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**ST. JOSEPH’S COLLEGE (AUTONOMOUS), BENGALURU - 27**

**IV SEM B. Sc**

 **END SEMESTER EXAMINATION - JULY/AUGUST 2022**

**GE 418 - General English (PSA Special) - EMS, MEC, PCM, PEM, PMC**

**Time: 2 ½ Hours Max. Marks: 70**

**INSTRUCTIONS**

1. **This paper is for students who have chosen the PSA Special course.**
2. **This paper has THREE printed sides.**
3. **You will lose marks for exceeding word limits.**
4. **You are allowed to use a dictionary.**

**SECTION A**

**I. Read the following passage carefully and answer the questions that follow.**

Given below are thoughts conveyed by these participants in a research conducted by Prof. William W. Cobern for his paper titled ‘Worldview, Science and the Understanding of Nature’. The research investigates conceptualizations of Nature held by scientists, high school science teachers and their students who illustrate the variety of thought people have about science and Nature, and the association of one to the other.

Mr. Hess, a scientist:

I think that everything has patterns. We haven't necessarily discovered those patterns, yet I feel that with enough scientific knowledge all things are understandable. I think that the more we understand about matter itself, and the more we know about how to make things, the more predictable Nature will be. Scientific or reductionist thinking is very powerful. I feel that once we know enough about the minutia of the world, breaking it down by using the scientific method, scientists tearing it apart and analyzing the parts of Nature and seeing how they interact, that we will be able to predict just about anything about Nature. Eventually, all Nature will be explainable.

Prof. Flock, a college professor:

My definition of Nature is more biological. I look at Nature as interactions between living and non-living. As my area is ecology so I sort of look at Nature from an ecological point of view. I always like to look at the interactions. Nature is something you can observe and measure, so it's very real. You can see the order in it. You can measure it. You can predict it. It is knowable. I don't like the word “mysterious.” Mysterious, divine… it's like there's no answer. But I think there are answers to things that happen, so I don't think Nature is mysterious. I don't think you can answer everything that goes on in Nature. I don't think it's necessarily predictable but I don't think it's mysterious. And, I do think about Nature quite a bit.

Prof. Blisstic, a scientist:

My first response about Nature, well, to be really honest, the deep down feeling would be delightful, pleasant, beautiful, and attractive. Like I said, the first image that comes into my mind are mountains, lakes, wilderness, those kinds of things so that would be, to be perfectly honest, not at the intellectual level, but that is what comes up first here. I also think of things like insects…. because that's what I'm interested in and… there's a lot of aspects of things. Even like insects, most people think that “a bug is a bug,” … if you look at them under a microscope or you watch them for hours like I have, you find out that there's some really beautiful aspects about… insects, their behavior and all that kind of stuff.

Mr. David, a scientist:

Nature is orderly and chaotic, predictable and unpredictable. These pairs are sort of needed in order to define each other. Things wouldn't be predictable if you didn't know what unpredictable was. Things wouldn't be orderly if you didn't know what chaotic was. It is sort of a Ying-yang relationship between the two. I would call this just the dualistic Nature of reality. Living, mysterious, and exciting – these are terms I most closely associated with in the natural world and how it appears. It's alive. It's mysterious and we don't understand it, and it's exciting... there is a lot that we don't know about it

Patricia X, a student:

God created the natural world. Nature has many characteristics: it’s powerful, diverse, changeable, and beautiful… physically and emotionally. The Bible says God created the heavens and Earth, so I think that explains to me what Nature is. The wonderment of the world increases knowledge through science, but is limited, due to Nature’s complexity. Both views, scientific and religious, try to explain hard questions such as the origins of life. Science and religion have distinct roles in our life’s teachings. Science teaches us how to conserve our resources, and how to possibly restore them, while religion teaches us the caring attitudes required to be productive members of the natural world…. People must learn to take the time to enjoy the beauty of Nature, both religiously and scientifically.

**I. A. Answer ANY FOUR of the following questions based on the reading of the passage in 150-175 words each. (4 x 10 = 40)**

1. Which of the above concepts of nature appealed to you the most? What name would you suggest for that concept? What part of the statement made you want to suggest the name? Provide reasons for your answer.

2. Which of the above statements, according to you, puts nature at the center? What role does science vis-a-vis nature in that statement?

3. Comment on the statement provided by Mr. Hess, the scientist. What are the implications of his statement? Do you think he understands science with the language he has used?

4. Prof. Flock says, “I don't like the word “mysterious” Mysterious, divine… it's like there's no answer. But I think there are answers to things that happen, so I don't think Nature is mysterious.” Do you agree with this statement? How would you challenge Prof. Flock’s idea of mystery in nature?

5. Patricia X says, “The wonderment of the world increases knowledge through science, but is limited, due to Nature’s complexity.” Is this statement contradictory? What role does religion play in the conservation of nature?

**II. A. Answer ANY TWO of the following questions in 175-200 words each. (2 x 15 = 30)**

6. Prof. William W. Cobern in his paper goes on the explain the Problem of Scientism -

“The common threat to both Nature and science– as well as to the arts and literature and religion –is scientism – the cultural hegemony of science. The problem is not that science dominates at what it does best: the production of highly efficacious naturalistic understanding of natural phenomena. The problem is that too often science is used to dominate the public square as if all other discourses were of lesser value. This is a hierarchic view of knowledge with science placed at the epistemological pinnacle.

Comment on the manner in which Prof. Cobern looks at science. How does he connect science to scientism? Elaborate your answer by providing examples.

7. Three men went to see Niagara Falls. One was an Indian from India, one was a Chinese, and one an American. On seeing the falls, the Indian, as a matter of course, thought of his god, manifested in this grandeur of nature. The Chinese simply wished to have a little hut beside the falls, where he might invite a friend or two, serve tea, and enjoy conversation. The American, however, on viewing the falls, immediately asked himself what could be done to make the most of such an enormous amount of energy.

If you were to interchange the nationalities of the above men would it change anything about the way they are represented? What other problems do you see in the way in which the story is narrated. Elaborate your answer.

8. Identify an issue related to nature in your community or vicinity and create an awareness with a community based focus. Elaborate on how you would incorporate other disciplines along with science in creating an awareness? (You have the option to illustrate/make posters)