

Seat No : _____

No of printed pages: 02

[119]

SARDAR PATEL UNIVERSITY

M.Sc. Organic Chemistry,

Semester IV, External Examination

Saturday, Date: 23-11-2019

Time: 02:00 pm to 05:00 pm

Subject: Applied Organic Chemistry Paper: PS04EORC22

- N.B. (1) Figures to the right indicate marks.
(2) Attempt all questions.

[Total marks: 70]

Q.1 Choose the correct option from the following.

08

- Process chemistry is the arm of...
(a) analytical chemistry (b) bio chemistry
(c) physical chemistry (d) pharmaceutical chemistry
- The drug that reduces fever is called as...
(a) antipyretics (b) analgesics
(c) antibiotics (d) antiseptics
- The Herbicides shows action on...
(a) algae (b) fungi
(c) birds (d) plants
- The VOCs, term stands for...
(a) volatile organic compounds (b) visible organic compounds
(c) versatile oxygenated compounds (d) none of these
- The presumptive tests, cobalt thiocyanate is used for detection of...
(a) marijuana (b) cocaine
(c) heroin (d) hallucinogens
- Duquenois-Levine reagent for marijuana gives _____ color for positive drug test.
(a) purple (b) blue
(c) yellow (d) orange
- Friedel-Crafts alkylation is carried out in presence of _____ catalyst.
(a) NaOH (b) $AlCl_3$
(c) $Al(OH)_3$ (d) NaCl
- A Knoevenagel condensation is a _____ reaction.
(a) nucleophilic addition (b) electrophilic addition
(c) nucleophilic elimination (d) electrophilic elimination

Q.2 Answer the following questions. (Any seven)

14

- Define the term Herbicides, and classify it into two classes.
- Write a short note on: Generic drugs.
- Explain the role of FDA IND review team.
- How the DDT is going to affect environment? Explain.
- What are the polycyclic aromatic hydrocarbons (PAHs)?
- Explain the term: Poisoning.
- Give the detail about Duquenois-Levine reagent that uses for detection of marijuana.
- Explain the Doebner modification.
- How the Enzymes and biocatalysts works? Explain.

(1)

(PTO)

- Q.3 A Explain the various clinical research phases. 06
B Give a brief account on Medicine, and classify into various classes as per its action. 06
- OR
- B What are the Agrochemicals? Write a note on 2,4-dichlorophenoxyacetic acid. 06
- Q.4 A Give details on the twelve principles of green chemistry. 06
B What are the Chlorofluorocarbons (CFCs)? What are the replacements for Chlorofluorocarbons (CFCs)? 06
- OR
- B Explain the detail role of Endocrine disruptor on environment. 06
- Q.5 A Write a note on following drugs of abuse : (i) Heroin (ii) Cocaine and (iii) Alcohol. 06
B What are the instrumental methods that uses for designing drugs. Discuss the designer drug in detail. 06
- OR
- B Discuss the method for fingerprints visualization. 06
- Q.6 A Explain Friedel–Crafts alkylation in detail with mechanism. 06
B What are the phase transfer catalysts? Explain with example. 06
- OR
- B Give a brief account on Knoevenagel condensation. 06

—X—
②