

C-2773

Sub. Code

84521

DIPLOMA EXAMINATION, APRIL 2024.

Second Semester

Fashion Design

FUNDAMENTALS OF TEXTILES

(2023 onwards)

Duration : 3 Hours

Maximum : 75 Marks

Part A

(10 × 1 = 10)

Answer **all** questions.

1. Which of the following fibers is a regenerated cellulose fiber?
(a) Cotton (b) Jute
(c) Viscose (d) Nylon
2. What is the final step in the process of conventional spinning?
(a) Ginning (b) Drawing
(c) Combing (d) Roving
3. Which type of twist is typically used in wet spinning of yarn?
(a) Wet twist (b) Dry twist
(c) Melt twist (d) All of the above
4. What is the primary mechanism involved in producing a plain weave fabric?
(a) Knitting (b) Weaving preparatory
(c) Drawing (d) Weaving mechanism

5. Which type of knitting structure is known for its elasticity and is commonly used for cuffs and collars?
- (a) Single Jersey (b) Double Jersey
(c) Rib Knit (d) Interlock Knit
6. Which type of dye is derived from natural sources such as plants and insects?
- (a) Direct dyes (b) Acid dyes
(c) Vat dyes (d) Reactive dyes
7. Which dyeing machine is suitable for dyeing fabric in rope form?
- (a) Hank dyeing machine
(b) Beam dyeing machine
(c) Jigger dyeing machine
(d) Winch dyeing machine
8. What is the process of applying color to fabric through engraved rollers or cylinders called?
- (a) Dyeing (b) Finishing
(c) Printing (d) Knitting
9. Which finishing process imparts resistance against water to the fabric?
- (a) Wrinkle-free finish (b) Water repellent finish
(c) UV-finish (d) Flame retardant finish
10. Which finishing process involves the process of pressing fabric between rollers to give it a smooth surface?
- (a) Dyeing (b) Calendaring
(c) Printing (d) Combing

Part B

(5 × 5 = 25)

Answer **all** questions.

11. (a) Discuss the properties and applications of wool fiber in the textile industry.

Or

- (b) Explain the manufacturing process and properties of silk fiber.

12. (a) Describe the process of carding in conventional spinning.

Or

- (b) Explain the significance of drafting in the spinning process.

13. (a) Describe weaving preparation process.

Or

- (b) Compare and contrast the characteristics of plain weave and twill weave fabrics.

14. (a) Explain the classification of dyes used in textile dyeing.

Or

- (b) Discuss the types of dyeing machines used in the textile industry.

15. (a) Describe the process of calendaring in textile finishing.

Or

- (b) Discuss the classification of finishing techniques used in the textile industry.

Part C

(5 × 8 = 40)

Answer **all** questions.

16. (a) Discuss in detail the classification of textile fibers, emphasizing natural fibers such as cotton and jute.

Or

- (b) Analyze the properties and applications of regenerated cellulose fibers like Viscose and Acetate Rayon.

17. (a) Explain the process of conventional spinning, highlighting the stages of ginning and blow room.

Or

(b) Compare and contrast different types of yarn twist and their significance in textile manufacturing.

18. (a) Describe the weaving mechanism and various weave types, focusing on plain, twill, and satin weaves.

Or

(b) Define knitting and explore the characteristics of different knit structures such as single jersey and double jersey.

19. (a) Discuss the classification of dyes used in textile dyeing, elaborating on the properties and applications of direct and acid dyes.

Or

(b) Evaluate the different types of dyeing machines, including hank, beam, and jigger, and their suitability for various dyeing processes.

20. (a) Analyze the various finishing techniques in textiles, such as wrinkle-free and water repellent finishing, emphasizing their importance in enhancing fabric properties.

Or

(b) Explain the different types of printing methods, including screen, roller, and rotary printing, and their impact on the final fabric appearance.

C-2774

Sub. Code

84524

DIPLOMA EXAMINATION, APRIL 2024

Second Semester

Fashion Design

SUSTAINABLE FASHION

(2023 onwards)

Duration : 3 Hours

Maximum : 75 Marks

Part A

(10 × 1 = 10)

Answer **all** questions.

1. Which of the following is a major contributor to greenhouse gas emissions leading to climate change?
 - (a) Renewable energy sources
 - (b) Deforestation
 - (c) Public transportation
 - (d) Organic farming

2. What is the primary focus of the concept of sustainable development?
 - (a) Economic growth at any cost
 - (b) Social justice and equality
 - (c) Exploitation of natural resources
 - (d) Short-term profitability

3. Which ethical issue pertains to the fair treatment of workers and ensuring they receive adequate compensation for their labor?
 - (a) Environmental conservation
 - (b) Workers' rights
 - (c) Corporate profits
 - (d) Market competition

4. Which organization is known for its advocacy and campaigns against environmental degradation and for conservation efforts?
 - (a) World Bank
 - (b) International Monetary Fund (IMF)
 - (c) Greenpeace
 - (d) World Trade Organization (WTO)

5. What is a primary concern associated with the use of fossil fuels for energy production?
 - (a) Minimal environmental impact
 - (b) Renewable energy generation
 - (c) Air pollution and greenhouse gas emissions
 - (d) Sustainable development

6. Which industry is often associated with habitat destruction and biodiversity loss?
 - (a) Renewable energy
 - (b) Organic agriculture
 - (c) Mining and extraction
 - (d) Eco-tourism

7. Which global initiative aims to combat poverty, inequality, and environmental degradation?
 - (a) Kyoto Protocol
 - (b) World Trade Organization
 - (c) United Nations Sustainable Development Goals (SDGs)
 - (d) International Monetary Fund (IMF)

8. What is a significant environmental consequence of industrial agriculture practices?
 - (a) Soil regeneration
 - (b) Biodiversity preservation
 - (c) Water pollution from chemical runoff
 - (d) Carbon sequestration

9. Which agreement focuses on reducing emissions from deforestation and forest degradation?
 - (a) Montreal Protocol
 - (b) Kyoto Protocol
 - (c) REDD+ (Reducing Emissions from Deforestation and Forest Degradation)
 - (d) Paris Agreement

10. What is the primary goal of the circular economy model?
 - (a) Maximizing resource extraction
 - (b) Minimizing waste generation
 - (c) Expanding consumerism
 - (d) Promoting planned obsolescence

Part B

(5 × 5 = 25)

Answer **all** questions.

11. (a) Discuss the primary factors contributing to climate change and their impacts on the environment.

Or

- (b) How does consumerism exacerbate resource depletion? Provide examples to support your answer.

12. (a) Explain the importance of sustainable wages and working conditions in ensuring workers' rights and well-being.

Or

- (b) Discuss the ethical implications of exploitation in the workplace. How can organizations address this issue.

13. (a) Describe the mission and objectives of Greenpeace. How does Greenpeace contribute to environmental sustainability.

Or

- (b) What role does the United Nations play in promoting global sustainability initiatives? Provide examples of UN-led projects.

14. (a) Explore the environmental impacts of the fashion and textiles industry. How can these impacts be mitigated through sustainable practices.

Or

- (b) Discuss the environmental consequences of oil extraction and production. How can alternative energy sources address these issues.
15. (a) Explain the significance of the UN Sustainable Development Goals (SDGs) in guiding global sustainability efforts.

Or

- (b) How do ocean cleanup initiatives contribute to environmental conservation? Discuss innovative approaches to tackling marine pollution.

Part C (5 × 8 = 40)

Answer **all** questions.

16. (a) Discuss the role of capitalism in exacerbating environmental problems.

Or

- (b) Genetically modified species have been a topic of debate. Evaluate the potential benefits and risks associated with the use of genetically modified organisms (GMOs) in agriculture
17. (a) Analyze the ethical considerations surrounding sustainable wages and working conditions.

Or

- (b) Explore the ethical implications of health and safety standards in the workplace.

18. (a) Investigate the role of Ethical Fashion Forum in promoting sustainability within the fashion industry.

Or

- (b) Discuss the initiatives undertaken by the World Wildlife Fund (WWF) to protect endangered species and preserve biodiversity.

19. (a) Evaluate the environmental impact of mining operations.

Or

- (b) Discuss the importance of sustainable forestry practices and their role in mitigating climate change.

20. (a) Explore the potential of technological innovations in achieving the UN Sustainable Development Goals (SDGs).

Or

- (b) How does the Paris Climate Agreement aim to combat climate change? Assess the effectiveness of international agreements in promoting environmental sustainability.