

## CERAMICS

### **1. PREAMBLE**

Ceramics has been identified as a vocational subject at the Senior High School level because of the advantage it has in the provision of utilitarian and decorative objects, relating to cultural and economic developments of a society.

### **2. AIMS AND OBJECTIVES**

The aims and objectives of the syllabus are to test for the candidate's:

- (i) knowledge in the history and development of ceramics
- (ii) ability to explore, identify, prepare and use materials tools and equipments.
- (iii) knowledge and experience in healthy studio practices.
- (iv) ability to design, develop and create ideas for ceramics
- (v) skills in the processes and production of ceramics wares:
- (vi) ability to interpret and appreciate works in ceramics
- (vii) ability to plan and establish a small-scale industry.

### **3. SCHEME OF EXAMINATION**

There will be three papers, Papers 1, 2 and 3 all of which must be taken. Papers 1 and 2 will be a composite paper to be taken at one sitting.

**PAPER 1:** Will consist of forty multiple choice objective questions, all of which must be answered within 50 minutes for 40 marks.

**PAPER 2:** Will consist of six essay-type questions. Candidates will be required to answer four questions within 2 hours for 60 marks.

**PAPER 3:** Will be two practical projects out of which candidates will execute one within five days, working for six hours each of the days. The paper will carry 80 marks.

The question papers will be sent to the candidates two weeks before the execution period for candidates to study. Designing of sketches and preparatory notes should also be done within the two weeks prior to the execution of the project. These will carry 20 marks. The total mark for the paper is therefore 100.

### **4. DETAILED SYLLABUS**

Ceramics as applied to this syllabus, includes the general knowledge of the history and development of the vocation, use of tools and materials, production of items and objects, their finishing methods, marketing and uses of the products. Candidates will be expected to respond adequately to questions drawn from all aspects of ceramics in their objective, essay and practical forms. Questions will be drawn from the following areas

- (1) Ceramics as a vocation

The definition and history of ceramics, career opportunities, types of products, e.g. bricks, tiles, vases, bowls, their uses, i.e. utilitarian and decorative, relation of products to the culture of the people. Indigenous pottery e.g. Ntonso, Pankrono pottery etc. Ghanaian pioneer contemporary ceramic artists e.g. Daniel Cobblah, W.C. Owusu, R.C. Ekem, Ofori Duodu, K.K. Broni, J.K. Amoah, Kofi Asante, J.K. Nsiah, I.K. Oteng, P.S. Kwawukume, David Tetteh, Adu Darko, A.E. Quarm, Happy Kufeh, etc.

(2) Raw materials, (Clay, Glazes and Other Raw Materials)

- (a) The definition of clay, its formation, kinds and types of clay, e.g. primary clay e.g. kaolin, secondary clay e.g. Ball clay, earthenware clay, stoneware, etc. prospecting and tests for clays, plasticity, shrinkage, firing temperature etc. Preparation of clay, types of clay bodies e.g. plastic, rough etc. Sources of raw materials
- (b) Glazes, Colouring Oxides, Stains etc.

(3) Tools and equipment

- (a) Tools:- their uses and maintenance e.g. Modelling and trimming tools, sponge, cutting wire, callipers, knives, scraper, kidney, dipper, etc.
- (b) Equipment:- their uses and maintenance e.g. Kilns, kiln furniture, potters wheel, blunger, pug mill, jaw crusher, filter press, ball mill, dehumidifier, spraying booth, spraying machine, sackboard, etc.
- (c) Design and Construction of Ceramic Tools/Equipment e.g. forming tools, modelling tools, cutting wire, dipper, sackboard, rolling pin, kiln design and construction.

(4) Forming Techniques :-

- (a) Drawing and designing: Idea development e.g. sketching, drawing, dimension planning, computer aided designing etc.
- (b) Hand building e.g. Pinching, coiling, slabbing, etc. wheel work, e.g. Throwing, Turning, (c) Casting Pressing Extrusion.

(5) Decoration and Finishing:-

- (a) Decorative process e.g. Stamping, Inlaying, Incision, Embossing, Sgraffito, Slip Trailing, Glazing, Sprigging, Spraying, Painting, Printing, etc.
- (b) Drying and firing – open firing, kiln firing, (Bisque firing), Glost firing.

Glazing:-

Preparation, Application, Firing, and its defects.

(6) Establishment of small-scale Ceramic industry:- Site

(i) Factors

finding, financing, branding, registration, licensing, labour, quality control.

(ii) Entrepreneurial Skills:- Managing a ceramic enterprise.

(iii) Costing, pricing, packaging, and marketing of ceramic objects:- Market surveying, valuing, labour cost, transportation, etc.

(7) Exhibition:- Definition, types, planning and organizing exhibitions.

(8) Ceramic production and sustainable environmental issues:-

energy conservation, afforestation, land reclamation, etc.

(9) Professional Practices/Ethics

- Healthy studio practices
- Building a portfolio of works
- Developing Business Plan
- Brochure and Business card
- Portfolio Development

- Sustainable environment

(10) Museum and Galleries

- Definition, history and development of the museum.
- Functions and socio-economic importance of the museum.
- The administrative structure of the museum.
- Authenticity and neutrality of the museum.
- Examples of museums and their activities.