Parvatibai Chowgule College of Arts and Science
Autonomous

B.A. Summative Continuous Assessment, February 2022

Semester: I   Max. Marks: 40

Subject: Philosophy   Duration: 2 hours

Course Title: Logic (Core)   Paper code: PHI-I.C-2

Instructions:

1. All questions are compulsory
2. There are internal choices in the **Q2, Q3, Q4** and **Q5**.
3. In the **Q1** and **Q6** have no internal choices.
4. Figures at the right indicate full marks.

Q.1. "Many people with serious illness are too poor to afford the cost of treatment on their own. Yet even those who are too poor to afford the cost of treatment on their own have a right to decent health care. Anybody with a right to decent health care is entitled to government assistance in covering their health costs. Therefore many people with serious illnesses are entitled to government assistance in covering their health costs."

With the help of above paragraph, identify and describe the type of Sorites and construct its correct logical form.   **(10)**

Q.2.   **Answer ANY FOUR of the following:**   **(2X4=8)**

1. Draw Venn diagram stating the distribution of terms of Categorical propositions.

2. Distinguish between two types reasoning with the help of appropriate example.

3. Demonstrate the difference between propositions and sentences.

4. Design an argument and explain how to identify its conclusion and reasons.

5. Why do you think the study of logic is essential in our day today life?

6. Define what role played by truth, validity and soundness in logic.

Q.3. **Reduce given below sentences to the correct standard form of categorical proposition and state distribution of terms. (ANY SIX)** **(6X1=6)**

1. Pigs are mammals.
2. None canaries are melancholy creatures.
3. Professors are terrible bores.
4. Coins are square objects.
5. Are catfish feline creatures?
6. A few spiders are web spinners.
7. Few teachers are competent teachers.
8. Professors seldom attend the cultural functions.
9. Only percussionists are present in the concert hall.
10. Cats are not dogs.

Q.4. **Identify the relations of given propositions with the help of square of opposition and its truth value. (ANY TWO)** **(2X2=4)**

1. Truthiness doesn't apply in all context. (**True**)
2. No one who eats sashimi is vegetarian. (**False**)
3. He who hesitates is lost. (**True**).
4. Emotions annoys everyone. (**True**).

Q.5. **Test the validity of Categorical Syllogism by determining the mood and figure (ANY FOUR)** **(2X4=8)**

1. No patrons of fast-food restaurants are health-food addicts. Consequently none of them are connoisseurs of fine desserts, since all connoisseurs of fine desserts are health-food addicts.
2. No physical actions are chance occurrences. All chance occurrences are random events. Hence no random events are physical actions.
3. Mathematicians know what mathematics is. No philosopher is a mathematician. Therefore no philosopher knows what solving is.
4. Figure 2, ＜IO-A＞
5. Figure 1, ＜OO-E＞
6. Figure 3, ＜AI-I＞

Q.6. **Identify out the valid eductions in the following sentences.** (2X2=4)

1. Woodworkers alone are expert cabinet makers. (Find valid obverted-converse)

2. Whoever doesn't run for president are ambitious. (Find valid contraposition)