STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI 600 086
(For candidates admitted during the academic year 2015–16)

SUBJECT CODE: 15EL/FC/LS13

B.A. / B.Sc. DEGREE EXAMINATION, NOVEMBER 2015
FIRST SEMESTER

COURSE : FOUNDATION COURSE - ENGLISH
PAPER : LANGUAGE AND STUDY SKILLS
TIME : 3 HOURS MAX. MARKS: 100

SECTION A

I. Expand any ONE of the following ideas into a paragraph of about 150 – 200 words: (10)

(a) There is no such thing as the ladder of success; it is a greased pole.
(b) Laughter is the best medicine.

II. Read the following passage and answer the questions that follow: (15)

The botanical sciences aim to monitor and observe the plant world under different conditions to record the various phenomena and map the variations within and across different plant species. Over the years, it has led to certain unassailable conclusions about the plant world: plants are static; they do not possess locomotive powers like animals and humans; they are passive beings in which automated processes such as growth, tropisms, flowering, leafing and root expansion are discernible; they do not possess an observable nervous system and are therefore unable to think for themselves and are appropriately placed at a lower rung of the volutionary ladder than the invertebrate organisms in whom the first semblance of a nervous system has been discovered.

As a scientific discourse then, botany is largely based on these notions, and approaches the plant world accordingly. Two of the most significant exceptions to this in the history of botany – Charles Darwin and Jagadis Chandra Bose – are notable because of a difference in their beliefs, and thereby approach, to the plant world.

Charles Darwin (1809-1882) is best known for his theory of evolution. With reference to botany though, of significant interest is his book *The Power of Movement in Plants* (1880). In this book Darwin documents the basic movement of circumnutation in plants. This movement occurs in a circular spiral, in irregular elliptical or oval figures and every growing part is constantly circumnutating on different scales. Even the stems of the seedlings and buried radicles circumnutate, as much as the surrounding earth permits. Though circumnutation is not easily observable in itself, it forms the basis of certain nuanced movements such as the twining of the tendrils, which occurs as a result of an increase in the amplitude of circumnutation. All the tropisms (movements) observed in a plant such as

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phototropism (the tendency of plants to turn 'towards' light), geotropism (the movement of the shoot away from the ground and of the roots towards it) etc. are also modified forms of circumnutation.

This movement of circumnutation, including its modified forms, is not automatic. Darwin describes the plant, right from the stage of germination, as a sensitive being, consciously gauging and responding to environmental stimuli in a manner that ensures and extends its survival. Stimulus and response forms the basis of Jagadis Chandra Bose's research. Sir Jagadis Chandra Bose (1858-1937) was an Indian scientist who began his scientific journey as a physicist with several technical inventions to his name. His research in metals led him to discover similarities in responses of metals to those of living tissues, which in turn resulted in his experiments in plant physiology. The uncanny similarities in the responses of plants and animals directed a definite shift in his perception of plants. Bose's experiments recorded responses of plants to various stimuli that go undetected by other organisms. Plants respond "even to the slight fluctuations of light caused by a drifting cloud," claimed Bose in one of his essays. When compared to animals and humans, the range of plant perception of stimuli is significantly higher.

In a lecture titled "Sense Organs of Plants", Bose discusses the three main obstacles which had hitherto stood in the way of advance in plant physiology. The first is the belief that only a few plants are sensitive, the second is the erroneous idea that plants do not possess a nervous system and the third is our inability to detect internal irritability that causes movement. While the third obstacle can be overcome through advancement in technology, the first two obstacles are based on perceptions. However, a shift in belief and perspective will lead to different results through experimentation using appropriate instruments.

Bose and Darwin, through their experiments and findings, encourage such a shift in perception of the plant world. The scientific nature of their experimentation validates the seemingly fanciful hypothesis of plants as sentient, intelligent, responsive beings.

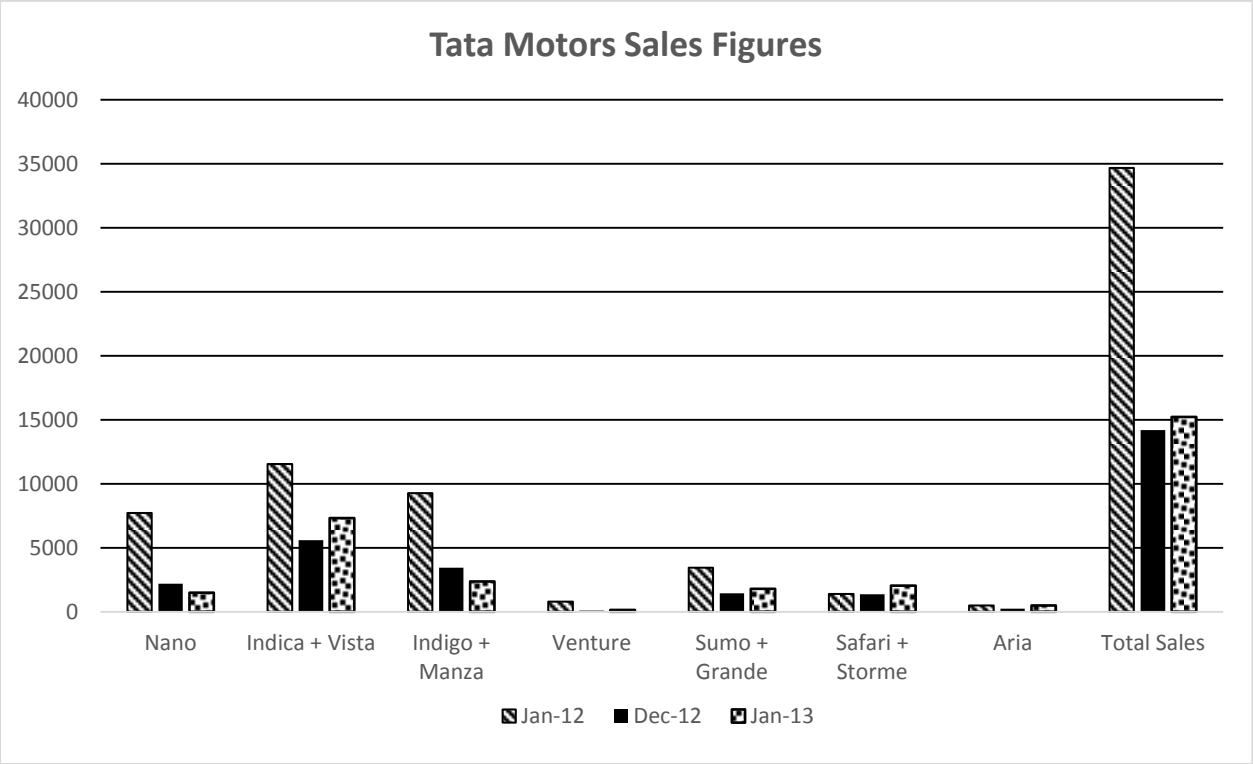
1. In the second sentence–"Over the years, it has led to certain unassailable conclusions about the plant world," – the word unassailable means: (1)

   (a) that which cannot sail (b) that which cannot be assaulted

   (c) that which is not usually disputed (d) that which is untrue

2. Explain in your own words how Charles Darwin and Jagadis Chandra Bose disproved the generally accepted notions regarding plants. (6)
3. Which of the following statements is true: (2)
   (a) the author believes that plants are unintelligent
   (b) the author believes that plant movements are automatic
   (c) the author believes that plant intelligence cannot be proved or disproved
   (d) the author believes that plants are intelligent, responsive beings
4. According to Bose, which TWO of the following observations are obstacles in the advance in plant physiology: (2)
   (a) The touch-me-not plant curls its leaves even if we touch it a little bit, while the leaves of the hibiscus shrub do not.
   (b) With a time lapse camera, I can photograph a bud flowering.
   (c) If I don't water my potted plant for a few days, its leaves wilt.
   (d) There is no point in talking to a plant – it does not show us that it has understood us.
5. Which of the following is implied in the passage? (1)
   (a) Instruments used for experiments are always useful
   (b) Instruments used for experiments need to be well calibrated
   (c) Instruments used for experiments are dependent upon beliefs and perceptions
   (d) New technology will only reinforce old perceptions
6. From your observation of plants around you, would you agree with Darwin and Bose? (3)

III. Given below is a graph depicting the sales of seven models of Tata cars in three periods, namely January 2012, December 2012 and January 2013. Read the graph carefully and answer the questions that follow. (10)



1. In each of the three years, name the model (3)
    a. which has the maximum sales
    b. which has the minimum sales
2. How would you describe the difference in the overall sales of Tata Motors between January 2012 and December 2012? (1)
    a. Steep rise b. Marginal rise
    c. Steep fall d. Marginal fall
3. Tata Motors believes that the amount spent on advertising is directly proportional to the sales of a model. Given this,
    a. For which model in January 2013 has Tata Motors spent the most amount on advertising? (1)
    b. For which model in January 2012 has it spent the least on advertising? (1)
    c. For which model in December 2012 should it have spent more on advertising? (1)
4. Write a 150 word summary of the data presented in the above graph. (3)

IV. Give instructions to students explaining how they can check their attendance on the college website. (5)

SECTION B

V. Describe any FIVE of the following in about one or two sentences each: (5x2=10)

(a) index (b) contents (c) preface (d) footnote (e) endnote

(f) select bibliography (g) blurb

VI. Given below is a list of books used for writing a research paper. Compile a bibliography using the information given. Unless otherwise mentioned, you may assume that the material is in the print medium. (10)

A novel by Kavery Nambisan titled Scent of Pepper, published by the New Delhi office of Penguin Books in 1998.

A novel titled River of Fire by Qurratulain Hyder published in 1999 by Kali for Women, Kolkatta.

An essay titled Some Affinities of Content in a book titled New and Selected Essays by Denise Levertov published by the New York Office of the publishing house called New Directions in 1958. The inclusive page numbers where this essay appears are 6 to 35.

Representations of the Intellectual, a book by Edward W Said, published in 1994 by Vintage in London. The book is subtitled the Reith Lectures.

A book titled Where the Silence Rings: A Literary Companion to Mountains by Grady Wayne, published by Graystone Books, Vancouver in 2012. The researcher found the book on the website www.bookfi.org and accessed it on 12 August 2015.

SECTION C

VII. Write a note to be put up on the students' notice board with the information that a creative writing workshop will be conducted on the campus on Saturday, 12 December 2015. The workshop is open to a maximum of 20 students and students will be taken on a first-come-first-served basis. The registration fee is Rs. 100. The workshop will be from 9.00 am to 2.00 pm with a break at 12.00 noon. The resource person will be Ms GeethaHariharan, renowned English novelist. All participants will be given certificates. The exact venue will be announced later. (5)

VIII. Read the following passage and make notes on it: (10)

Tundra forms primarily because of climate. In the Arctic, winters are long and cold, and summers are short and cool. This allows limited plant growth. On high mountains, tundra forms when the location is right to produce the necessary climate. The lack of soil in a tundra region may be due to erosion (wearing away) from wind and rain. During the Ice Ages more than 10,000 years ago, glaciers scraped away any soil, leaving only bare rock.

There are two types of tundra: Arctic and Alpine.

Arctic tundra is found near the Arctic Circle. Alpine tundra forms on mountaintops where the proper conditions exist. Arctic tundra Several characteristics are typical of Arctic tundra. One is the polar climate, which has an average July temperature of not more than 50˚F(10˚C). Arctic tundra is far from the equator. Sunlight hits Earth here at an angle and must pass through more atmosphere. This means the sunlight that reaches the soil contains less energy per square foot (square meter) than at the equator. Another characteristic of the Arctic tundra is a deep layer of permanently frozen ground called permafrost. Generally, fewer than 18 inches (45 centimeters) of tundra soil thaws during the cool summer. Below that the ground remains frozen. Water from melting snow cannot drain into the frozen ground, and little evaporates in the cool summer air. As a result, the water becomes trapped on the surface. Arctic tundra is found on all three northern continents close to or above the Arctic Circle and near the Arctic Ocean. In Asia, Arctic tundra is found in the part of Russia known as Siberia. In Europe, it is found in northern Scandinavia, which includes the countries of Norway, Sweden, and Finland. In North America, Arctic tundra is found in northern Alaska and Canada. Some Arctic tundra is located on islands, such as Greenland and Iceland.

Alpine tundra is found at the tops of mountains above the timberline, the point above which trees cannot grow. The timberline and tundra are found at different elevations (heights) in different mountain ranges. The farther the mountains are from the equator, the lower the elevation needed for tundra to form. Compared to Arctic tundra, alpine tundra gets more rain and its soildrains better because of the sloping terrain. It also gets more sunlight because it is found at lower latitudes (a distance north or south of the equator, measured in degrees) where day and night are more equal in length than in the Arctic. Usually, there is no lower layer of permafrost in alpine tundra. Alpine tundra is found in the Rocky, Cascade, and Sierra Mountains in North America, the Andes Mountains in South America, the Alps and Pyrenees in Europe, and the Himalayas in Asia.

IX. Summarise the above passage, bringing down the word length to about one third. (10)

X. a.Fill in the blanks choosing the appropriate word from those given in the brackets. ($^1/_2$ x 20=10)

The Bog People

Organic materials ___1___(on / in) peat bogs absorb and ____2___(hold / holds) large amounts of water ___3___(like/ similar to) a sponge. Bog soils are extremely acidic and have ___4____ (few / little) oxygen. Because of these factors, decomposition takes place ____5____(very slowly / too gradually). _____6_____ (Entire / Complete) trees, animals, and even human bodies have been preserved for centuries.

The ____7____ (remaining / remains) of more than 2,000 humans have been found in bogs, primarily___8_____ (over / in) northwestern Europe. The bodies are in various stages of ___9____ (perseverance / preservation), from skeletons to those with flesh ___10____ (in tact / intact). Sometimes only body parts ___11____ (such / like) as heads or limbs are found. ___12____ (Often / Perhaps) the skin has darkened and the hair has ___13____(turned red / reddened) from peat acids. The bodies found in Europe ___14____ (range / ranges) in ___15____ (age / ages) from about 1,500 to 3,000 ___16____ (years / years old). The body of a woman, known as the Koelbjerg Woman, was found in Denmark and is believed to be 10,000 ___17____ (of years / years) old.

Many of these people ___18____ (appear / appears) to have died violent deaths. ___19____ (Perhaps / Might be) they were killed as a punishment for a crime or were the victims of human sacrifice. Their deaths may have taken place at the bog because ___20____ (they / it) was so isolated.

a. Fill in the blanks in the following sentences selecting the most appropriate idiom from the ones given in brackets. (5x1=5)

1. I had worked very hard at my project and had made a nearly perfect model of the solar system. But just on the day I had to submit it, my younger sister upturned a bottle of ink over it, completely ruining it. All my hard work had _____ (gone down the drain / gone with the wind).
2. When Vinod, the defence lawyer, did not cross question three witnesses, the public prosecutor became wary. He knew Vinod was up to something, that he _____ (had a trump card up his sleeve / had an ace up his sleeve).

3. I had prepared a very basic speech on advertising practices for the event. Imagine my shock when I found that most people in the audience were from the advertising industry. I would simply be _____ (showing a light to the sun / carrying coal to Newcastle).
4. The professors all loved Ravi because he was very hardworking. He was their _____ (little prince / blue eyed boy).
5. We had wanted to keep our plans for our parents' anniversary celebrations a secret. But that was impossible with my kid brother around. In no time at all, he had _____ (let the beans out of the bag / let the cat out of the bag).

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