

**INDIAN INSTITUTE OF HANDLOOM TECHNOLOGY**  
BARGALHUR/WAHALU/UDAL/ODHUPUNAL/EM/VARANASI/HAMPA/KAHNNI/BUKITTIGADAG/SPKM VENKATAGIRI  
**DIPLOMA IN HANDLOOM AND TEXTILE TECHNOLOGY**  
SEMESTER EXAMINATION - NOV/DEC-2017  
(2011 REGULATION)

Semester: IV Semester

Time: 3 Hours

Subject Code & Name: 4.2 FABRIC STRUCTURE AND ANALYSIS - III

Max.marks:80

**PART-A**

(2 X 10 =20 Marks)

(Answer all the questions within two to three sentences)

1. What are the characteristics of a treble width cloth?
2. How many series of ends and picks are used in warp wadded double cloth?
3. How many ends and picks are required to construct imitation backed cloth by using a base weave of 2/2 twill?
4. How many series of end and picks are required to construct warp wadded weft backed cloth?
5. Whether corduroy is a warp pile (or) weft pile?
6. Draw a repeat of 3 pick - terry to form pile on both sides.
7. What is a true warp pile?
8. What for twin shed formation technique is used in warp pile weaving?
9. What are the two important character required for a toweling fabric?
10. How many loose picks and fast picks are there in a 6 pick terry weave?

**PART-B**

(4+8) X 5 =60 Marks

11. A) Construct treble width cloth. (4)
- B) Construct weft backed cloth by taking 3 and 1 twill. (8)
- (Or)
- C) What are the objectives of wadding? (4)
- D) Construct treble cloth with suitable stitching by taking 2 and 2 twill for face, centre & back. (8)

12. A) What type of effect backed cloth produce in fabric? (4)  
B) Construct warp backed weave with weft wadding. (8)  
(Or)  
C) Differentiate warp and weft backed weaves. (4)  
D) Construct weft backed weave with warp wadding. (8)
13. A) Differentiate velvet and velveteen. (4)  
B) Construct plain backed velveteen by taking 1 and 3 twill for pile picks. (8)  
(Or)  
C) Construct a weave for velvet fabric. (4)  
D) Explain the production technique of velveteen fabric. (8)
14. A) Draw thread interlacing diagram for a repeat of 3 pick terry. (4)  
B) Construct a weave for producing two colour check-effect by using 3 pick terry. (8)  
(Or)  
C) Construct four pick terry. (4)  
D) Explain terry pile formation technique. (8)
15. A) What is the formula for calculating crimp percentage? (4)  
B) Analyze the weave. (8)  
(Or)  
C) 10 X 10 cm of fabric weights 2gms. Calculate GSM of fabric. (4)  
D) How will you identify the direction of warp & weft from the given fabric sample? (8)

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**DIPLOMA IN HANDLOOM AND TEXTILE TECHNOLOGY**  
 SEMESTER EXAMINATION - NOV/DEC-2017  
 (2014 REGULATION)

**Semester: IV Semester**

**Time: 3 Hours**

**Subject Code & Name: 4.2 FABRIC STRUCTURE – III**

**Max.marks:80**

**PART-A**

**(2 X 10 =20 Marks)**

1. What are the methods of stitching treble cloth?
2. How many series of ends and picks are required for constructing weft backed cloth?
3. What are the objectives of wadding?
4. How many ends and picks are required to construct imitation warp backed cloth with 2 and 2 base twill?
5. Whether velveteen are cut piles or loop piles?
6. Draw thread interlacing diagram for a repeat of 3 pick terry pile.
7. Whether corduroys are velvet or velveteen?
8. How many looms are required for weaving chenille fabric?
9. Where the twin shed formation technique is used?
10. What are the classifications of velveteen?

**PART-B**

**(4+8) X 5 =60 Marks**

11. A) Draw thread interlacing diagram for treble width cloth. (4)
- B) Construct treble cloth with 2 and 2 twill with suitable stitching. (8)
- (Or)
- C) Construct weft backed cloth with 3 and 1 twill. (4)
- D) Explain step by step construction of treble cloth with stitching. (8)
12. A) Differentiate warp backed and weft backed cloth. (4)
- B) Construct warp wadded weft backed cloth. (8)
- (Or)

- C) Differentiate reversible and irreversible backed cloth. (4)  
D) Construct weft wadded warp backed cloth. (8)
13. A) Construct plain back velveteen. (4)  
B) Differentiate velvet and velveteen pile fabrics. (8)  
(Or)  
C) Construct 3pick terry to form pile on both sides with thread interlacing diagram. (4)  
D) Construct a terry weave to produce two colour check - effect with 3 pick terry. (8)
14. A) Write short note on velvet. (4)  
B) Construct velvet weave with 'W' binding. (8)  
(Or)  
C) Draw twin shed formation in the production of velvet. (4)  
D) Construct velvet weave suitable for twin shed weaving. (8)
15. A) Construct plain back velveteen. (4)  
B) Explain the manufacturing technique of velveteen. (8)  
(Or)  
C) Construct a corduroy weave. (4)  
D) Explain the production process of chenille carpets. (8)

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**DIPLOMA IN HANDLOOM & TEXTILE TECHNOLOGY**

**FOURTH SEMESTER (2011-REGULATION) EXAMINATION APRIL/MAY-2017**

**Time : 3 Hours**

**Max.Marks : 80**

**4.2 FABRIC STRUCTURE & ANALYSIS**

**Part - A**

**10 x 2 = 20 Marks**

- 1 Draw thread interlacing diagram for Treble width cloth.
- 2 What type of wadding threads are introduced in Wadded double cloth?
- 3 How many series of ends and picks are used in Warp backed cloth.
- 4 How many ends and picks are required to construct Imitation Warp Backed cloth with  $\frac{2}{2}$  twill as base weave.
- 5 How many picks are loose picks & fast picks in 4 pick terry?
- 6 Whether Velveteen is loop pile or cut pile.
- 7 What are the two techniques used in Terry Pile weaving?
- 8 Draw a repeat of thread interlacing diagram for 3 pick Terry.
- 9 Whether Corduroys are warp pile or weft piles?
- 10 What is the formula for calculating crimp percentage?

**PART-B**

**12 x 5 = 60 Marks**

- 11 A) What are the different types of stitches used in Treble cloth? (4)  
B) Construct Warp Wadded double cloth with  $\frac{2}{2}$  twill for face & back cloth. (8)  
(OR)  
C) How many series of ends and picks are used in Weft Wadded Double cloth and what are they? (4)  
D) Construct a stitched treble cloth with  $\frac{2}{2}$  twill for face, centre and back. (8)
- 12 A) How many series of ends and picks are required for constructing a Imitation Backed cloth & what are they? (4)  
B) Construct a Weft Wadded Warp backed cloth with 4 thread twill for face & back. (8)  
(OR)  
C) How many series of ends and picks are required for constructing warp Wadded Weft Backed cloth and What are they? (4)  
D) Construct a Imitation Warp backed cloth with base  $2/2$  twill weave. (8)

**PTO**

- 13 A) What are the classification of pile fabrics? (4)
- B) Construct a Velvet weave for insertion of pick & wire simultaneous with thread interlacing diagram (8)
- (OR)
- C) What is the production technique followed for manufacturing Velveteen fabrics? (4)
- D) Construct Velvet weave to produce Velvet with 'W'-binding with thread interlacing diagram. (8)
- 14 A) Construct Corduroy weave. (4)
- B) Construct Twill Backed Velveteen with thread interlacing diagram. (8)
- (OR)
- C) Construct design of 5 pick Terry structure. (4)
- D) Explain Terry pile formation on both sides with the help of three pick terry. (8)
- 15 A) What are the objectives of cloth analysis? (4)
- B) Analyze the weave in the given sample. (8)
- (OR)
- C) 10 cm x 10 cm sample weighs 2 gms. Calculate the GSM of fabric. (4)
- D) Extract the ends and picks per inch from the given sample. (8)

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VENKATAGIRI

**DIPLOMA IN HANDLOOM & TEXTILE TECHNOLOGY**

**SEMNESTER EXAMINATION APRIL/MAY-2017 (2014-REGULATION)**

**Time : 3 Hours**  
**IV SEMESTER**

**4.2 FABRIC STRUCTURE-III**

**Max.Marks : 80**

**PART- A**

**2x10=20 Marks**

- 1 Mention the purpose of producing Treble cloth.
- 2 Name the warp and weft series used to produce Treble cloth.
- 3 Name the two types of Backed cloth.
- 4 Mention the uses of introducing wadding threads in the backed cloth.
- 5 Name the two types of warp series used to produce Pile fabrics.
- 6 Mention the factors for the absorbency quality of pile fabrics.
- 7 Mention the two types of warp pile fabrics.
- 8 Name the pile fabric required two looms for its production.
- 9 What type of pile effect produce in the velvet fabric?
- 10 Why pile fabrics are having more weight per unit area than the normal woven fabrics with the same ends per inch?

**PART-B**

**12x5= 60 Marks**

- 11 A) Construct the design for Treble width cloth. (4)
- B) Construct the design of Treble cloth in 12x12 using plain weave with self stitching. (8)
- (Or)
- C) Explain the methods of producing Wadded Backed cloth. (4)
- D) When do you called a Backed fabric as reversible? Construct the weave, draft, peg plan of a Reversible Backed Weave and Non-Reversible Backed weave. (8)
- 12 A) Mention the differences between Warp Backed cloth and Weft Backed cloth. (4)
- B) Draw the design of Weft Wadded Warp Backed weave using 6 thread twill. (8)
- (Or)
- C) Write short notes on Imitation Backed Cloth. (4)
- D) Draw the design for producing Warp Wadded Weft Backed cloth by using suitable weave. (8)

**P.T.O.**

- 13 A) Construct four pick Terry to form stripe effect of the fabric. (4)
- B) Explain the formation of 3 pick Terry pile on handloom with suitable attachment. (8)

(Or)

- C) Draw 3 pick Terry for check formation. (4)
- D) Name the different Terry weave structures. Draw a 4 pick Terry weave with pile on both side using 1 ground and 1 pile ratio and give the drafting order for this weave. (8)

- 14 A) What are the differences between 'True pile' and 'Terry pile'? (4)
- B) What is Chenille Carpet? With suitable diagram explain the method of manufacturing this variety on handloom. (8)

(Or)

- C) Differentiate between 'Loop piles' and 'Cut piles'. (4)
- D) Explain the method of producing Velvet fabric with the weave. (8)

- 15 A) Write differences between Velvet and Velveteen. (4)
- B) Describe Corduroy with help of neat sketch and design with thread interlacement diagram. (8)

(Or)

- C) Write down the salient features of Weft Piles. (4)
- D) Explain the method of producing Velveteen fabric with the weave. (8)



DIPLOMA IN HANDLOOM & TEXTILE TECHNOLOGY  
IV SEMESTER (BACK PAPER) EXAMINATION - NOV/DEC-2015

4.2 -FABRIC STRUCTURE & ANALYSIS-III

Time: 3 hours

PART-A



Max. Marks 80

- I. Answer all the questions in detail. 2x10=20
- Give the formula for Crimp% of yarn in a woven fabric.
  - Write the purpose of cloth analysis.
  - Mention any two additional mechanisms to produce uniform pile fabric.
  - When do you call a backed fabric as reversible?
  - How many series of warp and weft required for the warp backed cloths?
  - Give the example for warp pile and weft pile fabrics.
  - Give two reasons to use terry weave in toweling fabric.
  - What do you understand by the term wadding?
  - What is the difference between double cloth and treble cloth?
  - Name the pile fabric producing longitudinal cord effect.

PART-B

Answer all the questions in detail.

- II. a. Differentiate warp wadding and weft wadding. (04)  
b. Taking 8 ends and 12 picks, construct a weft wadded double cloth using 2 up 2 down twill. (08)

OR

- c. What are the differences between double cloth and Treble cloth? (04)  
d. Explain the stages of constructing treble cloth with 6 threads weave for each layer(08) by indicating suitable binding marks.

- III. a. Write down the differences between warp backed and weft backed fabrics. (04)  
b. Construct Warp backed fabric with 6 thread twill on both sides. (08)

OR

- c. Differentiate between backed cloth and imitation backed cloth. (04)  
d. Draw the Weft backed fabric with 5 thread sateen on both sides (08)

- IV. a. What are the differences between Velvet and Velveteen? (04)  
b. Explain the production of velveteen fabric by using suitable structure. (08)

OR

- c. Explain the weaving technique of velvet fabric. (04)  
d. Explain the production technique of Chenille Pile fabric with figures. (08)

- V. a. Explain various possibilities of ornamenting the terry fabric. (04)  
b. Draw 4 pick terry check design on a point paper and show the thread interlacing diagram. (08)

OR

- c. Draw 6 pick terry with pile on both side using 2 ground and 2 pile ratio. (04)  
d. Explain the production of terry pile fabric with 3 pick terry on handloom. (08)

- VI. Analyse the given fabric sample and furnish the following particulars for its re-production.
- |      |                |      |
|------|----------------|------|
| i.   | Ends per inch  | (02) |
| ii.  | Picks per inch | (02) |
| iii. | Weave          | (04) |
| iv.  | Draft          | (02) |
| v.   | Peg plan       | (02) |



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# INDIAN INSTITUTE OF HANDLOOM TECHNOLOGY

BARBARH/FULIA/GUWAHATI JODHPUR SALEM VARANASI CHAMPA KANNUR KHEJJI GADAG SPRINGFIELD VENKATAPUR

DIPLOMA IN HANDLOOM AND TEXTILE TECHNOLOGY  
FOURTH SEMESTER (NEW SYLLABUS) EXAMINATION - APRIL/MAY-2016

Time: 3 Hours

## 4.2 FABRIC STRUCTURE-III

Max. Marks 80

Answer all the questions.

### PART-A

2x10=20

- i. a) How many series of warp and weft used in the treble cloth
- b) Mention the difference between the wadded double cloth and treble cloth.
- c) Name the difference types of wadding used in the backed cloth.
- d) How many series of warp and weft required for the warp backed cloth?
- e) Write the essential features for producing pile fabrics
- f) Mention the different types of yarn for producing toweling fabric.
- g) Name the two kinds of warp pile.
- h) Name the device used for producing velvet fabric.
- i) How many looms required for producing chenille fabric.
- j) Give the examples for warp and weft pile fabrics.

### PART-B

Answer all questions in details:

- II a) Explain the principle of reversible and non reversible backed cloth. 4
- b) Construct the weft backed weave with 8 ends and 16 picks and mark the drafting order. 8
- OR
- c) Differentiate between the treble width cloth and 3 ply cloth. (4 points) 4
- d) Construct a stitched treble cloth weave in 18 ends and picks by using 6 threads twill for base weave. 8
- III a) Write down the differences between warp backed and weft backed fabrics. 4
- b) Construct the warp backed weft wadded weave with 12 ends and 12 picks and mark the drafting order. 8
- OR
- c) Mark the Imitation warp backed weave by using 9 ends and picks. 4
- d) Draw the Weft backed warp wadded weave with 16 ends and 16 picks. 8
- IV. a) What are the different varieties of terry file. 4
- b) Draw the design and thread interlacement diagram for the following: 8
- i) 3 pick terry with pile on both sides ii) 4 pick terry with pile on face side
- OR
- c) Mark a 6 pick terry weave with pile on both side. 4
- d) Explain the Loom arrangements required for producing 3 pick terry on handloom. 8
- V. a) Differentiate between true pile and terry pile. (4 points) 4
- b) Explain the production of Velvet fabric with suitable thread interlacement diagrams. 8
- OR
- c) Differentiate between loop piles and cut piles. (4 points) 4
- d) Explain Fast back velvet and Loose back velvet with suitable diagrams. 8
- VI. a) Differentiate between Velvet and Velveteen. (4 points) 4
- b) Explain the production of velveteen fabric by using suitable structure. 8
- OR
- c) What is 'Corduroy pile structure'? 4
- d) Explain the production technique of a Chenille Pile fabric with figures. 8

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**4.2 – FABRIC STRUCTURE & ANALYSIS – III**

Time: 3 Hrs

Max. Marks: 80

**PART-A**

**NOTE:- ANSWER ALL QUESTIONS**

[2 x 10 = 20]

- I
- a) Name the series of warp and weft used in the treble cloth?
  - b) Mention the purpose of introducing wadding in the cloth.
  - c) When do you call a backed fabric as non reversible.
  - d) How many series of warp and weft required for the weft backed cloth.
  - e) Give the examples for warp pile and weft pile fabrics.
  - f) Give the reason to use terry weave in toweling fabric.
  - g) Name the additional mechanism used for terry weaving?
  - h) Name the pile fabric produced by using two looms.
  - i) Write down the formula for calculating the weight in Grams per square Metre of the Cloth.
  - j) Write the purpose of cloth analysis.

**PART - B**

**Answer the following questions in details:**

- II a) Differentiate warp wadding and weft wadding. 04
- b) Construct an interchanging plain double cloth on 24 ends and 24 picks (excluding wadding picks) to produce check pattern and accommodate 6 wadding picks in a uniform manner at the suitable place. 08
- OR**
- c) What are the differences between double cloth and Treble cloth? 04
- d) Construct a stitched treble cloth weave using 2 up 2 down twill and mention the type of Stitching you have used. 08
- III a) Write down the differences between warp backed and weft backed fabrics. 04
- b) Construct the warp backed weft wadded weave with 16 ends and 16 picks. 08
- OR**
- c) Draw the Imitation warp backed cloth by using 2 up 2 down twill. 04
- d) Draw the Weft backed warp wadded weave with 16 ends and 16 picks. 08
- IV a) What are the differences between Velvet and Velveteen? 04
- b) Draw a design and thread interlacement diagram for a warp pile fabric produced with the aid of wires. 08
- OR**
- c) Differentiate between loop piles and cut piles 08
- d) Explain the production technique of a Chenille Pile fabric with figures. 04
- V a) Explain various possibilities of ornamenting the terry fabrics. 04
- b) Draw the design and thread interlacement diagram for the following. 08
- i) 3 Pick terry with pile on only face side ii) 4 pick terry with pile on both side
- OR**
- c) Draw a 6 pick terry with pile on both sides. 04
- d) Explain the production of terry pile fabric with 3 pick terry on handloom. 08
- VI Analyse the given fabric sample and furnish the following particulars for its re-production (2+2+4+2+2)
- i) Ends and picks per inch ii) Count of warp and weft iii) Weave iv) Draft v) Peg Plan

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DIPLOMA IN HANDLOOM & TEXTILE TECHNOLOGY  
FOURTH SEMESTER (2014-REGULATION) EXAMINATION – NOV/DEC-2016

4.2 – FABRIC STRUCTURE-III

Time : 3 Hours

Max. Marks: 80

**PART-A**

I Answer all the questions:

2x10=20

1. Draw thread interlacing diagram for treble cloth.
2. How many series of ends and picks are used in warp backed cloth?
3. What type of wadding is used in warp backed cloth?
4. How many series of ends and picks are required for weaving imitation backed cloth?
5. How many warp beams are required for weaving terry pile fabrics?
6. Draw a repeat of thread interlacing diagram of 3 pick terry with pile on face side only.
7. Whether velveteen are cut piles or loop piles?
8. Whether PPI will be more in velvet or velveteen?
9. How many loom are required for weaving Chenille pile carpets?
10. How many ends and picks are required for producing 3 pick terry pile fabric (both sides) with 1G : 1P ratio.

**PART-B**

- II a) Construct treble width cloth. 4  
b) Construct a self stitched treble cloth with 2 and 2 twill for face, centre and back. 8
- OR**
- c) Construct a weft backed cloth on 4 ends & 8 picks. 4  
d) Construct warp backed cloth with sateen and satin. 8
- III a) Differentiate warp backed and weft backed fabric. 4  
b) Construct imitation warp backed cloth with 2 and 2 twill as base weave. 8
- OR**
- c) Differentiate warp and weft wadded backed cloths. 4  
d) Construct imitation weft backed cloth with 3 and 3 twill as base weave. 8
- IV a) Construct 4 pick terry to form pile on both sides. 4  
b) Draw thread interlacing diagram of 3 pick terry to form pile on both sides and explain terry pile formation. 8
- OR**
- c) Draw thread interlacing diagram for a repeat of 4 pick terry. 4  
d) Construct terry pile weave to form stripe effect with two colour piles on both sides. 8
- V a) Explain production technique of velvet fabrics. 4  
b) Construct a velvet structure with 2 picks to 1 wire and 2 ground, 1 pile ratio of ends with weft cross section diagram. 8
- OR**
- c) Differentiate between velvet and velveteen. 4  
d) Construct plain back velveteen with  $\frac{1}{3}$  twill for pile weave. 8
- VI a) What is corduroy pile structure? 4  
b) Explain the production technique of chenille pile with figures. 8
- OR**
- c) Construct plain back velveteen with plain for pile weave. 4  
d) Construct twill back velveteen  $\frac{2}{1}$  twill for foundation cloth  $\frac{1}{2}$  twill for pile weave. 8

704(3)

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DIPLOMA IN HANDLOOM AND TEXTILE TECHNOLOGY  
FOURTH SEMESTER (2011 - REGULATION) EXAMINATION –NOV/DEC-2016

**4.2-FABRIC STRUCTURE AND ANALYSIS-III**

**Time: 3 Hours**

**Max.Marks: 80**

**PART – A**

- I. Answer the following questions in two or three sentences :** **(2X10=20)**
- i) How many ends & picks per repeat of the design are required for making simple plain treble cloth.
  - ii) Write the purpose of introducing wadding ends or picks in the cloth.
  - iii) Define the term “Revesible backed cloth”
  - iv) Define the term “Non Revesible backed cloth”
  - v) Define the term “Loop pile”
  - vi) Define the term “Cut pile”.
  - vii) Define the term “Velveteen”
  - viii) Classify the terry file structures.
  - ix) Find ends/inch and picks/inch of the sample supplied to you.
  - x) Find material used in warp & weft of the sample supplied to you.

**PART B**

- II. Answer all the questions in detail**
- A) With suitable diagram, explain treble width plain cloth. **(4)**
  - B) Construct warp wadded double cloth on 12 x 08 using 2/2 twill on face 1/3 twill on back and also indicate the draft& pegplan. **(8)**
- (OR)**
- C) Construct weft wadded double cloth on 08 x 12 using 2/2 twill on face 1/3 twill on back. **(4)**
  - D) Construct treble cloth using design with 3/3 twill for each layers with suitable stitching. **(8)**
- III. A) Construct the design reversible warp backed cloth using 4 thread twill. **(4)****
- B) Construct wadded warp backed cloth by using the above design and also indicate the draft and pegplan. **(8)****
- (OR)**
- C) Construct the design of non reversible weft backed cloth using 4 thread twill. **(4)**
  - D) Construct wadded weft backed cloth by using the above design and also indicate the draft and pegplan. **(8)**
- IV. A) Explain classification of pile fabrics. **(4)****
- B) Explain briefly warp pile produced with the aid of wires with suitable diagram. **(8)****
- (OR)**
- C) Briefly explain “U” binding “W” binding technique used for anchoring pile. **(4)**
  - D) Explain briefly manufacturing technique of weft pile fabrics. **(8)**
- V. A) Construct 3 pick terry and 4 pick terry weave design. **(4)****
- B) Construct design and interlacement diagram for 6 pick terry piles produced on both side. **(8)****
- (OR)**
- C) Furnish salient features of pile fabrics. **(4)**
  - D) Construct design and interlacement diagram for 6 pick terry pile produced on one side. **(8)**
- VI. Analyze the sample supplied to you and derive the followings. **(4)****
- A) Weave. **(8)**
  - B) Draft and peg plan of the derived weave.

guwahati - 54

**INDIAN INSTITUTE OF HANDLOOM TECHNOLOGY**  
**DIPLOMA IN HANDLOOM AND TEXTILE TECHNOLOGY**

BARGARH / GUWAHATI / JODHPUR / SALEM / VARANASI / CHAMPA / KANNUR / KHTIGADAG /  
SPKMIHT/VENKATAGIRI

**ANNUAL/SEMESTER EXAMINATION APRIL/MAY 2018**  
(REGULATION 2014)

Year/Semester : 2<sup>nd</sup> Year/IVth Semester

Time : 3 Hours

Subject Code & Name : 4.2 Fabric Structure – III

Max. Marks : 80

**PART-A**

**2 x 10 = 20 Marks**

Answer all the questions within two to three sentences

1. Name the 3 series of warp threads used to produce treble cloth.
2. Mention the objectives of weft wadded backed cloth production.
3. How many types of wadding threads are used to produce backed cloth?
4. Mention any two basic weaves used to produce backed cloth.
5. Write the ground and pile warp ratio to produce terry fabric?
6. What is the special loom arrangement required to produce terry fabric?
7. Name the ground weaves used to produce velvet fabric
8. Mention any two types of Warp pile fabrics.
9. Which fabric needs two looms for its production?
10. What type of effect is produced in the Corduroy cloth?

**PART-B**

**(4+8) x 5 = 60 Marks**

Answer all the questions in details

11. A) Write the special features of treble cloth (04)  
B) Construct Treble cloth on 12 ends and 12 picks with 2up 2 down twill( $\frac{2}{2}$  twill) for face, centre and back fabric. (08)

OR

- C) Explain the salient features of Backed cloth. (04)  
D) Construct a warp backed cloth with drafting order. (08)

12. A) Write the differences between Warp and Weft Backed cloths (04)  
B) Construct Weft backed warp wadded weave on 16 x 16. (08)

OR

- C) Construct a Imitation weft backed weave on 11 x 11. (04)  
D) Construct a Warp backed weft wadded weave on 16 x 16. (08)

P.T.O.

( 2 )

13. A) Write the classification of pile fabrics. (04)  
B) With the help of a neat sketch, explain the production method of 3 pick terry by using handlooms? (08)

OR

- C) Construct a 4 picks terry weave to form pile on face side only. (04)  
D) Construct a 6 picks terry weave to form pile on both the sides with thread interlacing diagram. (08)

14. A) Construct a repeat of plain back velveteen (04)  
B) Explain the weaving and production techniques of velveteen. (08)

OR

- C) Construct a repeat of velvet weave. (04)  
D) Write the fastback velvet weaving technique (W binding) with a repeat of weave (08)

15. A) Differentiate Velvet and Velveteen. (04)  
B) Explain the Chenille fabric production with neat sketches. (08)

OR

- C) Construct a repeat of corduroy weave. (04)  
D) Explain twin shed formation technique for the production of velvet with a repeat of weave. (08)

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INDIAN INSTITUTE OF HANDLOOM TECHNOLOGY  
BARGARH/FULIA/GUWAHATI/JODHPUR/SALEM/VARANASI/CHAMPA/KANNUR/KHTI GADAG/SPKMIHT VENKATAGIRI  
**DIPLOMA IN HANDLOOM AND TEXTILE TECHNOLOGY**  
ANNUAL/SEMESTER EXAMINATION APRIL/MAY 2018  
(REGULATION -2011)

Class : II YEAR / IV SEMESTER

Subject: (4.2) FABRIC STRUCTURE & ANALYSIS-III

Time: 3 Hours

Max. Marks: 80

**PART - A**

(2 X 10 =20)

(Answer all the questions within TWO to THREE sentences.)

- 1) How many series of warp threads are used to produce treble cloth?
- 2) Name the two types of backed cloth.
- 3) What are the objectives of using wadding threads in the backed cloth production?
- 4) Classify the wadded backed cloth.
- 5) What are the two types of warp used to produce terry fabric?
- 6) What is the objective of using terry weave in towel production?
- 7) Mention any two types of pile fabrics
- 8) How many looms are required for the production of Chenille fabric?
- 9) Write the formula of crimp percentage.
- 10) How will you identify warp in the given sample?

**PART-B**

(4+8) X 5 = 60

(Answer all the questions in details)

- 11) (A) Explain the differences between Wadded double cloth and treble cloth 4  
(B) Construct a Treble cloth weave with drafting order 8  
OR  
(C) Explain the salient features of Backed cloth. 4  
(D) Construct wadded double cloth with drafting order 8
- 12) (A) Write the differences between Warp and Weft Backed cloths. 4  
(B) Construct a Weft backed weave with drafting order 8  
OR  
(C) Construct Imitation backed weave. 4  
(D) Construct a Warp wadded weft backed weave with drafting order. 8
- 13) (A) Differentiate between 'Velvet' and 'Velveteen'. 4  
(B) Explain in detail the warp pile fabric production with the insertion of wire as a weft? 8  
OR  
(C) Explain the techniques of "anchoring of piles". 4  
(D) Explain the production techniques of Velveteen fabric. 8
- 14) (A) Write the different methods of ornamenting terry fabrics. 4  
(B) Explain the production method of 3 pick terry with sketch 8  
OR  
(C) Construct 4 picks terry design. 4  
(D) Draw the 6 picks terry designs with both side pile formation. 8
- 15) Analyse the given fabric and produce the following particulars (2+2+4+2+2)  
(1) Ends per inch (2) Picks per inch. (3) Weave (4) Drafting order (5) Pegplan

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DIPLOMA IN HANDLOOM AND TEXTILE TECHNOLOGY  
SEMESTER (BACK PAPER) EXAMINATION-NOV./DEC.- 2018

Year / Semester: IV Semester

Time: 3 Hours

Subject Code & Name: 4.2 FABRIC STRUCTURE – III

Max.Marks:80

**Part-A**

2 X 10 =20 Marks

Answer all questions within TWO or THREE sentences.

1. How many series of warp and weft used in the treble cloth?
2. Mention the difference between the wadded double cloth and treble cloth
3. Name the different types of wadding threads used in the backed cloth
4. How many series of warp and weft required for the warp backed cloth?
5. Whether velveteen is cut piles or loop piles?
6. Draw thread interlacing diagram for a repeat of 3 pick terry pile.
7. Whether corduroys are velveteen or velvet?
8. Name the pile fabric required two looms for its production.
9. What type pile effect produces in the velvet fabric?
10. Give the example of for warp and weft pile fabric.

**PART B**

12x5= 60 Marks

11. A) construct the design for treble width cloth (4)  
B).construct the design of treble cloth in 12 x 12 using plain weave with self stitching. (8)  
(Or)  
C). Differentiate between treble width cloth and 3 ply cloth (4 points) (4)  
D).Construct a treble width cloth weaves with 18 ends and picks by using twill for base weave (8)
12. A) Write down the difference between Warp Backed and Weft Backed Fabrics. (4)  
B) Draw the weft backed warp wadded weaves with 16 ends and 16 picks (8)  
(Or)  
C).Write short notes on Imitation backed cloth (4)  
D).Draw the design of weft wadded warp backed weave using 6 thread twill. (8)
13. A). Construct 4 pick terry to form stripe effect on the fabric (4)  
B). Explain the formation of 3 pick terry pile on handloom with suitable attachment. (8)  
(Or)  
C) Construct plain back velveteen. (4)  
D). Differentiate velvet and velveteen pile fabric. (8)
14. A). Differentiate between true pile and terry piles. (4)  
B). Construct fast back velvet and loose back velvet with thread interlacing diagram. (8)  
(Or)  
C).Draw twin shed formation in production of velvet. (4)  
D). Construct velvet weave suitable for twin shed weaving. (8)
15. A) Write down the salient features of weft piles. (4)  
B) Explain the production technique of chenille pile fabric with figures. (8)  
(Or)  
C) Differentiate loop piles and cut piles. (4)  
D) Describe corduroy with help of neat sketch and design with thread interlacement diagram. (8)

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DIPLOMA IN HANDLOOM & TEXTILE TECHNOLOGY  
SEMESTER (REGULAR AND BACK PAPER) EXAMINATION – APRIL /MAY 2019  
(Regulation-2014)

Year/Semester: IV SEMESTER

Subject Code & Name: 4.2 FABRIC STRUCTURE –III

Time: 3 Hours

Max.Marks:80

PART-A

- 1) Answer all the questions within two to three sentences: 2x10=20
1. Write the purpose of producing treble cloth.
  2. Name the three types of warp series used to produce treble cloth
  3. Write the types of backed cloths.
  4. How many series of weft thread used to produce weft backed cloth?
  5. How many warp beams are required to produce terry fabric?
  6. Write the ground and pile thread height ratio for producing terry fabric.
  7. Mention the purpose of wires in the production of warp pile fabric
  8. Mention the example for warp file fabric.
  9. Write the special effect produced in the corduroy fabric.
  10. How many series of warp and weft series used to produce weft pile fabric?

PART-B

11. Answer all the questions in detail: (4+8) x5=60
- a. Explain the special features of treble cloth.
  - b. Explain the construction of treble cloth weave by illustrating different types of stitches.
- OR
- c. Write the features of non reversible warp backed cloth
  - d. Construct warp wadded weft backed cloth by using sateen weave for stitching.
12. a. Write the differences between warp and weft backed cloth
- b. Construct weft wadded warp backed cloth by using twill weave for stitching.
- OR
- c. Construct imitation weft backed weave on 7 x 7
  - d. Construct imitation warp backed weave on 13 x 13
13. a. Differentiate loop pile and cut pile
- b. Construct 6 pick terry weaves with one side and both side file formation with thread diagram.
- OR
- c. Construct 4 pick terry weave.
  - d. Explain the production of stripe and check effect of terry fabric with suitable examples.

P.T.O.

14. a Explain the special features of warp pile fabric.  
b. Explain the production of loose back and fast back velvet fabric with the suitable weaves and thread interlacing diagram.

OR

- c. Mention the differences between terry and velvet fabric production.  
d. Explain the production method of Chenille carpet by using two looms.
15. a Explain the differences between velvet and velveteen .  
b. Explain the method of producing velveteen fabric.

OR

- c. Write the method of producing corduroy fabric.  
d. Explain the differences of pile fabrics with suitable example.

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**DIPLOMA IN HANDLOOM & TEXTILE TECHNOLOGY**  
**SEMESTER EXAMINATION (BACK PAPER)- NOVEMBER / DECEMBER 2019**  
**(Regulation-2014)**

**Year / Semester:IV Semester**

**Time:3 Hours**

**SubjectCode & Name: 4.2 FABRIC STRUCTURE-III**

**MAX.MARKS:80**

**PART-A**

**Answer all questions in ONE or TWO sentences**

**[10x2=20]**

- 1 Name the series of warp threads used for constructing treble cloth.
- 2 How many series of ends and picks are required for constructing warp wadded weft backed cloth.
- 3 Define the term "Reversible backed cloth".
- 4 Mark imitation backed cloth on 7 X 7.
- 5 Mark one repeat of 3 pick terry to form pile on both side.
- 6 How many warp beams are required to produce 3 pick terry weave.
- 7 What is the purpose of twin shed formation technique used in warp pile weaving.
- 8 Name the pile fabric that require two looms for its production.
- 9 Name the pile fabric producing longitudinal cord effect.
- 10 Velveteen is warp pile or weft pile?

**PART-B**

**Answer the following questions in detail**

**(4+8)=12 X 5 =60**

- 11 a. With suitable diagram, explain treble width plain cloth. [4]
- b. Explain step by step construction of treble cloth with suitable stitching. [8]

**(OR)**

- c. What is wadding and its purpose. [4]
- d. Construct treble cloth design with 3/3 twill for each layers and indicate the suitable stitching marks. [8]

- 12 a. Differentiate warp and weft backed cloth. [4]
- b. Construct warp wadded weft backed cloth. [8]

**(OR)**

- c. Construct warp backed cloth with 8 thread twill on both side. [4]
- d. Construct imitation warp backed cloth. [8]

- 13 a. Define the term "non-reversible terry pile" with suitable design and its interlacement diagram. [4]
- b. Construct 3 and 6 pick reversible terry weave and its interlacement diagram. [8]
- (OR)
- c. Differentiate loop pile and cut pile. [4]
- d. Explain terry pile formation with neat diagram. [8]
- 14 a. Define the term "U" binding briefly with suitable examples. [4]
- b. Explain the production technique of warp pile [8]
- (OR)
- c. What are the salient features of warp pile fabrics? [4]
- d. Explain the warp pile fabric production using simultaneous insertion of pick and wire technique with neat diagram. [8]
- 15 a. Construct plain back velveteen. [4]
- b. Explain manufacturing technique of weft pile. [8]
- (OR)
- c. Construct corduroy with interlacement diagram. [4]
- d. Explain briefly manufacturing technique of chenille pile fabrics. [8]