R2721

Sub. Code
2MF2C1

M.Voc. DEGREE EXAMINATION, APRIL – 2025

Second Semester

Fashion Technology

ADVANCED TEXTILE DESIGN

(CBCS – 2022 onwards)

Time : 3 Hours Maximum : 75 Marks

Part A (10 × 1 = 10)

Answer **all** the following objective type questions by choosing the correct option.

1. Which of the following is the simplest weave structure? (CO1, K1)

   (a) Twill weave (b) Satin weave

   (c) Plain weave (d) Lenoweave

2. What is the function of the "warp" in weaving? (CO1, K1)

   (a) Crosswise threads

   (b) Lengthwise threads

   (c) Decorative threads

   (d) Weft pile formation

3. What does pigment theory deal with? (CO2, K1)

   (a) Light-based colors

   (b) Dyeing process

   (c) Material blending

   (d) Physical mixing of pigments

4. Which weave results in a crinkled effect? (CO2, K1)

(a) Crepe weave (b) Satin weave

(c) Double cloth (d) Bedford cord

5. Bedford cord fabrics are mainly used for: (CO3, K1)

(a) Embroidery (b) Coats and suits

(c) Interior design (d) Knit structures

6. What is the main feature of double cloth? (CO3, K1)

(a) Wadded surface (b) Two layers woven together

(c) Double color effect (d) Float stitches

7. What is corduroy classified as? (CO4, K1)

(a) Weft pile fabric (b) Warp pile fabric

(c) Crepe weave (d) Backed fabric

8. Which weave structure includes extra warp and extra weft threads? (CO4, K1)

(a) Piqué weave (b) Twill weave

(c) Rib weave (d) Satin weave

9. What is the main difference between "rib" and "plain" weft knits? (CO5, K1)

(a) Float stitch inclusion

(b) Presence of tuck stitches

(c) Loops in opposite directions

(d) Warp pile formation

10. Which knitting method uses Rachel machines? (CO5, K1)

(a) Warp knitting (b) Weft knitting

(c) Purl knitting (d) Interlock knitting

Part B (5 × 5 = 25)

Answer **all** questions not more than 500 words each.

11. (a) Explain the derivatives of plain weave with neat diagrams. (CO1, K2)

Or

(b) List and compare the different types of twill weaves. (CO1, K2)

12. (a) What is the difference between light theory and pigment theory of colors? (CO2, K2)

Or

(b) Discuss the construction and applications of honeycomb weaves. (CO2, K3)

13. (a) Outline the features and uses of Bedford cord fabrics. (CO3, K2)

Or

(b) Explain how reversible and non-reversible backed fabrics differ. (CO3, K3)

14. (a) Describe the process of producing a weft pile fabric. (CO4, K2)

Or

(b) Write a short note on extra warp and extra weft figuring. (CO4, K2)

15. (a) Compare plain weft knit and rib knit structures. (CO5, K3)

Or

(b) Explain the technological advancements in warp knitting. (CO5, K2)

Part C (5 × 8 = 40)

Answer **all** questions not more than 1000 words each.

16. (a) Develop a step-by-step process for designing a basic plain weave. (CO1, K3)

Or

(b) Analyze how weaving methods influence fabric strength. (CO1, K4)

17. (a) Illustrate the application of color and weave effects in woven fabrics. (CO2, K3)

Or

(b) Evaluate the significance of crepe weaves in textile design. (CO2, K5)

18. (a) Compare the characteristics of wadded Bedford cord and plain faced Bedford cord. (CO3, K4)

Or

(b) Assess the advantages and limitations of double cloth fabrics in modern textiles. (CO3, K5)

19. (a) Distinguish between warp pile and weft pile structures with examples. (CO4, K4)

Or

(b) Interpret the importance of pile fabrics in furnishing and apparel industries. (CO4, K5)

20. (a) Distinguish between weft knit structures and warp knit structures with examples. (CO5, K4)

Or

(b) Create an advanced knit structure design using interlock stitches for functional wear. (CO5, K6)

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R2722

Sub. Code
2MF2C2

M.Voc. DEGREE EXAMINATION, APRIL – 2025

Second Semester

Fashion Technology

ADVANCED WET PROCESSING

(CBCS – 2022 onwards)

Time : 3 Hours Maximum : 75 Marks

Part A (10 × 1 = 10)

Answer **all** the following objective questions by choosing the correct option.

1. Which type of plasma is used in textile surface modification? (CO1, K1)

   (a) Low-pressure plasma

   (b) Medium-pressure plasma

   (c) Steam plasma

   (d) None of the above

2. What is the first step in the preparatory process for grey cotton fabric? (CO1, K1)

   (a) Bleaching (b) Desizing

   (c) Scouring (d) Mercerization

3. Which of the following dye would you choose from environmental point of view? (CO2, K1)

(a) Acid dyes

(b) Azoic dyes

(c) Low-salt reactive dyes

(d) Sulphur dyes

4. What is the main advantage of microwave-assisted dyeing? (CO2, K1)

(a) Reduced energy consumption

(b) Increased dye penetration

(c) Both (a) and (b)

(d) None of the above

5. What is the primary function of nano finishes in textiles? (CO3, K1)

(a) Enhancing the final conductivity

(b) Self-cleaning properties

(c) Both (a) and (b)

(d) None of the above

6. Which technique is used to achieve UV protection in textiles? (CO3, K1)

(a) Spray coating

(b) Microencapsulation

(c) Phase change materials

(d) None of the above .

7. What is the main enzyme used for bio-polishing in textiles? (CO4, K1)

(a) Cellulase (b) Amylase

(c) Protease (d) Lipase

8. Which washing process creates a pseudo-denim effect? (CO4, K1)

(a) Marble wash (b) Enzyme wash

(c) Laser fading (d) Ozone wash

9. What is the primary goal of effluent treatment in textile processing? (CO5, K1)

(a) Reduce noise pollution

(b) Minimize water pollution

(c) Minimise air pollution

(d) None of the above

10. What does light fastness test measure? (CO5, K1)

(a) Durability against washing

(b) Resistance to fading under sun

(c) Resistance to rubbing

(d) Color penetration

Part B ($5 \times 5 = 25$)

Answer **all** the questions not more than 500 words each.

11. (a) Explain the role of atmospheric plasma in modifying synthetic fibers. (CO1, K2)

Or

(b) Differentiate between low-pressure plasma and high-pressure plasma techniques. (CO1, K4)

12. (a) Illustrate the advancements in printing technology. (CO2, K3)

Or

(b) Compare ultrasonic-assisted dyeing and aerodynamic dyeing techniques. (CO2, K4)

13. (a) Explain the working mechanism of self-cleaning textile finishes. (CO3, K2)

Or

(b) Discuss the differences between foam coating and powder coating methods. (CO3, K4)

14. (a) Describe the process of enzyme inactivation in bio-processing. (CO4, K2)

Or

(b) Analyze the advantages of acid washing over stone washing in terms of environmental impact. (CO4, K4)

15. (a) Explain the importance of colorfastness testing in textiles. (CO5, K2)

Or

(b) Evaluate the efficiency of a tertiary treatment method in effluent processing. (CO5, K5)

Part C (5 × 8 = 40)

Answer **all** the questions not more than 1,000 words each.

16. (a) Evaluate the advantages of plasma modification for protein-based fibers. (CO1, K5)

Or

(b) Create a process flow for preparatory process sequence of woven cotton fabrics and explain. (CO1, K6)

17. (a) Analyze the impact of low-liquor ratio dyeing on water consumption. (CO2, K4)

Or

(b) Design a dyeing workflow using supercritical carbon dioxide for polyester. (CO2, K6)

18. (a) Assess the thermal regulation efficiency of phase-changing materials in textiles. (CO3, K5)

Or

(b) Generate a case study highlighting the commercial use of antimicrobial nano-finishes. (CO3, K6)

19. (a) Evaluate the environmental benefits of Bio processing compared to traditional processing. Quote examples. (CO4, K5)

Or

(b) Construct a step-by-step process for achieving vintage wash on cotton fabric. (CO4, K6)

20. (a) Discuss about types of pollution in textile industry, causes and remedies. (CO5, K2)

Or

(b) Justify the role of computer color matching in modern dyeing practices. (CO5, K4)

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R2723	Sub. Code
	2MF2C3

M.Voc. DEGREE EXAMINATION, APRIL – 2025

Second Semester

Fashion Technology

NANO-TEXTILES

(CBCS – 2022 onwards)

Time : 3 Hours Maximum : 75 Marks

Part A (10 × 1 = 10)

Answer **all** the following objective questions by choosing the correct option.

1. What is the size of nanoparticle? (CO1, K1)

   (a) 1-10 nm (b) 100 nm

   (c) Less than 100 nm (d) Greater than 100 mm

2. Which approach is used to synthesize nanomaterials? (CO1, K1)

   (a) Additive approach

   (b) Bottom-up approach

   (c) Subtractive approach

   (d) Polymerization

3. What is the primary principle behind electro spinning? (CO2, K1)

(a) Thermal conduction

(b) Electrostatic atomization

(c) Mechanical weaving

(d) Electro spraying

4. Nano fibres are primarily used in (CO2, K1)

(a) Decorative textiles

(b) Filter media

(c) Casual wear

(d) Traditional textiles

5. Carbon nanotubes are synthesized using (CO3, K1)

(a) Electrospinning

(b) Melt spinning

(c) Chemical vapor deposition

(d) Solution polymerization

6. Which property is enhanced in textiles by incorporating ZnO nanoparticles? (CO3, K1)

(a) Tensile strength

(b) UV resistance

(c) Thermal insulation

(d) Water permeability

7. Which instrument is commonly used to observe the structure of nanoparticles? (CO4, K1)

(a) SEM (b) Tensile Strength Tester

(c) Drape Meter (d) Tearing Strength Tester

8. X-Ray Diffraction (XRD) is used to (CO4, K1)

(a) Measure fiber fineness

(b) Analyze crystalline structure

(c) Test tensile strength

(d) Evaluate elongation properties

9. Nano coatings improve the functionality of textiles by providing (CO5, K1)

(a) Aesthetic designs

(b) Improved UV protection

(c) Lower costs

(d) Reduced weight

10. Nano-Tex technology is primarily used for (CO5, K1)

(a) Increasing water absorption

(b) Developing water and stain-resistant textiles

(c) Enhancing fabric color vibrancy

(d) Reducing fiber length

Part B (5 × 5 = 25)

Answer **all** questions not more than 500 words each.

11. (a) Define nanotechnology and explain its fundamental concepts. (CO1, K2)

Or

(b) Briefly describe the bottom-up and top-down approaches for synthesizing nanomaterials. (CO1, K2)

12. (a) What are the applications of nano fibers in tissue engineering? (CO2, K2)

Or

(b) Explain the principle of electrostatic atomization. (CO2, K2)

13. (a) Write a short note on cellulose nano wiskers. (CO3, K2)

Or

(b) Describe the role of ZnO nanoparticles in technical textiles. (CO3, K2)

14. (a) Discuss the importance of Scanning Electron Microscopy (SEM) in characterizing nanoparticles. (CO4, K3)

Or

(b) Explain how X-Ray Diffraction (XRD) is used for analyzing textile substrates. (CO4, K2)

15. (a) List the advantages of nano coatings in functional textiles. (CO5, K2)

Or

(b) Discuss the significance of Nano-Tex technology in technical textiles. (CO5, K2)

Part C ($5 \times 8 = 40$)

Answer **all** questions not more than 1000 words each.

16. (a) Compare the historical development and future scope of nanotechnology in textiles. (CO1, K3)

Or

(b) Illustrate the various methods used for synthesizing nanomaterials. (CO1, K3)

17. (a) Analyze the ecological considerations associated With the use of nanofibers in textiles. (CO2, K4)

Or

(b) Evaluate the effectiveness of electrospinning as a method for producing continuous nano fibers. (CO2, K5)

18. (a) Propose an innovative application of nano-filled polymer fibers in smart textiles. (CO3, K6)

Or

(b) Examine the properties of carbon nanotubes that make them suitable for industrial applications. (CO3, K4)

19. (a) Justify the use of FTIR and MLC in textiles. (CO4, K5)

Or

(b) Develop a detailed process for characterizing cellulose nano-whiskers using SEM and TEM. (CO4, K6)

20. (a) Assess the benefits and challenges of applying nano coatings to textiles for medical use. (CO5, K5)

Or

(b) Design a nono-coating process for creating water-repellent smart textiles. (CO5, K6)

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R2724

Sub. Code
2MF4G2

M.Voc. DEGREE EXAMINATION, APRIL – 2025

Fourth Semester

Fashion Technology

FASHION STYLING AND PHOTOGRAPHY

(CBCS – 2022 onwards)

Time : 3 Hours Maximum : 75 Marks

Part A (10 × 1 = 10)

Answer **all** the following objective type questions by choosing the correct option.

1. What is the primary focus of fashion styling? (CO1, K1)

   (a) Creating fashionable textiles

   (b) Coordinating clothing, accessories, and makeup

   (c) Designing new garments

   (d) Selling clothes

2. Which of the following is a key responsibility of a fashion stylist? (CO1, K1)

   (a) Sketching garment designs

   (b) Selecting outfits for clients

   (c) Manufacturing fabrics

   (d) Managing textile production

3. Which of the following is considered a wardrobe essential? (CO2, K1)

(a) A neon-colored coat

(b) Statement accessories

(c) Seasonal trendy items

(d) A classic black blazer

4. What is the first step in identifying your personal style? (CO2, K1)

(a) Buying trendy clothes

(b) Following celebrity fashion

(c) Wearing designer brands

(d) Analyzing body shape and lifestyle

5. What is the main advantage of being a freelance stylist? (CO3, K1)

(a) Fixed monthly salary

(b) Freedom to work with multiple clients

(c) Limited networking opportunities

(d) No need for marketing

6. Which of the following is crucial for branding a stylist's business? (CO3, K1)

(a) Trend analysis

(b) Consistent visual identity

(c) Sewing skills

(d) Fashion history knowledge

7. What is a key function of shutter speed in a camera? (CO4, K1)

(a) Controls image sharpness

(b) Adjusts image colors

(c) Enhances zoom capacity

(d) Determines file size

8. Which camera setting adjusts brightness without changing exposure? (CO4, K1)

(a) ISO (b) White balance

(c) Shutter speed (d) Focus

9. What is the most important factor to consider when styling for a photoshoot? (CO5, K1)

(a) The photographer's budget

(b) The lighting and background

(c) The season's latest trends

(d) The location of the studio

10. What role do textures play in fashion photography? (CO5, K1)

(a) They determine the cost of the clothing

(b) They add depth and dimension to images

(c) They make the background look brighter

(d) They reduce the need for editing

Part B (5 × 5 = 25)

Answer **all** the questions not more than 500 words each.

11. (a) What are the essential skills required to become a fashion stylist? (CO1, K2)

Or

(b) Define fashion styling and its significance in the fashion industry. (CO1, K2)

12. (a) Discuss the importance of wardrobe planning and maintenance. (CO2, K3)

Or

(b) Brief on wardrobe essentials. (CO2, K2)

13. (a) How does color theory impact fashion styling? (CO3, K2)

Or

(b) Explain the importance of networking in a stylist's career. (CO3, K2)

14. (a) Explain the difference between portrait and landscape photography. (CO4, K3)

Or

(b) What are the main components of a DSLR camera? (CO4, K2)

15. (a) Describe the significance of photography in a fashion show. (CO5, K2)

Or

(b) Describe the key elements of a successful fashion photoshoot. (CO5, K2)

Part C (5 × 8 = 40)

Answer **all** the questions not more than 1000 words each.

16. (a) Assess the need to understand body shapes and personal style while designing. (CO1, K4)

Or

(b) Analyze the role of a fashion stylist in shaping fashion trends. (CO1, K4)

17. (a) Compare and contrast personal styling and commercial styling. (CO2, K4)

Or

(b) Evaluate how fashion choices influence personal branding. (CO2, K5)

18. (a) Discuss the importance of creating a strong portfolio for a fashion stylist. (CO3, K3)

Or

(b) Justify the use of digital marketing in promoting a stylist's business. (CO3, K4)

19. (a) Compare and contrast prime and zoom lenses in fashion photography. (CO4, K4)

Or

(b) Develop a checklist for preparing a fashion photography shoot. (CO4, K6)

20. (a) Assess about concept based photography and its application in branding. (CO5, K4)

Or

(b) Explain how different types of lighting setups affect fashion photography. (CO5, K3)

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