

T.Y.B.SC. SEM – V (2014 Course) : WINTER - 2018
SUBJECT: CHEMISTRY OPTIONAL : a) ENVIRONMENT CHEMISTRY – V

Day: Saturday
Date: 20/10/2018

W-2018-0853

Time: 12.00 NOON TO 02.00 PM
Max. Marks: 40

N.B:

- 1) All questions are **COMPULSORY**.
 - 2) Figures to the right indicate **FULL** marks.
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SECTION - I

Q.1 Answer any **TWO** of the following **(10)**

- a) What is El Nino? How does it affect the global climate.
- b) What are humic substances? Explain the role of humic substances in aquatic environment.
- c) Which are the major developments in evolution of the atmosphere of our earth? Describe there developments.

Q.2 Answer any **TWO** of the following **(10)**

- a) Give an account of Inorganic particulate matter and show its differences from organic particulate matter.
- b) What do you mean by a term 'Smog'? How does photochemistry play a role in formation of photochemical Smog?
- c) Write a note on Iron and manganese bacteria in water bodies.

SECTION - II

Q.3 Answer any **TWO** of the following **(10)**

- a) Discuss the chemistry of Bhopal disaster.
- b) How do you control CO emission in air.
- c) Describe the method for the estimation of ammonia in water bodies.

Q.4 Answer any **TWO** of the following **(10)**

- a) Give an account of oil spill and marine pollution.
- b) Draw a neat diagram of Urey and Millar experiment. Describe the experiment in detail with respect to primitive earth atmosphere.
- c) Explain the following terms:
 - i) Entrophication
 - ii) Chemical speciation
 - iii) BOD
 - iv) COD
 - v) Thermal pollution