

SC7152&1
WASSCE 2020
TEXTILES 2 & 1
Essay and Objective
2 hours 50 minutes

2&1

N

I

- ❖ PAST QUESTIONS
- ❖ QUIZZES
- ❖ REVISION NOTES
- ❖ SYLLABUS / CHIEF EXAMINERS' REPORT
- ❖ LESSON NOTES
- ❖ FREE COURSES
- ❖ CAREER / SCHOLARSHIP OPPORTUNITIES
- ❖ STUDENT NEWS

THE WEST AFRICAN EXAMINATIONS COUNCIL
West African Senior School Certificate Examination
for School Candidates

SC 2020

TEXTILES 2 & 1

2 hours 50 minutes

*Do not open this booklet until you are told to do so. While you are waiting, read and observe the following instructions carefully. Write your **name** and **index number** in **ink** in the spaces provided above.*

*This booklet consists of **two** papers. Answer Paper 2 which comes first, in your answer booklet and Paper 1 on your Objective Test answer sheet. Paper 2 will last **2** hours after which the answer booklet will be collected. Do not start Paper 1 until you are told to do so. Paper 1 will last **50** minutes.*

Answer **four** questions **only**

All questions carry equal marks.

Credit will be given for clarity of expression and orderly presentation of material.

1. (a) State **three** reasons why textiles should be studied as a vocation. [3 marks]
- (b) Describe the following arrangements and appropriately illustrate **each** of them.
(i) All-over pattern;
(ii) Full-drop pattern;
(iii) Half-drop pattern. [12 marks]
2. Discuss **five** factors to show how traditional fabrics have contributed to the socio-economic development of Ghana. [15 marks]
3. (a) Explain *sustainable development* in textiles. [3 marks]
- (b) Advance **four** ways of sustaining the indigenous weaving industry in Ghana. [12 marks]
4. (a) Define *finishing*. [2 marks]
- (b) **Briefly** explain the **two** main forms of finishing. [4 marks]
- (c) Explain **three** reasons why finishing is important in textile production. [9 marks]
5. Describe in **detail**, the processes involved in making a **one-colour** pictorial batik fabric. [15 marks]
6. (a) (i) Describe the shuttle used for broadloom weaving. [3 marks]
(ii) Draw and label **four** parts of the shuttle. [6 marks]
- (b) Identify and discuss **two** problems that may result from the use of the shuttle for weaving on the broadloom. [6 marks]

END OF ESSAY TEST

**DO NOT TURN OVER THIS PAGE UNTIL YOU
ARE TOLD TO DO SO.**

**YOU WILL BE PENALIZED SEVERELY IF YOU
ARE FOUND LOOKING AT THE NEXT PAGE BEFORE
YOU ARE TOLD TO DO SO. WHILE YOU ARE WAITING,
READ THE FOLLOWING INSTRUCTIONS CAREFULLY.**

PAPER 1
OBJECTIVE TEST
[40 marks]

50 minutes

1. Use **2B** pencil throughout.
2. On the pre-printed answer sheet, check that the following details are **correctly** printed:
 - (a) In the space marked *Name*, check your **surname** followed by your **other names**.
 - (b) In the spaces marked *Examination*, *Year*, *Subject* and *Paper*, check 'WASSCE', 'SC 2020', 'TEXTILES', and '1' in that order.
 - (c) In the box marked *Index Number*, your **index number** has been printed vertically in the spaces on the left-hand side, and each numbered space has been shaded in line with each digit. **Reshade** each of the shaded spaces.
 - (d) In the box marked *Subject Code*, the digits 715113 are printed vertically in the spaces on the left-hand side. **Reshade** the corresponding numbered spaces as you did for your index number.
3. An example is given below. This is for a male candidate whose *name* is Elliot Kofi AGBANA. His *index number* is 7102143958 and he is offering *Textiles* 1.

**THE WEST AFRICAN EXAMINATIONS COUNCIL
ANSWER SHEET**

PRINT IN BLOCK LETTERS.		GHA	
Name: AGBANA ELLIOT KOFI			
Examination: WASSCE	Year: SC 2020		
Subject: TEXTILES	Paper: 1		

INSTRUCTIONS TO CANDIDATES

1. Use grade 2B pencil throughout.
2. Answer each question by choosing one letter and shading it like this: ☐ A ☒ B ☐ C ☐ D ☐ E
3. Erase completely any answer you wish to change.
4. Leave extra spaces blank if the answer spaces provided are more than you need.
5. Do not make any markings across the heavy black marks at the right hand edge of your answer sheet.

INDEX NUMBER	
7	<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input checked="" type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9
1	<input type="checkbox"/> 0 <input checked="" type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9
0	<input checked="" type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9
2	<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input checked="" type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9
1	<input type="checkbox"/> 0 <input checked="" type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9
4	<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input checked="" type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9
3	<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9
9	<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input checked="" type="checkbox"/> 8 <input type="checkbox"/> 9
5	<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input checked="" type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9
8	<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input checked="" type="checkbox"/> 8 <input type="checkbox"/> 9

SUBJECT CODE	
7	<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input checked="" type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9
1	<input type="checkbox"/> 0 <input checked="" type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9
5	<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input checked="" type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9
1	<input type="checkbox"/> 0 <input checked="" type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9
1	<input type="checkbox"/> 0 <input checked="" type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9
3	<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9

For Supervisors only
If candidate is absent
shade this space. ☐

Answer **all** the questions.

Each question is followed by four options lettered A to D. Find the **correct** option for **each** question and **shade** in **pencil** on your **answer sheet** the **answer space** which bears the same letter as the option you **have** chosen. Give only **one** answer to **each** question. **An example** is given below.

In still-life study, drawings are made from

- A. imagination.
- B. memory.
- C. observation.
- D. imitation.

The correct answer is observation which is lettered C and therefore answer space C would be shaded.

☐ A ☐ B ☒ C ☐ D

Think carefully before you shade the answer spaces; erase completely any answers you wish to change.

Do all rough work on this question paper.

Now answer the following questions.

1. Textile fibres are classified according to their
 - A. coarseness and fineness.
 - B. grade and quality.
 - C. origin and chemical composition.
 - D. warmth and hard-wearing.
2. Identify from the options, the appropriate reason for studying textiles. It is to
 - A. cut patterns for dresses.
 - B. encourage self employment.
 - C. limit the use of traditional designs.
 - D. promote only modern designs.
3. Rayon fibres fall under
 - A. polyamide fibres.
 - B. regenerated fibres.
 - C. staple fibres.
 - D. vegetable fibres.
4. A fibre which looks like bamboo stalk when seen under microscope is
 - A. flax.
 - B. jute.
 - C. kapok.
 - D. viscose.
5. The Ghanaian symbol which depicts royal authority as a motif is the
 - A. executioner's knife.
 - B. ram's horn.
 - C. state sword.
 - D. war horn.
6. Identify the fibre with the **least** elasticity from the options.
 - A. Cotton
 - B. Kapok
 - C. Silk
 - D. Sisal
7. A characteristic that will hinder a textile fibre from functioning is its
 - A. brittleness.
 - B. flexibility.
 - C. length.
 - D. strength.

8. The character of a yarn is influenced by the degree of
 - A. alignment.
 - B. force.
 - C. twist.
 - D. uniformity.
9. Which of the following statements is **true**? Fibres are
 - A. all manufactured.
 - B. mostly synthetic.
 - C. only from natural products.
 - D. varied in length and fineness.
10. Identify a physical property of cotton from the options. It
 - A. can be used safely with bleaching agents.
 - B. does not stretch easily.
 - C. is deteriorated by the action of acids.
 - D. resists the action of alkalis.
11. Identify from the options, the tool used for threading warp yarns.
 - A. Heddlng hook
 - B. Knitting needle
 - C. Latch needle
 - D. Reeding hook
12. Warp yarns are sized to
 - A. increase the width.
 - B. prevent breakage.
 - C. reduce lustre.
 - D. reduce tension.
13. Labelling of chemicals in the textiles studio is important because it helps in
 - A. advertisement.
 - B. bonding.
 - C. decoration.
 - D. identification.
14. Select the design principle used in motif arrangement.
 - A. Colour
 - B. Ogee
 - C. Shape
 - D. Texture
15. Rinsing of fabrics after dyeing is done to
 - A. brighten the fabric.
 - B. make the dye fast.
 - C. remove excess dye.
 - D. strengthen the fabric.
16. Which of the following looms is described as shuttleless?
 - A. Dobby
 - B. Jacquard
 - C. Rapier
 - D. Tappet
17. Identify the difference between *discharge* and *resist* printed fabrics.
 - A. Discharge fabric has light tones on dark background
 - B. Discharge fabric is broad
 - C. Resist fabric has dark tones on only one face of the fabric
 - D. Resist fabric is narrow
18. The number of yarns per centimetre in a woven fabric depends on
 - A. length of pick.
 - B. size of raddle.
 - C. size of reed.
 - D. width of cloth.

Turn over

19. Violet, blue-violet and green are in harmony because they
 A. are called hues.
 B. are complementary colours.
 C. have one shade.
 D. contain a common hue.
20. A distinct characteristic of dumas fabric is the presence of
 A. green.
 B. indigo.
 C. red.
 D. yellow.
21. In preparing a vat dye bath, sodium hydroxide is **best** dissolved with
 A. cold water.
 B. distilled water.
 C. hot water.
 D. warm water.
22. Grey baft should be bleached before dyeing to
 A. get rid of impurities.
 B. make the colour bleed.
 C. prevent shrinkage.
 D. soften the fabric.
23. Every newly deposited weft yarn in the shed is beaten to the
 A. end of the cloth.
 B. fell of the cloth.
 C. warp threads.
 D. width of cloth.
24. The process of using adhesive to fix fabric onto a table for printing is
 A. batching.
 B. calendaring.
 C. gumming.
 D. pressing.
25. Spinning operators wear nose masks to prevent them from
 A. blood pressure.
 B. inhaling bad odour.
 C. inhaling fluffy particles.
 D. nose bleeding.
26. Which of the following describes appliqué?
 A. Drawing of shapes on a fabric
 B. Printing cut-out shapes onto a fabric
 C. Stitching a cut-out onto another fabric
 D. Stitching sequence onto fabrics
27. Which of the following options is **true** about the function of a portfolio? It is used for the safe keeping of
 A. bales of fabric.
 B. indanthrene dyes.
 C. oxidizing agents.
 D. selected pieces of designs.
28. The recommended ratio of sodium hydroxide to sodium hydrosulphite in dyeing is
 A. 1 : 2.
 B. 1 : 3.
 C. 1 : 4.
 D. 1 : 5.
29. Choose from the options, the process associated with fabric decoration.
 A. Bonding, crocheting and singeing
 B. Marbling, printing and dyeing
 C. Painting, crocheting and knitting
 D. Scouring, bleaching and printing

30. Identify from the options, the statement that **best** describes a business plan. It is a document that
- A. is presented for financial assistance.
 - B. indicates what one intend doing.
 - C. shows an artist's brochure.
 - D. shows how to exhibit an artifact.
31. Chemicals for dyeing are **best** preserved under
- A. airy condition.
 - B. dry condition.
 - C. humid condition.
 - D. moist condition.
32. The **main** purpose of bleaching a fabric is to remove the natural
- A. colouring matter.
 - B. hairy appearance.
 - C. protein impurities.
 - D. size and dust.
33. Dyes extracted from plants are preserved using
- A. caustic soda.
 - B. soda ash.
 - C. salt-petre.
 - D. sodium chloride.
34. Intricate designs in screen printing can be achieved with
- A. application of lacquer.
 - B. application of starch.
 - C. photographic technique.
 - D. stencilling method.
35. To produce firm designs weaves, **each** design pick is bound by a
- A. plain pick.
 - B. sateen pick.
 - C. satin pick.
 - D. twill pick.
36. If the dentage of a reed is 40s and it carries 2000 ends, what is the width of the woven fabric.
- A. 200 cm
 - B. 140 cm
 - C. 100 cm
 - D. 50 cm
37. A mordant enables a fabric to
- A. absorb the dye.
 - B. resist the dye.
 - C. shrink after dyeing.
 - D. stretch well after dyeing.
38. One **major** reason for taking care of fabric is to
- A. allow for fastness.
 - B. increase absorption.
 - C. make them expensive.
 - D. preserve quality.
39. In weaving, the term *tying-up* is the
- A. attachment of heddle shafts to the treadle.
 - B. attachment of pulleys to the horses.
 - C. pulling and winding of warp onto beam.
 - D. stretching of weft yarns on the roller.

40. Calculate the ends needed to weave a piece of fabric 30 cm wide using a reed of 24 dents per centimetre.
- A. 54
 - B. 60
 - C. 125
 - D. 720

END OF PAPER