

Ph. D. ENTRANCE TEST (PET) 2025

Signature of Invigilator

Roll.  
No.

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Paper - II  
Textile Chemistry

Maximum Marks: 50

No. Of Printed Pages: 8

Instruction for the Candidate:

1. This paper consists of **FIFTY (50)** multiple choice type questions. Each Question carries **ONE (1)** mark.
2. There is no Negative Marking for Wrong Answer.
3. A separate OMR Answer Sheet has been provided to answer questions. Your answers will be evaluated based on your response in the OMR Sheet only. No credit will be given for any answering made in question booklet.
4. Defective question booklet or OMR if noticed may immediately replace by the concerned invigilator.
5. Write roll number, subject code, booklet type, category and other information correctly in the OMR Sheet else your OMR Sheet will not be evaluated by machine.
6. Select most appropriate answer to the question and darken appropriate oval on the OMR answer sheet, with black / blue ball pen only. **DO NOT USE PENCIL** for darkening. In case of over writing on any answer, the same will be treated as invalid. Each question has exactly one correct answer and has four alternative responses (A), (B), (C) and (D). You have to darken the circle as indicated below on the correct response against each item.  
**Example:** (A) ● (B) ● (C) ● (D) ● where (B) is correct response.
7. Rough Work is to be done in the end of this booklet.
8. If you write your Name, Roll Number, Phone Number or put any mark on any part of the OMR Answer Sheet, except for the space allotted for the relevant entries, which may disclose your identity, or use abusive language or employ any other unfair means, such as change of response by scratching or using white fluid, you will render yourself liable to disqualification.
9. Calculators, Log tables any other calculating devices, mobiles, slide rule, text manuals etc are **NOT** allowed in the examination hall. If any of above is seized from the candidates during examination time; he/ she will be immediately debarred from the examination and corresponding disciplinary action will be initiated by the Center Supervisor as deemed fit.
10. **DO NOT FOLD** or **TEAR** OMR Answer sheet as machine will not be able to recognize torn or folded OMR Answer sheet.
11. **You have to return the OMR Answer Sheet to the invigilator at the end of the examination compulsorily** and must not carry it with you outside the Examination Hall. You are however, allowed to carry original question booklet on conclusion of examination.



**Paper - II**  
**Textile Chemistry**

**Note:** This paper contains **FIFTY (50)** multiple-choice questions. Each Question carries **ONE (1)** mark.

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- Q.1 Singeing of cotton fabrics result in  
A Improved strength                      B Decreased crease recovery  
C Increased banding Rigidity          D Improved performance during printing
- Q.2 Scouring is done to  
A Remove size                              B Neutralize the substrate after alkaline treatment  
C Remove colourant                      D Remove wax
- Q.3 Which chemical is used for weight reduction of Polyester fabrics?  
A Caustic soda                              B Sulfuric acid  
C Common salt                              D Glaubber's salt
- Q.4 An optical brightener is  
A A synthetic bleaching agent          B A colorless dye  
C A fluorescent compound              D Chemical salt
- Q.5 Which one is NOT a surfactant?  
A Reducing agent                          B Detergent  
C Dispersing agent                          D Wetting agent
- Q.6 Which chemical is used in Mercerization of Cotton?  
A Caustic soda                              B Sulphuric acid  
C Sodium nitrate                          D Sodium carbonate
- Q.7 The highest washing fastness in a dyed cotton fabric would be obtained if the dye-fibre bond is  
A Ionic    B Hydrogen  
C Covalent                                      D Van der Waal's force
- Q.8 The cotton fiber- fabrics cannot be dyed with following dye.  
A Acid dye                                      B Vat dye  
C Direct dye                                      D Reactive dye
- Q.9 Dyeing of silk is carried out by using  
A Disperse dyes                              B Acid dyes  
C Pigment colours                          D None of the above
- Q.10 Monochloro triazine reactive dyes are applied on cotton under  
A Neutral pH                                  B Acid pH  
C Alkaline pH                                  D None of the above
- Q.11 A Polyester/Cotton blended fabric can be dyed to solid shade using a combination of  
A Disperse/Vat dyes                          B Vat and acid dyes  
C Acid and basic dyes                      D Reactive and direct dyes
- Q.12 Which dyes give highest washing fastness when dyed on cotton fibre fabrics?  
A Vat dye    B Azoic dye  
C Reactive dye                                  D Direct dye
- Q.13 Which dye is also known as ice colours?  
A Azoic dye                                      B Direct dye  
C Disperse dye                                  D Vat dye
- Q.14 Which of the following descriptions about dyeing is *incorrect*?  
A Dye is water soluble.                      B Pigment diffuses into the fibre.  
C Dye migrates from the dye              D Both dye and pigment can be used for printing.  
liquor to the fibre





- Q.39 Calendering is a mechanical finishing process which used to
- (1) smooth the surface.
  - (2) provide various surface effects.
  - (3) lift the fibres from the fabric to form a soft fibrous surface.
- A (1) and (2) only                      B (1) and (3) only  
 C (2) and (3) only                      D (1), (2) and (3)
- Q.40 Antistatic finish is applied to
- A Polyester                                  B Cotton  
 C Wool                                        D None of these
- Q.41 Sodium formaldehyde sulfoxylate is
- A Hygroscopy agent                      B Mild oxidizing agent  
 C Thickener                                D Reducing agent
- Q.42 The fibre which has a mineral origin is
- A Asbestos                                 B Silk  
 C Flax                                        D Acrylic
- Q.43 The fibre that will float on water is
- A Nylon                                      B Polyester  
 C Polypropylene                         D Acrylic
- Q.44 The method used for printing polymer film, other packaging materials and transfer paper is usually known as \_\_\_\_\_
- A Transfer printing                      B Polymer printing  
 C Flexographic printing                D Photographic printing
- Q.45 In roller printing colour print paste is kept in which part of the machine
- A Pressure bowl                         B Steel mandrel  
 C Furnishing roller                      D Colour box
- Q.46 What is the name of steel blade, used to remove excess colour from the surface of engraved roller in roller printing machine
- A Colour doctor                         B Steel mandrel  
 C Colour box                                D Pressure bowl
- Q.47 For rotary screens, which method is the most modern method of screen making
- A Mill engraving                         B Laser engraving  
 C Hand engraving                        D Photo engraving
- Q.48 Which method of printing textiles uses a CAD system with digitized image data
- A Transfer printing                      B Rotary printing  
 C Foam printing                         D Digital Ink-Jet printing
- Q.49 Which one is batch type of steamer used for fixation of print on textiles
- A Star steamer (Kerag)                 B Festoon steamer (Stork)  
 C Mather and Platt Roller Ager        D Krostewitz steamer
- Q.50 Knitted fabrics can be satisfactorily handled in which steamer
- A Mather and Platt Roller Ager        B Festoon steamer (Stork)  
 C Krostewitz steamer                    D Star steamer (Kerag)

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**Rough Work:**