I. Fill in the blanks with suitable nouns by adding suitable suffixes to the word given in brackets.

1. Deepa wanted to become a --------------------(Technology)
2. Raju works as a fashion ----------------------- in Paris (Photograph)
3. This genetic operation needs ten ------------- (nucleus) of plant cells.
4. We have to submit the -------------- (Comply) report to the AICTE at the earliest.
5. The -------------- (analyst) of this study revealed amazing facts.
6. This type of refrigerator doesn’t require a -------------- (Stable)
7. The volatility of gold maintains its ---------- (Supreme) in jewel making.
8. One’s Logical -----------(Able) is inevitably examined in interviews.
9. The ----------- (Dense) of this liquid makes it fit for the experiment.
10. Her ----------- (Quiet) disturbed everybody.
11. For solving differential equations ------(Converge) of a numerical method is used.
12. Long distance wireless ------- (Communicate) is called Wimax Technology.
13. Liquid Nitrogen is a Rocket ------------------ (Propel)
14. Awareness about soil ----------- (Erode) must be given to public.
15. The ratio of ----------- (Employ) and employability is adverse nowadays.

II. Match column A with its appropriate prefixes found in column B that could give antonyms of base found in column A

<table>
<thead>
<tr>
<th>Column A</th>
<th>Column B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soluble</td>
<td>Im</td>
</tr>
<tr>
<td>Measurable</td>
<td>Dis</td>
</tr>
<tr>
<td>Normal</td>
<td>Ir</td>
</tr>
<tr>
<td>Connect</td>
<td>Ab</td>
</tr>
<tr>
<td>Reversible</td>
<td>In</td>
</tr>
<tr>
<td>Column A</td>
<td>Column B</td>
</tr>
<tr>
<td>-----------------</td>
<td>----------</td>
</tr>
<tr>
<td>6. Corrosion</td>
<td>Un</td>
</tr>
<tr>
<td>7. Plugged</td>
<td>Il</td>
</tr>
<tr>
<td>8. Combustible</td>
<td>Mis</td>
</tr>
<tr>
<td>9. Legitimate</td>
<td>Non</td>
</tr>
<tr>
<td>10. Diagnose</td>
<td>Anti</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Column A</th>
<th>Column B</th>
</tr>
</thead>
<tbody>
<tr>
<td>11. Practice</td>
<td>A</td>
</tr>
<tr>
<td>12. Compress</td>
<td>Mal</td>
</tr>
<tr>
<td>13. Proper</td>
<td>De</td>
</tr>
<tr>
<td>14. Logical</td>
<td>Im</td>
</tr>
<tr>
<td>15. Political</td>
<td>Il</td>
</tr>
</tbody>
</table>

**III. Choose the best suffix that changes the word given into its adjectival form.**

1. Flex
   - a. ible
   - b. able
   - c. ive
   - d. ic

2. Duct
   - a. ic
   - b. able
   - c. ile
   - d. ive

3. Effect
   - a. ive
   - b. able
   - c. ile
   - d. ible

4. Flim
   - a. ible
   - b. able
   - c. ive
   - d. sy

5. Green
   - a. ish
   - b. al
   - c. able
   - d. ible

6. Jaunt
   - a. ive
   - b. y
   - c. ile
   - d. ible

7. Motivation
   - a. ible
   - b. able
   - c. ive
   - d. al

8. Derivation
   - a. ful
   - b. al
   - c. able
   - d. ible

9. Innovation
   - a. ive
   - b. al
   - c. ous
   - d. ible

10. Numeral
    - a. ive
    - b. ous
    - c. ile
    - d. ible
11. Communicate  
   a. ion  b. al  c. able  d.ible 
12. Muscle  
   a. ive  b. al  c. ar  d.ible 
13. Migrate  
   a. ive  b. ory  c. al  d.ible 
14. Fission  
   a. ive  b. al  c. ful  d.ile 
15. Inflame  
   a. ive  b. able  c. ile  d.ible 

IV. Rearrange the words highlighted in the following paragraphs to get the comprehensive scientific passages.

1. The experimental SOLUBLE is prepared as per instruction given in the lab manual. Metals A, B, C, and D are taken to examine whether they are DISSOLVED in the solution taken for the study. While the metals A, B, and C SOLUTES absolutely in the solution the, metal D is found to be SOLVENT. The INSOLUBLE are metals A, B, and C that possess 100% SOLUTION. Hence, the solution taken for the study cannot be called as SOLUBILITY.

2. The external COMBUSTIBLE engine is a heat engine that derives its heat from the fuel consumed outside the cylinder. NON-COMBUSTIBILITY means capable of Combustion. There are several testing apparatus today to check the COMBUSTING of any material. On the other facet, the COMBUSTIBILITY of materials can also be checked through various tests. Most involve the COMBUSTION of a specified quantity of the test specimen of a set duration.

3. Radio waves have the longest wavelength in the electromagnetic spectrum. Hence, they are used to TRANSMISSION information. The radio, television and mobile phones are the edification of the TRANSMITTABLE of radio waves that largely support the communication network. The frequency of radio waves can be adjusted to make the information TRANSMIT.
I. CLOZE TEST
Fill in the blanks with appropriate prepositions of the passage given.

Nuclear energy plays an important role ---(1)--- the development ---(2)------
human civilization. This energy is produced ---(3)----- fission or fusion.
Nuclear waste is used as fertilizer ---(4)------- increase the yield. Industries can use nuclear energy ---(5)---
--- expanding their production. All the NMR scans, CAT scans, Sterilized surgical materials, industrial radiography, radio nuclide imaging and open organ surgery are
benefits derived .....(6)---- nuclear science.

II. EDIT THE ERRORS IN THE FOLLOWING SENTENCES
1. Water is a universal solvent.
2. Liquid nitrogen is a rocket propulsion.
3. Tissue culture is recommended to this research
4. Little machines have long life.
5. Poly Vinyl Chloride withstand corrosion.

III. CHOOSE THE BEST ANSWER FROM THE GIVEN OPTIONS.
1. Camphor ------------------- (undergo) sublimation if burnt.
   a. Underwent       b. had undergone     c. would undergo     d. will undergo
2. Engine with rotary movements -----------(develop) in 1780.
   a. has developed   b. is developed     c. was developed     d. were developed
3. These types of nuts and bolts ----------- (cut) on this lathe.
   a. is cut         b. are cut          c. has been cut      d. have cut
4. For a long time, we ------------- (use) polymers in various engineering fields.
   a. are using      b. have used       c. use              d. have been using
5. This machine ----------- (overhaul) every three months.
   a. Will have to be overhauled         b. will overhaul     c. overhauls     d. have to be overhauled
IV. SENTENCE CONVERSION
   a. Change the following into impersonal passive structure
      1. He welded the plates together.
      2. Coal miners produce millions of tons of gold every week.
      3. We must lubricate bearings periodically.
      4. One can alter the characteristics of steel in many ways.
      5. Welders normally prefer a Vee-shaped weld.
      6. The company will market many new products every year.

   b. Convert the following passage into its active voice
      The process of extraction of gold is described in this flowchart. Initially, the ore is
      obtained by lode mining, where pure gold is extracted. During mining, the ore is washed
      with water. This is followed by recovery of pure gold through three different processes,
      Flotation, Amalgamation and Cyanidation. In flotation, gold is made to stick to air
      bubbles and pure gold is separated from the top. In the amalgamation process, the ore is
      mixed with water to get a pulp. The pulp is collected on a copper plate coated with
      mercury. Then mercury is removed by distillation and pure gold is obtained. In the
      Cyanidation process gold is dissolved in sodium cyanide / potassium cyanide. Zinc dust
      is added to this. Finally, the precipitated pure gold is removed.

V. EXPAND THE NOMINAL COMPOUNDS
   1. Fire tube extension boiler
   2. Front brake
   3. Non aqueous solvent
   4. Intensive care unit
   5. Nozzle gas ejection
   6. Virtual reality
ANNEXURE – II / QUESTIONNAIRE – III

TECHNICAL DISCOURSE

I. TRANSCODING

a. Convert the following table into a comparative passage using discourse markers

<table>
<thead>
<tr>
<th>FEATURES</th>
<th>HUMAN BRAIN</th>
<th>COMPUTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight</td>
<td>About 1.5 Kg.</td>
<td>From a few grams to tons</td>
</tr>
<tr>
<td>Energy sources</td>
<td>Blood Glucose</td>
<td>Electricity</td>
</tr>
<tr>
<td>Temperature needed</td>
<td>Fairly steady</td>
<td>Not very sensitive to change</td>
</tr>
<tr>
<td>No. of parts</td>
<td>Approx $10^{11}$</td>
<td>Approx $10^{11}$</td>
</tr>
<tr>
<td>Location of parts</td>
<td>Inside skull</td>
<td>Could even be in different</td>
</tr>
<tr>
<td></td>
<td></td>
<td>countries.</td>
</tr>
<tr>
<td>Memory</td>
<td>Probably unlimited capacity</td>
<td>Capacity limited by technology</td>
</tr>
<tr>
<td>Speed of calculation</td>
<td>Slow compared to a computer</td>
<td>Extremely fast.</td>
</tr>
</tbody>
</table>

b. Convert the following passage into a pie diagram.

The pie chart depicts the usage pattern of agro chemicals in percentage. 43.6% of agrochemicals are used as insecticides. 29.6% constitutes herbicides, while 20.6% is constituted by fungicides. 6.2% of other agrochemicals are also used. It is seen clearly that insecticides constitute a larger percentage of agrochemicals. On the contrary, fungicides constitute the least.

II. a. Develop the following hints into a descriptive paragraph and give a suitable title

1. Evolution of man
   Pre-historic to modern times
   Fascinating study to anthropologists
2. His progress
   From destitute to a civilized being.
   Saga of excellence
3. Golden Chapter
Encounter multifarious problems
Overcome with this superior intelligence.
4. The greatest story
Faced severe obstacles
The survival of the fittest
Life from a fugitive to the lord of the earth.

b. Make notes on the following passage

Stephen Hawking is the greatest of the living cosmologists and physicists. After his schooling, he went to University College, Oxford. He studied physics. Then he went to Cambridge to do research in cosmology. Since 1979, he has held the post of professor of mathematics. When he was 21, he was shocked to know that he was suffering from ‘scleroses’, an incurable disease. But he continued with his research. In 1985, he underwent an operation in the wind-pipe. He lost his ability to speak after the operation. He communicated with a portable computer and speech synthesizer. Though he has not been healthy, he is happy in his family life. He has dared to defy misfortune. He has overcome crisis with will, grit and determination.

III. PARAGRAPH WRITING
a. Write an argumentative paragraph on global warming and inevitable increase of vehicles.

b. Write a paragraph describing the process of sending an e-mail.