KENYA SCHOOL OF GOVERNMENT

PROFICIENCY EXAMINATION FOR CLERICAL OFFICERS

APRIL, 2021

PAPER CODE: 601

BUSINESS CALCULATIONS

DATE: WEDNESDAY, 30 JUNE 2021

TIME: 9.00 A.M. – 10.30 A.M. (1 ½ HOURS)

<u>INSTRUCTIONS TO CANDIDATES</u>

1. This paper consists of two sections, **A** and **B**.
2. Section A consists of **ten** compulsory questions carrying 30 marks.
3. Section B consists of **five** questions each carrying 10 marks. Answer any three.
4. Calculators may be used.
5. Show all your workings.
6. Answer all questions in the answer booklet provided.

SECTION A: (COMPULSORY)

1. The marked price of a laptop is Ksh.40,000. It was sold at Ksh.35,400. Determine the percentage discount allowed. **(2 marks)**

2. A clerical officer invested Ksh.150,000 in a bank at a simple interest rate of 5% per annum. Calculate the number of years it will take for the investment to amount to Ksh.200,000. **(3 marks)**

3. A support staff deployed in an office mixed grade A coffee costing Ksh.720 per kilogram with grade B coffee costing Ksh.640 per kilogram. Determine the ratio of grade A to grade B coffee in the mixture. **(2 marks)**

4. The marked price of a pair of shoes is Ksh.3,000. If the price was reduced by 15%, determine the selling price. **(2 marks)**

5. The total number of staff in a Government department is 300. Out of these 60 are senior management staff while $\frac{2}{3}$ of the remaining are middle management staff. If the rest are casual labourers, calculate their number. **(4 marks)**

6. In the month of June 2020, a casual labourer worked for 20 days normal working time and an overtime of 5 hours. He was paid Ksh.1,200 in a normal working day and Ksh.300 for every overtime hour worked. A tax of Ksh.3,825 was deducted from the gross pay. Calculate his net pay for the month of June. **(4 marks)**

7. A clerical officer deployed in a research office chose to use a questionnaire as a tool to collect data. Outline **three** reasons that could have led to this choice. **(3 marks)**

8. James and Alice shared an amount of money in the ratio of 2:3. Determine the amount that each received if the total amount shared was Ksh.50,000.
(3 marks)

9. A rectangular room measuring 10M by 20M in a department office was to be tiled. If each tile measures 30 cm by 30 cm, determine the total cost of tiles given that each tile costs Ksh.55. **(4 marks)**

10. A business lady imported goods worth Ksh.500,000 from USA. Determine the value of the goods in US dollars if import duty of 20% is applicable. Use 1 US dollar = Ksh.109.
(3 marks)

SECTION B: (ANSWER ANY THREE QUESTIONS)

11. Jannel would like to invest Ksh.100,000 and has two options A and B to make. Option A – To invest in a fixed deposit account with a commercial bank at a simple interest rate of 10% per annum for 3 years.

    Option B – To invest in a fixed deposit account with a housing finance company at a compound interest rate of 10% per annum for 3 years.

    Showing your workings, advice Jannel on the best option to invest in.   **(10 marks)**

12. A clerical officer earns a basic pay of Ksh.75,000 and a house allowance of Ksh.20,000 per month and is taxed as per the following schedule:

Income per month	Tax rate %
First 24,000	10%
Next 10,000	15%
Next 10,000	25%
Above 44,000	30%

    The officer is entitled to a monthly personal relief of Ksh. 1,162. In addition, the officer is servicing a Sacco loan amounting to Ksh.22,000 per month. Determine the officer's net pay for the month.   **(10 marks)**

13. An expatriate arrived in Kenya on his way to Tanzania. He had 500 sterling pounds, 2000 US dollars, 100,000 Japanese Yen and 20,000 South African Rand. He converted all the currencies to Kenya shillings and was charged a bank commission of 2%. He also paid Ksh.150,000 for his accommodation.
    Calculate the balance the expatriate remained with in Tanzania shillings.

    Take 1£ = Ksh.140.00
    1 US dollar = Ksh.109.00
    100 JPY = Ksh.80.00
    1 SA RAND = Ksh.10.00
    1 Tsh = Ksh.21   **(10 marks)**

14. A trader sold 100 units of a product to a customer. The customer was given 20% cash discount. The trader also allowed 10% trade discount if 100 or more units were purchased. A 16% VAT was applicable. Calculate the profit margin on this transaction given that the trader bought the items at Ksh.80 each.   **(10 marks)**

15. A State Department interviewed 3,000 applicants for employment. Among them, 50% were skilled and the rest were unskilled. Among the skilled, 800 were experienced and the rest had no experience. Among the unskilled, 400 had experience. Present this information using a bar chart.   **(10 marks)**