



UNIVERSITY OF THE PUNJAB

B.S. 4 Years Program / Eighth Semester – 2019

Paper: Applied Chemistry (Sp. Theory-I)

Course Code: CHEM-434 Part – I (Compulsory)

Time: 15 Min. Marks: 10

Roll No. in Fig.

Roll No. in Words.

Signature of Supdt.:

ATTEMPT THIS PAPER ON THIS QUESTION SHEET ONLY.

Division of marks is given in front of each question.

This Paper will be collected back after expiry of time limit mentioned above.

Q.1. Encircle the correct option.

(10x1=10)

- (i) _____ is not an example of fat:
- | | |
|----------------------|------------------|
| a Glycerol trioleate | b Vegetable ghee |
| c Glyceraldehyde | d Coconut oil |
- (ii) The process of stretching the wool fabrics is termed as
- | | |
|--------------|--------------|
| a Teentering | b Crabbing |
| c Decating | d Stiffening |
- (iii) The leather formed from calf is termed as
- | | |
|--------|---------------|
| a Skin | b Hides |
| c Kips | d None of all |
- (iv) The mercirization of cotton is done with NaOH having concentration
- | | |
|-------------|-------------|
| a 5 – 10 % | b 10 – 15 % |
| c 15 – 25 % | d 25 – 35 % |
- (v) The catalyst used in the process of converting unsaturated oil to saturated fat is
- | | |
|------------|------|
| a Sn | b Ni |
| c Raney Ni | d Fe |
- (vi) A leather obtained by the vegetable tanning is of _____ color.
- | | |
|---------|---------|
| a Brown | b Red |
| c Black | d White |
- (vii) The main acidification process in leather industry is
- | | |
|------------|-------------|
| a Pickling | b Tanning |
| c Deliming | d Finishing |
- (viii) The Iodine number of oil / fat indicates
- | | |
|--------------------------|------------------------|
| a Degree of unsaturation | b Degree of saturation |
| c Alkinity | d Acidity |
- (ix) The sherling may be defined as
- | | |
|--|-------------------------------------|
| a Blanket with soft pile | b Kind of sharp knife to trim hairs |
| c Lamb double faced tanned intact with hairs | d None of the above |
- (x) Nylon 66 is made by the reaction of hexamethylene diamine with
- | | |
|--------------------|----------------|
| a Succinic acid | b Malonic acid |
| c Hexanedioic acid | d None |



ATTEMPT THIS (SUBJECTIVE) ON THE SEPARATE ANSWER SHEET PROVIDED

(Short Questions)

- Q No. 02** Give short answers of the following questions (2 x 10)
- (i) Enlist the name and their sources of any four vegetable oils.
 - (ii) Distinguish between primary petrochemical and intermediate petrochemicals. Give examples.
 - (iii) Write down the process and significance of 'Singeing' of cotton.
 - (iv) Name different processes used for the conversion of polymers to fibres.
 - (v) State the role of catechol and pyrogallol in vegetable tanning
 - (vi) Differentiate between simple and mixed triglycerides with one example of each.
 - (vii) Write down the chemical reactions involved in manufacturing of cellulose acetate.
 - (viii) Describe the role of liming in chrome tanning.
 - (ix) State the need of salting in manufacturing of leather.
 - (x) Define Fiber. Give the attributes of fiber.

(Long Questions)

- Q No. 03** Give the brief description of the different steps involved in the conversion of skin to leather. (10)
- Q No. 04** (a) Describe different steps involved in the manufacturing of vegetable ghee. (5)
- (b) Write a concise note on the extraction of oil by solvent extraction method. (5)
- Q No. 05** (a) Write down the process manufacturing of viscose rayon with flow sheet diagram (6)
- (b) Write down the chemistry of naphthalene and its importance as petrochemical. (4)