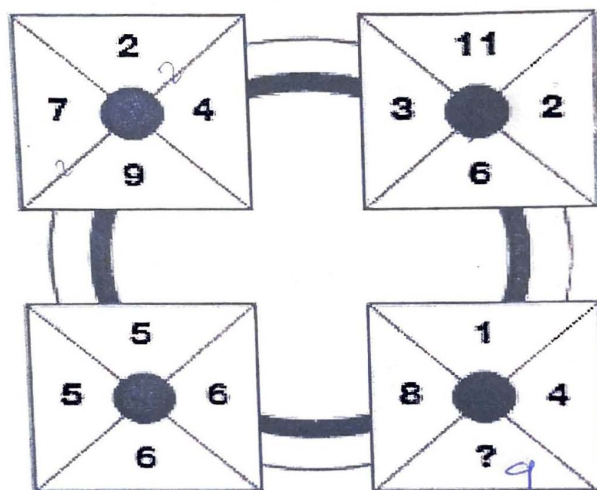
B) false

C) uncertain

[01]

(ii) Which number replaces the question mark?

[03]



(iii) Which number replaces the question mark?

[03]

7	3	6	2
2	8	5	4
1	1	2	4
4	2	1	? 4