

**INDIAN INSTITUTE OF HANDLOOM TECHNOLOGY**  
BARGARH/GUWAHATI/SULIA/KODHPUR/S.ALEM/VARANASI/CHANGA/KANNOUR/KHITI/GADAG/SPEM/VENKATAGIRI  
**DIPLOMA IN HANDLOOM AND TEXTILE TECHNOLOGY**  
SEMESTER EXAMINATION - NOV/DEC-2017  
(2014 REGULATION)

Semester: 1<sup>ST</sup> YEAR

Time: 3 Hours

Subject Code & Name: 1.7 FABRIC STRUCTURE - I

Max.marks:80

**PART-A**

(2 X 10 =20 Marks)

1. What is a Hopsack Weave?
2. What are the derivatives of plain weave?
3. Minimum how many ends and picks are required to construct a twill weave?
4. 1.5, 4/2, 3/3 Twill weaves – Classify them as warp face, weft face and equal face twill weaves.
5. Differentiate Sateen and Satin weaves
6. What are the possible moves to construct regular sateen on eight threads?
7. Name two important characteristics required for a toweling fabric.
8. Name a weave suitable for curtain fabric
9. What is Bird's Eye effect?
10. What is the move used for constructing cork screw weaves?

**PART-B**

(4+8) X 5 =60 Marks

11. A) Draw thread interlacing diagram (Flat view) for plain weave. (4)
- B) Construct 2/2 Warp Rib, 3/2 Weft Rib, 3 and 2 irregular Mat weave and 4 and 4 regular Mat weave. (8)
- (Or)
- C) What type of effect warp and weft rib produce in fabric? (4)
- D) What are the different methods of ornamentation of plain weave? Explain with illustration. (8)

12. A) Show thread interlacing diagram (flat view) for  $\frac{1}{2}$  twill weave. (4)

B) Construct wavy twill by taking  $\frac{3}{2} \frac{1}{2}$  twill as base weave. (8)

(Or)

C) Name any four varieties of twill weaves. (4)

D) By taking 12 thread twill as base construct transposed twill by transposing the base twill in groups of 2. (8)

13. A) Construct two Sateen weaves on 10 threads. (4)

B) Construct twill dice-check with drafting and Peg plan. (8)

(Or)

C) Construct two Satin weaves on eight threads. (4)

D) Construct Satin dice-check with drafting and Peg plan. (8)

14. A) How the Cell-formation takes place in honey comb weaves? (4)

B) Construct huck-a-back on 10x10 with drafting order and Peg plan. (8)

(Or)

C) Construct honey comb weave on 6 x 6. (4)

D) Construct mock-leno on 10 x 10 with drafting order and peg plan. (8)

15. A) What are different methods of constructing crepe weave? (4)

B) Construct Cork screw weave on 7x7. Indicate the drafting order and Peg plan. (8)

(Or)

C) Name any four colour and weave effects. (4)

D) Construct Crepe weave on 8 x 8 by using any two methods. (8)

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**DIPLOMA IN HANDLOOM AND TEXTILE TECHNOLOGY**  
SEMESTER EXAMINATION - NOV/DEC-2017  
(2011 REGULATION)

Semester: II Semester

Time: 3 Hours

Subject Code & Name: 2.2 FABRIC STRUCTURE AND ANALYSIS - I

Max.marks:80

**PART-A**

(2 X 10 =20 Marks)

1. How many ends and picks are required to construct plain weave?
2. Show thread interlacing diagram for warp up and weft up.
3. 3/2 Twill, 3/3 Mat, 1/1 Plain – Arrange the Weaves in increasing order of firmness.
4. How to decide the number of ends and picks in Peg Plan?
5. What are the directions of twist?
6. What are the possible moves to construct a 10 thread regular sateen weave?
7. Name any two basic weaves suitable for toweling fabric.
8. Name any two fabrics for which mock-leno weave is suitable.
9. What is the normal length and width of a Saree?
10. How to identify direction of warp in a woven fabric?

**PART-B**

(4+8) X 5 =60 Marks

11. A) What type of effect warp rib and weft rib produce in fabric? (4)  
B) Construct 2 and 2 regular warp rib and weft rib with thread interlacing diagram. (8)
- (Or)
- C) What is the technique used for weaving mat weaves? Explain how it works. (4)  
D) Construct 3 and 2 mat weave with thread interlacing diagram. (8)
12. A) Give one example for warp face, weft face and equal face twill weave (4)  
B) Construct wavy twill by taking  $\frac{3}{2} \frac{1}{2}$  base twill with drafting order. (8)

(Or)

- C) Show thread interlacing diagram for 1/3 Twill (4)  
D) Construct a herring bone twill by taking 4/2 base twill with drafting order (8)

13. A) Construct satinette weave (4)  
B) Construct diamond weave with drafting order (8)

(Or)

- C) Construct regular sateen on 5 ends & 5 picks (4)  
D) Construct twill dice-check with drafting order (8)

14. A) What is the move used for constructing cork screw weave? (4)  
B) Construct Huck-a-back weave on 10 x 10 with drafting order. (8)

(Or)

- C) Name different methods of constructing crepe weaves. (4)  
D) Construct Mock-Leno weave on 6 x 6 with drafting & denting order. (8)

15. A) Write the formula for calculating crimp percentage. (4)  
B) Analyze the fabric for weave. (8)

(Or)

- C) What are the Objectives of cloth analysis? (4)  
D) Analyze the fabric for Ends per inch, Picks per inch, warp pattern and weft pattern. (8)

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DIPLOMA IN HANDLOOM & TEXTILE TECHNOLOGY  
I YEAR (BACK PAPER) EXAMINATION – NOV/DEC-2015

1.7 FABRIC STRUCTURE - I

**Time: 3 hours**

**Max. Marks 80**

(2x10=20)



I Answer all question in one or two sentences.

- i. Construct plain weave.
- ii. Construct 2 and 2 regular mat weave.
- iii. Construct 2/2 Twill weave.
- iv. Construct a warp face twill on 4 threads.
- v. Among satin and sateen, which one is warp faced?
- vi. What are the two different weaves used in twill dice-check?
- vii. Is it possible to weave 6 x 6 honey comb on a loom with straight draft.
- viii. Name any two weaves suitable for toweling fabric.
- ix. Name any four types of colour and weave effect.
- x. Name four methods of constructing crepe weave.

II Answer all questions in detail.

(4+8)

- a. Construct 4 & 2 irregular warp rib and weft rib.
- b. What are the different methods of ornamenting a plain weave?

OR

- c. Name the effects produced in fabric woven by warp rib and weft rib?
- d. Construct the following weaves.
  - i. Regular Warp rib.
  - ii. Irregular warp rib.
  - iii. Regular mat.
  - iv. Irregular mat.

III a. Explain the construction of Twill weave.

- b. Construct  $\frac{3}{2} \frac{1}{2}$  Twill weave with drafting order.

(4+8)

OR

- c. What are the factors affecting the angle of twill weave?
- d. Construct a Herringbone weave with drafting order.

IV a. What are two different weaves used in twill dice-check.  
b. Construct a sateen dice check.

(4+8)

OR

- c. What are the different weaves used in sateen dice check?
- d. Construct a twill dice check.

V a. Construct Brighton honey comb suitable for weaving with 8 heald shafts.  
b. Construct Huck-a-back on 10x10 with drafting order and peg plan.

(4+8)

OR

- c. Construct ordinary honey comb on 6 x 6 threads.
- d. Construct mock leno on 10x10 with drafting and denting order.

VI a. What are the different classification of colour and weave effects.  
b. Construct colour and weave effect to produce Hound's tooth effect.

(4+8)

OR

- c. Briefly explain the characteristics of crepe weaves.
- d. Construct sponge weave.

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

1.7 FABRIC STRUCTURE - I

Time: 3 hours

Max. Marks 80

(2x10=20)

I Answer all question in one or two sentences.

- i. Construct plain weave.
- ii. Construct 2 and 2 regular mat weave.
- iii. Construct 2/2 Twill weave.
- iv. Construct a warp face twill on 4 threads.
- v. Among satin and sateen, which one is warp faced?
- vi. What are the two different weaves used in twill dice-check?
- vii. Is it possible to weave 6 x 6 honey comb on a loom with straight draft.
- viii. Name any two weaves suitable for toweling fabric.
- ix. Name any four types of colour and weave effect.
- x. Name four methods of constructing crepe weave.

II Answer all questions in detail.

(4+8)

- a. Construct 4 & 2 irregular warp rib and weft rib.
- b. What are the different methods of ornamenting a plain weave?

OR

- c. Name the effects produced in fabric woven by warp rib and weft rib?
- d. Construct the following weaves.
  - i. Regular Warp rib.
  - ii. Irregular warp rib.
  - iii. Regular mat.
  - iv. Irregular mat.

III a. Explain the construction of Twill weave.

- b. Construct  $\frac{3}{2} \frac{1}{2}$  Twill weave with drafting order.

(4+8)

OR

- c. What are the factors affecting the angle of twill weave?
- d. Construct a Herringbone weave with drafting order.

IV a. What are two different weaves used in twill dice-check.

(4+8)

- b. Construct a sateen dice check.

OR

- c. What are the different weaves used in sateen dice check?
- d. Construct a twill dice check.

V a. Construct Brighton honey comb suitable for weaving with 8 heald shafts.

(4+8)

- b. Construct Huck-a-back on 10x10 with drafting order and peg plan.

OR

- c. Construct ordinary honey comb on 6 x 6 threads.
- d. Construct mock leno on 10x10 with drafting and denting order.

VI a. What are the different classification of colour and weave effects.

(4+8)

- b. Construct colour and weave effect to produce Hound's tooth effect.

OR

- c. Briefly explain the characteristics of crepe weaves.
- d. Construct sponge weave.

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**1.7 – FABRIC STRUCTURE-I**

Time : 3 Hours

Max.Marks:80

**PART-A**

2x10=20

I. Answer all the questions within two to three sentences:

1. How many ends and picks are required to construct a weave?
2. Draw thread interlacing diagram (flat view) for 2 and 2 warp rib.
3. What is the technique used for weaving mat weave?
4. Construct  $1 \frac{2}{2}$  twill.
5.  $\frac{2}{2}$ ,  $\frac{1}{3}$ ,  $\frac{3}{1}$  twill – arrange them in the order of warp face, equal face and weft face twill.
6. Name any two weaves suitable for toweling fabrics.
7. Name any four colour and weave effects.
8. What type of effect crepe weaves produce on fabrics?
9. What is base weave used for constructing diaper?
10. What are possible moves for constructing sateen on 10 threads?

**PART-B**

- II a) Write short notes on count of graph paper. 4  
 b) Explain ornamentation of plain weave with illustration. 8
- OR
- c) What are derivatives of plain weave? 4  
 d) What are classifications of woven fabrics? 8
- III a) Construct  $\frac{2}{2}$  twill with drafting order. 4  
 b) Construct herring bone twill with drafting order by taking  $\frac{2}{2}$  twill as base. 8
- OR
- c) Name any four twill weaves constructed on twill base. 4  
 d) Construct a transposed twill in groups of 2 with base line of a 12 thread ordinary twill. 8
- IV. a) Construct satinette weave. 4  
 b) Construct possible sateen on 8 thread. 8
- OR
- c) Construct regular satin on 5 thread. 4  
 d) Construct twill dice-check. 8
- V. a) Differentiate between mock leno & huck a back. 4  
 b) Construct huck-a-back on 10 x 10 with drafting order. 8
- OR
- c) Construct mock-leno on 6 x 6. 4  
 d) Construct honey comb on 6 x 6 with drafting and peg plan. 8
- VI. a) What are the classification of colour and weave effect? 4  
 b) Construct warp cork screw weave on 7 threads with drafting order. 8
- OR
- c) Construct cork screw weave on 5 threads. 4  
 d) Construct crepe weave on 8 thread sateen base. 8

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## DIPLOMA IN HANDLOOM AND TEXTILE TECHNOLOGY

ANNUAL EXAMINATION APRIL/MAY-2017 (2014 REGULATION)

Time : 3 Hours  
FIRST YEAR

Max. Marks : 80

### 1.7 FABRIC STRUCTURE - I

#### Part - A

2 x 10=20 Marks

- 1 Show warp up and weft up thread interlacing diagram (Flat view)
- 2 Minimum how many ends and picks are required for constructing a weave?
- 3 What is the technique used for weaving mat weaves?
- 4 Give one example of warp face, weft face and equal face twill.
- 5 What type of effect sateen & satin weave produce in fabric?
- 6 Name possible moves for constructing regular sateen on 5 threads.
- 7 Name two important qualities required for a toweling fabric.
- 8 Name any two colour and weave effects.
- 9 What type of effect mock-leno weave produce in fabric?
- 10 What type of effect honey comb weave produce in fabric?

#### PART-B

(4+8) x 5= 60 Marks

- 11 A) Draw thread interlacing diagram (flat view) for  $\frac{1}{2}$  twill. (4)
- B) What are derivatives of plain weave? Mark one weave for each derivative. (8)
- (OR)
- C) Name any four different methods of ornamenting a plain weave with illustration. (4)
- D) Taking an example of 4 thread twill draw draft and peg plan also. (8)
- 12 A) Differentiate (4 -points) wavy twill across the cloth & wavy twill along the cloth. (4)
- B) Construct design, draft and peg plan for wavy twill across the cloth with base twill  $\frac{3}{3}$ . (8)
- (OR)
- C) Name any four different types of twill weaves? (4)
- D) Construct a Herring bone design with  $\frac{3}{2} \frac{1}{2}$  base twill, also furnish drafting order. (8)
- 13 A) Construct diamond weave with  $\frac{2}{2}$  base twill. (4)
- B) Construct possible sateen design on 8 threads. (8)
- (OR)
- C) Construct diaper weave with  $\frac{2}{2}$  base twill. (4)
- D) Construct irregular sateen design on 4 and 6 threads. (8)

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- 14 A) Construct honey comb weave on 6 threads. (4)  
B) Construct design for double stitched honey comb, also furnish drafting and denting order. (8)

(OR)

- C) Construct mock-leno design on 6 x 6. (4)  
D) Construct Huck-a back design on 10 x10 and furnish drafting and peg plan. (8)

- 15 A) What are the four different methods of constructing crepe weave. (4)  
B) Constructing corkscrew weave on 7 threads and furnish drafting order. (8)

(OR)

- C) What is the base and move used for constructing corkscrew weaves. (4)  
D) Show colour and weave effect with following weave and colouring order (8)  
Weave : 2/2 Twill  
Warp colour pattern : 2 dark & 2 light  
Weft colour pattern : 2 dark & 2 light

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**2.2 – FABRIC STRUCTURE & ANALYSIS-I**

TIME: 3 HOURS

MAX. MARKS : 80

**PART-A**

Answer all the questions within two or three sentences:

(2X10=20)

- I. i. Name the Longitudinal and Transverse threads in the woven fabric.
- ii. Name the draft order used for commercial production of plain weaving.
- iii. Name the weaves derived from plain weave.
- iv. Mark one repeat of 2 up 2 down twill weave.
- v. Indicate the draft of wavy twill along the cloth in 8x14.
- vi. The term Jeans is applied to \_\_\_\_ twill.
- vii. The term Denim is applied to \_\_\_\_ twill.
- viii. What are the end use of Huck-a-Back and Honey comb fabric?
- ix. Mark one repeat of sateen weave on 8 ends and 8 picks.
- x. Write the expanded form of EPI & PPI.

**PART – B**

Answer all questions in detail:

- II. a. What are the uses of graph paper? (04)
  - b. Show the weave, draft and peg plan of the following: (08)
    - i. Plain weave
    - ii. Mat weave
- OR
- c. Explain classification of fabrics. (04)
  - d. Show the weave, draft and peg plan of the following: (08)
    - i. Basket weave
    - ii. Irregular warp rib
- 
- III. a. Explain classification of twill weave. (04)
  - b. Show the weave, draft and peg plan to the following: (08)
    - i. Herring bone twill
    - ii. Transposed twill
- OR
- c. Explain the weaves derived from twill weave. (04)
  - d. Show the weave, draft and peg plan to the following: (08)
    - i. Broken twill
    - ii. Ordinary twill

IV. a. Write short notes on twill dice check. (04)

b. Show the weave, draft and peg plan of the following: (08)

- i. Diamond weave      ii. Honey-comb

OR

c. Differentiate between Diamond and Diaper. (04)

d. Show the weave, draft and peg plan of the following: (08)

- i. Sateen dice check      ii. Brighton Honey comb

V. a. Write short notes on cork screw weaves.

(04)

b. Show the weave, draft and peg plan of the following: (08)

- i. Mock leno      ii. Warp Cork screw

OR

c. Write the method of creating a crepe wave. (04)

d. Show the weave, draft and peg plan of the following: (08)

- i. Huck-a-Back      ii. Crepe weave

VI. a. Write the way of identifying the direction of warp and weft. (04)

b. Analyze the given fabric sample and furnish the following particulars for its Reproduction: (08)

- i. Ends per inch      ii. Picks per inch      iii. Weave, Draft and Peg plan

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INDIAN INSTITUTE OF HANDLOOM TECHNOLOGY

BARGARH FLUA GUWAHATI JODHPUR SALEM VARANASI CHAMPA KANNUR KHTLGADAG SPKMIHT VENKATAGIRI

DIPLOMA IN HANDLOOM & TEXTILE TECHNOLOGY

SECOND SEMESTER (OLD SYLLABUS - BACK PAPER) - APRIL/MAY-2016

2.2 - FABRIC STRUCTURE & ANALYSIS-I

Time: 3 Hrs

Max Marks: 80

PART-A

I Answer all the questions within two to three sentences

2x10=20

- a) Show thread interlacing diagram for warp up.
- b) How many minimum ends and picks are required for constructing a weave?
- c) Mark 4 ends x 4 picks on graph and show 2<sup>nd</sup> end up on 3<sup>rd</sup> pick.
- d) What are the directions of twist?
- e) What are the weaves used for constructing twill dice-check?
- f) What are the two qualities required for toweling fabric?
- g) Name a weave suitable for mosquito net.
- h) What is the base weave used for constructing corkscrew weave?
- i) What is the weave used in dhoties?
- j) What is known as reed mark in fabric?

PART-B

Answer all the questions in detail

- II (a) Construct plain weave for 1, 3, 2, 4 drafting order with peg plan.
- (b) What are the different methods of ornamenting plain fabric?

4  
8

OR

- (c) Construct 2 and 2 warp rib.
- (d) What is the relation between design draft and peg plan. Explain with an example.

4  
8

- III (a) Draw thread interlacing diagram (flat view) for  $\frac{1}{2}$  Twill.

4

- (b) Construct Herringbone Twill with  $\frac{3}{2} \frac{2}{1}$  interlacement.

8

OR

- (c) Name any four weaves derived from twill.
- (d) By transposing an 8 thread twill in groups of 2 construct a transposed twill.

4  
8

- IV (a) Differentiate between sateen and satin fabrics.
- (b) Construct possible regular sateen on 10 threads.

4  
8

OR

- (c) What are the techniques used for obtaining the required characters of a toweling fabric?
- (d) Construct an ordinary honey comb on 6 x 6.

4  
8

P.T.O.

- V (a) What is the speciality of mock-leno weave? 4  
(b) Construct Huck-a-back on 10 x 10. 8

OR

- (c) What is the speciality of Huck-a-back weave? 8  
(d) Construct mock leno on 10 x 10. 4

- VI (a) What is GSM? 4  
(b) Analyse the given sample to derive the following particulars : 8  
(i) weave (ii) drafting (iii) denting order

OR

- (c) What is the purpose of cloth analysis? 4  
(d) Analyse the fabric to derive the following particulars: 8  
(i) weave (ii) ends and picks per inch

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**DIPLOMA IN HANDLOOM & TEXTILE TECHNOLOGY**  
**SECOND SEMESTER (2011 REGULATION) EXAMINATION NOV/DEC - 2016**

**2.2 – FABRIC STRUCTURE & ANALYSIS-I**

Time : 3 Hours

Max.Marks:80

**PART-A**

- I. 1. Draw thread interlacing diagram for 3 and 3 mat weave. 2x10=20  
 2. Mention three methods of producing stripe effect in a plain fabric.  
 3. What is the purpose of using 4 heald shafts for weaving plain fabric?  
 4. Arrange plain,  $\frac{2}{2}$  twill and  $\frac{3}{3}$  mat in the increasing order of firmness.  
 5. Is it possible to produce a 6 x 6 honey comb by using straight draft on 6 heald shafts?  
 6. Construct 2 and 2 warp rib.  
 7. Construct 3 and 3 mat weave.  
 8. What type of effect warp rib produces on fabric?  
 9. How many beams are required for producing seersucker fabric?  
 10. What is weave used in Rapp fabrics?

**PART-B**

- II. a) Construct plain weave and draw thread interlacing diagram (Flat view). 4  
 b) Construct the following weaves. 8  
 (i) 3 and 2 warp rib (ii) 4 and 2 weft rib (iii) 3 and 2 mat weave (iv) 4 and 2 mat weave.

**OR**

- c) Name the derivatives of plain weave. 4  
 d) Construct 6 and 4 mat weave with drafting & peg plan. 8  
 III. a) Draw thread interlacing diagram (flat view) for  $\frac{2}{2}$  Twill weave. 4  
 b) Construct wavy twill with  $\frac{2}{2} \frac{1}{1}$  Twill. 8

**OR**

- c) Construct herring bone using 2 and 2 twill. 4  
 d) Construct a repeat of warp face equal face and weft face twill. 8

- IV. a) Construct 4 thread satinette. 4  
 b) Construct a diaper weave. 8

**OR**

- c) Differentiate between sateen and satin. 4  
 d) Construct possible sateen weaves on 8 thread. 8

- V. a) Name any two towel weaves and their characteristics. 4  
 b) Construct Huck-a-back weave on 10 x 10 with drafting & peg plan. 8

**OR**

- c) Construct corkscrew on 5 threads. 4  
 d) Construct crepe weave by using the principle of insertion of one weave over another. 8

- VI. a) What is the formula for calculating crimp%? 4  
 b) Extract weave from the sample supplied to you. 8

**OR**

- c) How will you identify the direction of warp and weft? 4  
 d) Extract the ends/inch, picks/inch warp pattern and weft pattern. 8

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**DIPLOMA IN HANDLOOM AND TEXTILE TECHNOLOGY**

SEMESTER EXAMINATION APRIL/MAY-2017 (2011 REGULATION)

**Time : 3 Hours**  
**II SEMESTER**

**2.2 FABRIC STRUCTURE AND ANALYSIS - I**

**Max. Marks : 80**

**PART - A**

**(Answer all the questions within two to three sentences)**

**2 x 10=20 Marks**

- 1 Name any four draft orders used in Handloom.
- 2 How the chambre effect is produce in plain woven fabric.
- 3 What is warp face twill?
- 4 What change is required to produce the weave wavy twill along the cloth in the loom run with 2/2 regular twill.
- 5 Write the draft order followed to produce a diamond weave repeats on 8 ends & 8 picks.
- 6 Differentiate between satin & sateen weaves (any two).
- 7 The ends and picks required to produce a repeat of Devon Huck-a-back weave.
- 8 Which weave is formed perforation in the fabric?
- 9 What is the purpose of cloth analysis?
- 10 Give construction particulars of a Bed sheet or cotton saree.

**PART - B**

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

- 11 A) Write short notes on graphical representation of structure of a woven fabric. **(4)**
- B) Construct the following weaves with their interlacing diagram. **(8)**
- |                  |                   |
|------------------|-------------------|
| (i) 2/1 Warp Rib | (ii) 3/3 Weft rib |
| (iii) 2/2 Mat    | (iv) 3/2 mat      |

**(OR)**

- C) Write short notes on derivatives structure of plain weave. **(4)**
- D) Construct a regular warp rib and a regular mat weave with drafting and peg plan. **(8)**
- 12 A) Construct all possible twill weaves on 4 threads. **(4)**
- B) Construct a design repeat of wavy twill across by taking 3/3 twill as base with drafting and peg plan. **(8)**
- (OR)**
- C) Construct a equal face twill on 6 thread. **(4)**
- D) Construct a design repeat of a 3/3 Herringbone twill with drafting and peg plan. **(8)**

- 13 A) Difference between regular satin and irregular satin weaves. (4)  
B) Construct a design of a diaper weave on 2/2 twill base with drafting and peg plan. (8)

(OR)

- C) Differentiate between Honey comb and Brighton Honey comb. (4)  
D) Construct a design of a brighton Honey comb on (16x16). (8)

- 14 A) Draw a repeat of a Huck-a-back weave on (6x6) (4)  
B) Construct a repeat of warp corkscrew weave on (9x9). (8)

(OR)

- C) Draw a repeat of Mock-leno weaves on (6x6). (4)  
D) Construct a repeat of a weft corkscrew weave on (9x9). (8)

- 15 A) Write any two methods to identify the direction of warp and weft. (4)  
B) Extract the Ends per inch & picks per inch, warp pattern & weft pattern from the sample supplied to you. (8)

(OR)

- C) Calculate the crimp percentage of warp and weft. (4)  
D) Extract a repeat of the weave, draft & peg plan from the sample supplied to you. (8)

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guwahati - 54

**INDIAN INSTITUTE OF HANDLOOM TECHNOLOGY**

BARGARH/GUWAHATI/TULIA/KOCHUPUR/SALEM/YARANASI/CHAMPALAN/BEJINGHTI/DAEJAG/SPKM VEROLA TAOSRI

**DIPLOMA IN HANDLOOM & TEXTILE TECHNOLOGY**

SEMESTER EXAMINATION- APRIL/MAY 2018

(2014 REGULATION)

**Semester: 1st YEAR**

**Time: 3 Hours**

**Subject Code & Name: 1.7 FABRIC STRUCTURE-I**

**Max. Marks: 80**

**PART-A**

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

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

- 1 Name any two woven fabrics of handlooms
- 2 How the check effect is produced in plain woven fabrics?
- 3 Construct one warp face twill
- 4 How many heald shafts are required to produce 2 up / 2 down & 3 up / 1 down combined twill?
- 5 What are the possible moves to construct regular 5 thread sateen.
- 6 Which two weaves are combined to construct a diamond weave?
- 7 Which weave is forming cell formation on both side of the cloth?
- 8 Name any two weaves suitable for towelling fabrics.
- 9 Construct weft cork screw weave on 5x5
- 10 What is Bird's Eye effect?

**PART-B**

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

- 11 A) Construct plain weave and show thread interlacing diagram (Flat view) [4]  
B) Construct warp rib, weft rib, hopsack & basket weaves. [8]
- (OR)**
- C) What are the different methods of ornamenting a plain weave (any four points)? [4]  
D) Explain Catch Cord technique used for weaving regular warp rib and explain how its works. [8]
- 12 A) Differentiate wavy twill and herring bone twill. [4]  
B) Construct a warp face twill, weft face twill & equal face twill. [8]
- (OR)**
- C) Name any four weaves constructed on twill base. [4]  
D) Construct a repeat of herringbone twill with draft and peg plan. [8]

13 A) Differentiate diamond and diaper [4]

B) Construct one repeat of weave draft and pegplan of twill dice check on 12 X 12 [8]

(OR)

C) Construct a Sateen dice check weave on 10x10. [4]

D) Construct a diamond weave on 24 X 24 with 2 up 2 down twill as a base. [8]

14 A) Differentiate mock leno and huck a back. [4]

B) Construct a repeat of double stitched honeycomb on 12 X 14 with draft and peg plan. [8]

(OR)

C) Construct a repeat of honey comb weave on 6x6.. [4]

D) Construct a repeat of huck-a-back 10 X 10 with draft and peg plan [8]

15 A) Write short notes on corkscrew weaves. [4]

B) Construct a repeat of warp corkscrew and crepe weave [8]

(OR)

C) Write short notes on crepe weaves. [4]

D) Show colour & weave effect with the following weave and coloring order. [8]

Weave=3 up 3 down twill warp way

Warp colour pattern=1 light 1 dark 1 light

Weft colour pattern=1 light 1 dark 1 light

GHW-3

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

**Semester: 1st YEAR**

**Time: 3 Hours**

**Subject Code & Name: 2.2 FABRIC STRUCTURE & ANALYSICS-I**

**Max. Marks: 80**

**PART-A**

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

- 1 Name any drafting orders used in handloom.
- 2 What is the technique used for weaving warp rib weaves.
- 3 Name any two derivatives of twill weave.
- 4 What type of effect herring bone weaves produce on fabric?
- 5 Name two weaves used in twill dice check.
- 6 Which two weaves are combined to construct a diamond weave?
- 7 Which weave is forming cell formation on one side of the cloth?
- 8 What is the basic character of honey comb woven fabric?
- 9 Which base weave is required to create a crepe weave.
- 10 What is hounds tooth effect

**PART-B**

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

- 11 A) What are the different methods of ornamenting a plain weave (any four points). [4]
- B) Draw one repeat of design, draft, pegplan & thread interlacement diagram of 3 and 2 hopsack weave. [8]
- (OR)
- C) Explain classification of woven fabrics. [4]
- D) Construct one repeat of weave, draft, pegplan & thread interlacement diagram of a basket weave. [8]
- 12 A) Differentiate wavy twill across and along the cloth. [4]
- B) Construct a repeat of weave draft & pegplan of 2 up 2 down, 1 up 1 down, 1 up 1 down twill weave. [8]

(OR)

- C) Name any four weaves constructed on twill base. [4]
- D) Construct a repeat of weave, draft and pegplan of broken twill. [8]

13 A) Construct a repeat of regular sateen on 8x8. [4]

B) Construct a repeat of weave, draft and pegplan of twill dice check on 10 X 10 [8]

(OR)

C) Differentiate sateen and satin. [4]

D) Construct a repeat of weave, draft and pegplan of diamond on 8 X 8. [8]

14 A) Write short notes on corkscrew weaves. [4]

B) Construct warp & weft corkscrew weaves on 7x7. [8]

(OR)

C) Construct a crepe weave on 8 x 8. [4]

D) Construct mock leno and huck a back weaves on 10x10. [8]

15 A) Write any four points for identifying the direction of warp and weft in a fabric. [4]

B) Analyse the fabric and extract warp pattern and weft pattern. [8]

(OR)

C) What is the purpose of cloth analysis. [4]

D) Analyse the fabric to derive the following particulars: [8]

(i) Weave, (ii) Draft (iii) Peg plan

Bar 4

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BARGARH/FULIA/GUWAHATI/JODHPUR/SALEM/VARANASI/CHAMPA/KANNUR/KHTI GADAG/SPKMIHT VENKATAGIRI

**DIPLOMA IN HANDLOOM AND TEXTILE TECHNOLOGY (2014-REGULATION)**

ANNUAL/SEMESTER EXAMINATION (BACK PAPER) NOV/DEC 2018

Year / Semester: I<sup>ST</sup> YEAR

Time: 3 Hours

Subject Code & Name : 1.7 FABRIC STRUCTURE-I

Max.Marks: 80

## PART - A

Answer all the questions within two or three sentences

2 x 10 = 20 Marks

1. How many minimum ends and picks are required for constructing a Mat weave?
2. Draw interlacement diagram of 2 x 4 Warp Rib.
3. What is the normal angle produced by 2 up 2 down Twill weave?
4. Which twill is called "Swans Down"?
5. What is the base weave used for constructing Diaper?
6. What are the possible moves for constructing 8 ends Satin?
7. How many ends and picks are required for constructing a Grecian huck-a-back?
8. Write the drafting order of Ordinary Honey Comb on 8 x 8.
9. Name any two weaves used for Toweling.
10. Name any two weaves which can be produced on 7 ends and 7 picks.

## PART - B

Answer all the questions in detail

(4+8) x 5 = 60 Marks

- 11 A) How the Woven fabrics are classified? Explain with illustration. (4)
- B) Explain any 4 Ornatmentation techniques of plain weave with neat sketch. (8)
- (OR)
- C) Construct a basket weave on 8 ends and 8 picks. (4)
- D) Explain the arrangement and working of a Catch Cord technique with suitable diagram. (8)
  
- 12 A) Construct one repeat of Warp Face and a Weft Face Twill on 5 ends and 5 picks. (4)
- B) Construct design, draft and peg plan of a Wavy Twill along the cloth on 8 x 16. (8)
- (OR)
- C) Differentiate any 3 points of Wavy Twill Across and Wavy Twill Along cloth. (4)
- D) Construct one repeat of weave, draft and peg plan of a Herring Bone Twill on 16 x 8 with  $\frac{4}{4}$  twill base. (8)

P.T.O.

- 13 A) Construct weave and draft for Satinette weave. (4)  
 B) Construct one repeat of weave and draft for 16 x 16 Diamond weave. (8)  
 (OR)  
 C) Differentiate Regular Satin and Irregular Satin. (4)  
 D) Construct satin & sateen dice-check on 16 ends and 16 picks. (8)
- 14 A) Differentiate Ordinary Honey Comb and Brighton Honey Comb. (4)  
 B) Construct one repeat of weave, draft and peg plan of a huck-a-back on 10 ends and 10 picks. (8)  
 (OR)  
 C) Differentiate Mock Leno and Huck-A-Back. (4)  
 D) Construct one repeat of mock-leno weave on 10 ends and 10 picks with drafting order and peg plan order. (8)
- 15 A) Construct a repeat of Warp Cork Screw weave on 9 x 9 repeat size. (4)  
 B) Construct Crepe weave on 8 x 8 by using any two methods. (8)  
 (OR)  
 C) Name any 4 Colour and Weave Effects. (4)  
 D) Construct a repeat of sponge weave with drafting order and peg plan. (8)

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BARGARH/GUWAHATI/TULITA/IODHPUR/SALFEM/VARANASI/CHAMPA/KANNUR/KHITIGADAG/SPKM IIHT VENKATAGIRI

DIPLOMA IN HANDLOOM AND TEXTILE TECHNOLOGY (Regulation – 2014)  
SEMESTER (REGULAR/BACK PAPER) EXAMINATION – April / May -2019

Year / Semester : 1<sup>ST</sup> Year

Time:3 Hours

Subject Code & Name: 1.7 Fabric Structure – I

Max. Marks: 80

## PART-A

Answer all the questions within two to three sentences.

(2×10=20 marks)

1. What are the four broad classifications of fabrics?
2. Draw flat view thread interlacing diagram for 2 and 1 warp rib.
3. What is the weave used in denim fabric?
4. Name any four weaves constructed on twill base?
5. What are the qualities required for a toweling fabric?
6. What type of effect mock - leno weaves produce?
7. What type of effects are produced on sateen & satin weaves?
8. What are the two different weaves used for constructing twill dice check?
9. What is the base used for constructing cork screw weaves?
10. Name any four colour & Weave effects?

## PART-B

Answer all the questions in detail

(4+8) × 5=60 marks)

11. a) Construct plain weave with thread interlacing (Flat View) diagram. (4)  
b) What are the different methods of ornamenting plain weave (6 Points)? (8)  
(Or)  
c) Construct 2 and 2 mat with thread interlacing diagram. (4)  
d) What are the derivatives of plain weave? Construct one weave for each derivative. (8)
12. a) Construct  $\frac{2}{2}$  twill. (4)  
b) Construct herring bone twill using 3 and 3 twill as base. (8)  
(Or)  
c) Construct a warp faced twill on 4 threads. (4)  
d) Construct a wavy twill across the cloth by using  $\frac{4}{2}$  twill using 1,2,3,4,5,6,1,6,5,4,3,2 drafting order. (8)
13. a) Construct 4 thread satinette weave. (4)  
b) Construct possible regular sateen weaves on 10 threads. (8)  
(Or)  
c) Name the different direction of twist with neat sketch. (4)  
d) Construct a diaper weave by using  $\frac{3}{3}$  twill as base weave. (8)

14. a) What is the denting order followed for 3 and 3 mock leno? (4)  
b) Construct a mock leno weave on 10x10 with drafting order & peg plan. (8)  
(Or)  
c) Name two fabrics, which are produced by using mock leno and honey comb weaves. (4)  
d) Construct honey comb on 6x6 with drafting order and peg plan. (8)
15. a) What type of effects are produced by cork screw weaves on the fabric? (4)  
b) Construct a corkscrew weave on 9 x 9 with drafting order (8)  
(Or)  
c) What type of effects are created by crepe weaves on the fabric? (4)  
d) Construct of a crepe weave on 8x8 sateen base with drafting order. (8)



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## DIPLOMA IN HANDLOOM & TEXTILE TECHNOLOGY (REGULATION - 2014)

ANNUAL / SEMESTER EXAMINATION – NOV/DEC -2019

Year/Semester: I Year Back Paper

Time: 3Hours

Subject Code & Name: 1.7 Fabric structure-1

Max. Marks: 80

### PART -A

Answer all the questions within two to three sentences.

(2x10=20 marks)

1. How many minimum ends and picks are required to construct 3/1 twill weave?
2. What are the three important fabric forming technologies?
3. Construct any one warp face twill.
4. Write the properties of twill weave.
5. What are the possible moves to construct regular 5 thread sateen?
6. Write the properties of diamond weave.
7. Give the classifications of honey-comb weave.
8. Name any two weaves suitable for towel fabrics.
9. Name any two colour & weave effects.
10. What are the methods of construction of crepe weave?

### PART -B

Answer all the questions in detail

(4+8) x 5=60 marks

11. a) Construct a plain weave and show warp way and weft way thread interlacing diagram. (4)  
b) Explain any four ornamentation methods for ornamenting the plain weave. (8)  
(Or)  
c) Write short notes on catch –cord technique for weaving warp rib weave. (4)  
d) Write the derivatives structure of plain weave? Construct one weave for each derivatives. (8)
12. a) Construct one repeat of 7 thread twill weave. (4)  
b) Construct herringbone twill using 3 and 3 twill as base. (8)  
(Or)  
c) Construct a weft face twill on 5 threads. (4)  
d) Construct a warp pointed twill across the cloth by using 1/3 twill 1,2,3,4,3,2 drafting order and indicate its peg plan and tie-up plan. (8)

13. a) Construct weave and draft for 4 thread satinette weave. (4)  
b) Construct design draft and peg plan for 16x16 diamond weave using 2/2 twill base. (2)

(Or)

- c) Write short notes on satin and sateen weaves. (4)  
d) Draw a Design Draft and peg plan for regular sateen on 10x10 threads. (2)
14. a) Differentiate Mock-leno and Huck-a-Back design with suitable weave. (4)  
b) Construct 10x10 Huck-a-Back design with Draft and peg plan. (2)

(Or)

- c) Construct Mock-leno design on 6x6. (4)  
d) Construct honey comb weave on 8x8 with draft order and peg plan. (2)
15. a) Construct one repeat of weft cork screw weave on 9x9 repeat size. (4)  
b) Construct crepe weave by using 8 thread sateen as base. (2)

(Or)

- c) Name any 4 colour and weave effect. (4)  
d) Construct Hound's tooth effect with the following weave and colouring order:

Weave : 2 and 2 twill

Warp colour pattern : 4 dark 4 light

Weft colour pattern : 4 dark 4 light

(2)

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