MARKING SCHEME

SUBJECT - FABRIC STUDY

SUBJECT CODE - 774

(2018-19)

GENERAL INSTRUCTIONS

- Please check that this question paper contains 3 printed pages.
- Please check that this question paper contains 31 questions. There are 2 sections in this paper Section A and Section B. Questions in section A carry one mark, two marks and three marks; and questions in section B carry five marks each. The students should read the instructions given in the question paper carefully before answering.
- Please write down the Serial Number of the question before attempting it.
- 15 minute time has been allotted to read this question paper. The question paper will be distributed at 10.15 a.m. From 10.15 a.m. to 10.30 a.m., the students will read the question paper only and will not write any answer on the answer-book during this period.

Time Allowed − 2 ½ Hours

SECTION – A

- I. This part of section A carries 12 questions that carry 1 mark each. Attempt any 10 questions from the following questions.
- Ques.1 Name the two direction of yarn twist.

Ans. The two directions of yarn twist are "S twist" and "Z twist".

(1 mark)

Maximum Marks: 50

Ques.2 State the characteristics of brocade fabric.

Ans. <u>Brocade fabric</u>- It is an example of jacquard weave. It has intricate patterns and floral motifs. The fabric is heavy in weight. The fabric has a subtle luster.

Ques.3 What are the end uses of damask fabric?

(any 2 = 1 mark)

Ans. The end uses of damask fabric are upholstery, draperies and table cloths.

Ques.4 Enlist the different types of shuttle-less looms.

Ans. The different types of shuttle less looms are -

(any 2 = 1 mark)

- a. water jet loom
- b. air jet loom
- c. rapier loom.

Ques.5 Which type of weave is used in denim fabric?

Ans. Twill weave is used in denims.

(1 mark)

Ques.6 Enlist the various motifs used in "Ajrakh" prints of Gujarat and Rajasthan.

Ans. The most common motifs used in ajrakh of gujrat and rajasthan are geometric motifs known as champakali, raiya, kharek, nipad, grinari etc. (any 2 = 1 mark)

Ques.7 Name any two variations of basic chain stitch.

Ans. The variation of basic chain stitch is open chain and twisted chain stitch. (1 mark)

Ques.8 Classify the types of screen printing technique that are generally used.

Ans. The two types of screen printing techniques are flat screen and rotary screen printing.

(1 mark)

Ques.9 Give an example of medium weight cut pile weave fabric.

Ans. An example of medium weight cut pile fabric is velvet.

(1 mark)

Ques. 10 In which state embroidery is the "Gavanti" stitch used?

Ans. The "gavanti" stitch is used in "kasuti" embroidery of Karnataka.

(1 mark)

Ques.11 Where is crepe fabric used?

Ans. Crepe weave is used in making lingerie, blouses, dresses and crepe bandages.

(any 2 = 1 mark)

Ques.12 Name two yarn resist dyed fabrics that are produced in Indian subcontinent.

Ans. The yarn resist dyed fabrics are Patola (Single Ikat and Double Ikat). (1 mark)

II. This part of section A carries 7 questions that carry 2 marks each. Attempt any 5 questions from the following questions.

Ques.13 Classify and explain fibres on the basis of their length.

Ans. Fibers based on their length are classified as staple and filaments.

- a. <u>Staple fibers</u> are the short length fibers whose length runs in centimeters and inches. They are the natural fibers cotton, flax and wool are examples of it.
- b. <u>Filament fibers</u> are long length fibers whose length runs in meters and kilometers. For example all synthetic fibers like nylon, rayon, polyester and the only natural filament fiber is silk.

Ques.14 Elucidate the characteristics of Jacquard weave.

(any 4 = 2 marks)

Ans. <u>Jacquard weave-</u>

- a. It is a decorative weave.
- b. It has combination of plain, twill and satin weave.
- c. It has intricate patterns. There is no limitation of repeating design.
- d. It requires skilled labour.
- e. It is expensive.

Ques.15 Name the two different styles of Chamba Rumal of Himachal Pradesh..Give examples of each type.

Ans. Chamba rumal has two different kinds –

(2 marks)

(A) Pahari style of painting which depicts the miniature style.

(B) Folk style in which the women embroider their cholis and scarves using their own patterns and designs.

Ques.16 Explain the meaning of "Phulkari". Give the difference between Phulkari and Bagh.

(2 marks)

Ans. Phulkari literally means flower craft.

Phulkari is considered as an important part of trousseau in Punjab.

PHULKARI	BAGH
Phulkari cloth is ornamented with	It is also ornamented with embroidery and the base
embroidery and the base is visible.	is not visible.
They can be grouped into 4-5 main	The types of bagh are ghunghat bagh and vari da
classes	bagh.
Chope, suber, til patra, saloo, nilak.	
This is given by the maternal side of the	This is given by the bride groom's motherto the
bride.	bride.

Ques.17 List out the industrial usages of fabrics.

Ans. <u>Industrial usages of fabric</u> –

(4 uses = 2 marks)

- a. automobiles,
- b. conveyor belts,
- c. footwear,
- d. laundry bags

Ques.18 Compare natural and synthetic dyes.

Ans. Comparison between Natural and Synthetic fibres. (4 points of comparison = 2 marks)

Natural Fibers	Synthetic Fibers
These fibers come from nature.	These fibers are manmade.
Length of the fiber is nature given so that's	Length is decided by man and they are
why they are staple(short fibers)	filament (long fibers)
They are comfortable to wear.	They are not very comfortable to wear.
It is not possible to change the fiber	It is easy to change fibre structure.
structure.	
It grows with its natural color.	Colors are added in the solution.
It is easy to dye.	Dyeing is not an easy process.
They are less durable.	They are more durable.

Ques.19 Give a brief description on the colour and fabric used for "Bagh" prints of Madhya Pradesh.

Ans <u>Bagh prints</u> are practiced in Madhya Pradesh by a small community known as "chippas" the motifs are generally geometric and floral compositions. The fabrics used are cotton, tassar, crepe and silk. Colors used in this process are vegetable and natural dyes like

indigo, turmeric root, pomegranate skin, lac and iron. These natural colours do not fade easily.

III. This part of section A carries 7 questions that carry 3 marks each. Attempt any 5 questions from the following questions.

Ques.20 Define "yarn". State the various properties of yarn which can be influenced by amount of yarn twist.

Ans. Yarn- it is a continuous strand of fibers that are used to make fabric. (1+2=3 marks)

The properties that are influenced by amount of yarn twist are as follows:-

- (A) Higher the twist is finer the yarn is.
- (B) It improves the strength of the fabric.
- (C) it increases the elasticity of the yarn.
- (D) luster of the yarn decreases.
- (E) absorbency of the yarn reduces.

Ques.21 What do you mean by "Non-wovens"? What are the various uses of non-woven fabric?

Ans. Non wovens – it is art of producing fabric directly from fibers matted together. This was invented much before weaving and knitting was invented.

They have various uses – diapers, sanitary pads, tissues, interlinings, tea bags, filters, carpets and etc. (1+2=3 marks)

Ques. 22 Explain the features and end uses of Satin and Velvet fabric. (1 $\frac{1}{2}$ x 2 = 3 marks)

Ans. Satin is a basic weave characterized by long floats of yarn on the face of the fabric. The surface has a very high luster. This weave is done by using filament yarn those have low twist to achieve shiny effect on the surface. A true satin weave has warp yarns floating over the filling yarns. It is used in curtains, draperies, upholstery and formal wear. Velvet is a medium weight cut pile fabric. It is made by using extra set of warp yarns to create a pile. It is a luxurious fabric and is usual made with filament fibers for high luster. It is also used in upholstery, curtains, draperies and formal dresses.

Ques. 23 Enlist different styles of printing. Explain any one in detail. (1 ½ for list of 3 styles +1 ½ for explaining any 1)

Ans. There are three styles of printing – direct, resist and discharge.

<u>Direct printing</u> is the most common style and direct approach to apply color directly on the white or dyed background using some coloring agent which is prepared in the form of paste. Printing paste is made by adding pigment, thickeners, water and resins. For example – block printing and screen printing.

<u>Resist printing</u> is the style of printing in which a substance like clay or wax which is impermeable to dye is used in the prescribed area which prevents the dye to penetrate. The resisting agents seals the air pores in the fabric. For example – batik.

<u>Discharge printing</u> – in this style of printing the color is destroyed or removed from the design area on the piece dyed fabric. Usually it is done to achieve light color motive on a darker color background. For example – dabu printing.

Ques. 24 Discuss the process of Block printing in detail. Mention its advantages and disadvantages.

Ans. <u>Block printing</u> – it is the most ancient method of printing on fabric by using wooden blocks. Blocks are made by engraving design on flat and the raised portion helps to print the design. Printing paste is made using pigment and adhesive, binder or thickners. Blocks are dipped into the print paste and stamped on the fabric. Separate blocks are used for each color.

<u>Advantages</u> – beautiful effects can be created. Bright and colorful prints are obtained. <u>Disadvantages</u> – slow process and cost is high. Placement of blocks are rarely aligned, leads to a lot of rejection.

Ques. 25 Write a short notes on "Mochi Bharat" and "Rabaris".

Ans. <u>Mochi bharat</u> – the needle work in kutch by a special needle called ari. Traditionally done by the community of mochi or cobbler. The stitch used is chain stitch. It is usually done on cotton and satin.

<u>Rabaris</u> – rabaris were a wandering tribe. The embroidery is done on a dark background with lighter color threads. The pieces of colored and patterned fabric are cut and sewn in different sizes on a plain background. This is used on canopies, wall hangings, table covers and other household items and not on clothing.

Ques. 26 What are the various forms of golden and silver embroidery? Discuss any two in detail.

Ans. The different forms of gold and silver embroidery are – Kathiawar, kamdani, makaish, gota work.

The Kathiawar work has gold and silver spangles and twisted gold wire. Known as badlani in surat.

Kamdani or badla is a gold and silver embroidery where flat wires or gold and silver is stitched on white fabric with the help of fine needles

Mukaish work is done by using the untwisted silver wire called badla. The work is very popular in the northern part of India.

Gota work is popular in jaipur. Gota is cut into fine shapes of birds, animal, flowers and attached to the cloth. It is usually practiced on colored silks.

Ques. 27 Give a detailed comparison on the properties of cellulosic and protein fibre.

Cellulosic fibers are obtained from the plant source – stem, seed, leaves etc. example – cotton and linen. Protein fibers are obtained from the hair or saliva of the animal for example wool and silk. Cellulosic fibers are comfortable to wear where as protein fibers are not. Cellulosic fiber burns like paper, smell like burning paper and continuous to burn where as protein fiber after burning gives a smell of burning hair and extinguishes easily. Cellulosic fibers have strength to take the daily wear and tear where as protein fibres have to be handled carefully and are not advised to wash. Cellulosic fibers have a moderate cost and they are not highly priced where as protein fiber is highly priced.

Ques. 28 What do you mean by knitting? Classify knits. What are the differences between its types?

Ans. Knitting is a traditional method of fabric construction. Knitting is done by interloping of yarns. Knits are of two types warp knits and weft knits.

Warp knits	Weft knits
1)Warp knits form vertical loops produced in	Weft knits form horizontal loops produced to
length of the fabric	the width of the fabric
2) They can only be made using knitting	They can be made by hand as well as knitting
machines.	machines.
3) Elasticity is less.	Elasticity is more.
4) Its shrinkage is less.	Its shrinkage is higher.
5) Loops have closed structure.	Loops have opened structure.
6) Compound needles and spring beard needles	Latch needles are used.
are used.	
7) They have less strength.	They have more strength.

Ques. 29 Write short notes on :-

a. Stencil printing – it started in china and japan. Stencils are templates of design cut out on cardboard, plastic or sturdy film or wax coated paper. The designs are cut out from the sheet or cardboard. The designs can be delicate or intricate. Color is

- either sprayed or stamped with brush. Separate stencils are made for different colors.
- b. Roller printing in this the rollers are made of copper and chromium plating for more durability. The design is engraved on the roller. The rollers are arranged in the machine. The roller rotates on the fabric and passes the color through the engraved design area.

Ques. 30 Give a detailed account on "Kashida of Kashmir".

Ans Kashida of Kashmir – Kashmir embroidery and shawl well known for the beauty of color, texture, design and technique. The wool embroidery is universally famous. Shawls of intricate embroider have become a fashionism in the market. Colors used – white, green, purple, blue, yellow and black, crimson are also used. Motifs – motifs are usually taken from nature. Animal and human figures are not seen in Kashmir embroider become of muslim influence. Bird motifs used are parrot, wood pecker etc floral motifs used are iris, lotus, lily, tulips and saffron flower. fabric used– all types of silk, cotton and wool. The threads used are wool, silk, and art silk. Stitches used – satin stitch, stem stitch and chain stitch.

Ques. 31 Name the popular prints of Rajasthan. Give a detailed account on it with respect to production technique, motifs, colours & end uses.

Bagru prints are famous in rajasthan. It is traditional process of hand block printing. It is done using wooden blocks. Colors used are beige, red, black. The base color is off-white. Natural dyes are used. Motifs are very small buds, leaves and stem. End uses – bagru prints are used mostly on ghagra, odhnis and paghris(turban). Home furnishing, apparel and accessories.

Dabu prints – it is a unique art form. Dabu is done with the help of brush and block. The resist paste is applied to the design area and sprinkled with the saw dust. The saw dust sticks to the cloth as the clay dries. The saw dust also acts as a binder which prevents color penetration while dyeing. The entire cloth is dyed. The area where saw dust and clay mixture was present does not catch the dye and remains colorless. After dyeing and drying. The fabric is washed to remove the clay. Natural colors are used grey brown and indigo color, yellow and red. Motifs- flower, geometric shapes, mangos, leaves and peacocks.