F.Y.B.PHARM. SEMESTER-I (CBCS - 2015 COURSE) : SUMMER - 2018

SUBJECT: PHARMACEUTICAL CHEMISTRY – II (ORGANIC)

Day : **Monday** **S-2018-3904** Time : **10.00 AM TO 01.00 PM**

Date : **23/04/2018** Max. Marks: 60

N.B.

1) **Q.1** and **Q.5** are **COMPULSORY.**
2) Solve any **TWO** of the remaining from Section – I and Section – II.
3) Figures to the right indicate **FULL** marks.
4) Answers to both the sections should be written in **SEPARATE** answer book.

Q.1 Answer **ANY FIVE** of the following: **(10)**

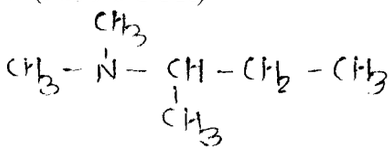
a) How inductive effect is measured?
b) Explain : Methyl amine is more basic than ammonia.
c) Dipole moment of carbon tetrachloride is 0 but dipole moment of methyl chloride is 1.86 D. Why?
d) What is dipole-dipole interaction?
e) Why melting point of ionic compounds is higher than non-ionic compounds?
f) What is polarity of bonds?
g) What is Hybridization?

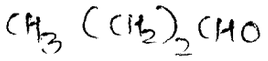
Q.2 Give contributing resonating structures in the resonance hybrid. **(10)**

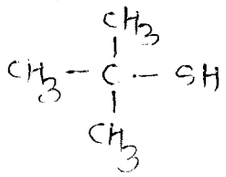
Q.3 **a)** Give factors affecting rate of S_N1 reaction. **(06)**

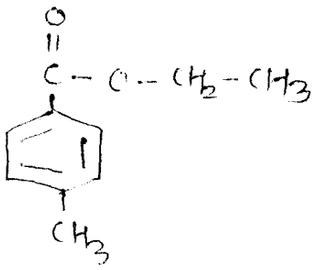
b) Give IUPAC names of following compounds (**ANY FOUR**) **(04)**

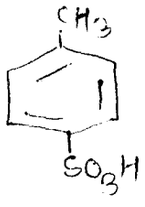
i) 

ii) 

iii) 

iv) 

v) 

vi) 

Q.4 Write short notes on **ANY TWO:** **(10)**

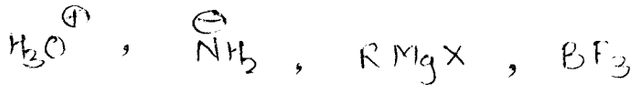
a) Steric effects
b) S_N^2 reaction
c) Hyper conjugation

P.T.O.

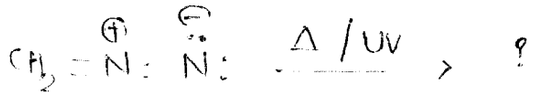
SECTION – II

Q.5 Answer **ANY FIVE** of the following: **(10)**

a) Classify following into electrophiles and nucleophiles.



b) Predict the product.



c) Give different reagents used in Sulphonation reaction.

d) Define Tautomerism.

e) How specific rotation is measured?

f) Give a reaction of generation of carbanions by decomposition of carboxylate ion.

g) What is Stereospecific reaction?

Q.6 What are reaction intermediates? Give an account on carbon radical. **(10)**

Q.7 **a)** Explain Geometric isomerism in detail. **(06)**

b) Give examples of Friedel Craft acylation and alkylation reaction. **(04)**

Q.8 Write short notes on **ANY TWO:** **(10)**

a) Structural Isomerism

b) Benzynes

c) Nitration reaction

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