

**PUBLIC SERVICE COMMISSION**

**PROFICIENCY EXAMINATION FOR CLERICAL OFFICERS**

**SEPTEMBER 2022**

**PAPER CODE: 601**

**BUSINESS CALCULATIONS**

**DATE: THURSDAY, SEPTEMBER 22, 2022**

**TIME: 9.00 AM – 10.30 AM (1½ HOURS)**

**INSTRUCTIONS TO CANDIDATES**

1. This paper consist of **two** sections **A** and **B**
2. SECTION A consists of **ten** compulsory questions carrying 40 marks.
3. SECTION B consists of five questions each carrying 10 marks. Answer any **three** questions.
4. Calculations may be used
5. Show all your workings
6. Answer all the questions in the answer booklet provided.

## SECTION A: ANSWER ALL QUESTIONS

1. James bought a vehicle spare part in January 2022 at Kshs.35,000. Calculate the amount he paid for the same item in the month of April if the price was increased by 15%. **(2marks)**
2. A clerical officer bought a piece of land valued at Kshs.1,200,000 at the end of the year 2015. The land has been appreciating at a simple interest rate of 5% per annum. Calculate the value of the piece of land at the end of the year 2020. **(4 marks)**
3. David bought an electrical fan whose marked price was Kshs.1,250. A cash discount of 6% was allowed. Calculate the amount he paid. **(3 marks)**
4. Susan a secretary has three insurance policies namely: motor vehicle, education and medical, all worth Kshs.360,000. Calculate the value of each policy if their ratio is 2:3:4 respectively. **(4 marks)**
5. A machine produces 6 metres of fabric in 2 minutes. Calculate the size of the fabric the machine would produce in 1 hour. **(2 marks)**
6. An intern is paid a basic salary of Kshs.15,000 and 5% commission on sales. He sold goods worth kshs.500,000 in the month of April 2022. Calculate the net pay for the month of April 2022 given that 12.5% pay as you earn (PAYE) is applicable **(4 marks)**
7. Jane, a clerical officer received a facilitation fee of Kshs.368,000 to attend an exchange program in South Africa. Calculate the amount she received in South African Rands.  
Take 1 South African Rand = Kshs.7.36 **(2 marks)**
8. A reception area has a floor dimension of 10m by 12m and is to be tiled. Calculate the number of tiles measuring 60cm by 60 cm that would be needed to cover the area. **(3 marks)**
9. A clerical officer was deployed in a research office to collect data. State **three** tools s/he would use to collect the data. **(3 marks)**
10. Determine the currency that has a higher value between Ksh.40 and USA \$0.70.  
Take 1 USA \$ = Kshs.115 **(2 marks)**

## SECTION B: ANSWER THREE QUESTIONS (30 MARKS)

11. Peter an ICT specialist in the State Department of Ajira got two job offers as follows:
  - London job that pays 70,000 pounds per annum
  - New York job that pays \$85,000 per annumAdvice the specialist on the best option based on salary, given that his current pay is Kshs.375,000 per month where 30% PAYE is applicable.  
Take:  
1 USA \$ = Kshs.115  
1 USA \$ = 0.8156 pound. **(10 marks)**

12. A cylindrical water tank in a State Department is of diameter 2.8 meters and a height of 7 metres.

Required:

- (a) Calculate the capacity of the water tank in litres. **(5 marks)**
- (b) The six employees of the State Department use 15 litres of water each per day. Each day 80 litres are used in cooking and general cleaning. A further 60 litres is used for watering flowers. Determine the number of full days a full tank would last in the department.

**(5 marks)**

13. The table below shows Kenya tax rate in a certain year.

Income Kshs	Tax rate %
0- 24,000	10%
Next 8,333	25%
Remaining amount	30%

A clerical officer earned a basic salary of Kshs.40, 000 per month, a house allowance of Kshs. 10,000 and a commuter allowance of Kshs. 4,000. He is entitled to a tax relief of Kshs.2,400 per month. Calculate the net monthly pay for the clerical officer. **(10 marks)**

14. Mr. James a retired government employee wrote a will to share his estate as follows:  $\frac{1}{4}$  to his eldest son,  $\frac{1}{5}$  to each of his two sons,  $\frac{1}{6}$  to his wife,  $\frac{1}{9}$  to his daughter and the balance to his sister. The sister got 600,000 worth of estate.

Required:

- a) Calculate the total value of Mr. James' estate.
- b) Determine the amount each got.

**(10 marks)**

15. A State department with **three** sections A, B and C received Ksh.2.2m for office use. The funds are dedicated to two vote heads namely operations and maintenance (O&M) and small office equipment. The sections received the amount in a ratio of **5:4:2** respectively. If 70% of the amount is used for operations and maintenance (O&M).

- a) Calculate the amount each section spent on operations and maintenance (O&M). **(7 marks)**
- b) Calculate the amount surrendered back by section A if their absorption rate is 80% on small office equipment. **(3 marks)**