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## UACE S101 General Paper section B: Logic Quiz 16

Study the information below and answer the questions that follow
A Bbosa Housing Company builds houses for sale. A person who wishes to buy has to make a down payment of $5 \%$ of the value of the house, excluding insurance, as soon as the applicationhas been accepted.

It is also a requirement by the government that each house is insured at $1 \%$ per annum of the initial value of the house, payable by the purchaser through the corporation. In case of death of the purchaser, if payments have been made to the company.
(i) For less than 5 years, the house will be sold and the payment refunded to the beneficiaries
(ii) Between 5 yearsand 10 years, the family of the purchaser will acquire the house on condition that the payments are completed on the time.
(iii) For more than 10years, the beneficiaries are given a grace period of of additional year in which to complete the payment.
(iv) The house is repossessed by the company if the beneficiaries fail to abide by the stipulated date.

There are 50 houses for sale grouped in four categories: A, B, C and D according to the value as shown

| Category | A | B | C | D |
| :--- | :---: | :---: | :---: | :---: |
| Value in million (Shs) | 80 | 90 | 100 | 120 |
| Number of houses | 15 | 16 | 9 | 10 |

According to the information available, all the applications for houses in category A, half in category B, none in category C and only two in category D have been accepted.

Questions
(a) How much money:
(i) hasbeen received by the company as down payment?
(ii) Will be received by the company after 15 years
(b) For each category, how much money must be paid per annum if the payment has to be completed within 15 years?
(c) If houses in category A are meant to benefit low income earners, what challenges the scheme is likely to face?
(d) What challenges affects the housing industry in Uganda?

Spellings, Punctuations, Gramatical Expressions (SPGE)

Possibe answers
(a) How much money:
(i) has has been received by the company as down payment?

Downpayment $=5 \%(0.05)$ of the initial value of the house
Total down payment per category $=5 \% \mathrm{x}$ number of houses whose application are accepted x initial value
Total down payment for category $A=0.05 \times 15 \times 80,000,000=60,000,000$
Total down payment for category $B=0.05 \times 8 \times 90,000,000=36,000,000$
Total down payment for category $C=0.05 \times 0 \times 100,000,000=0$
Total down payment for category $D=0.05 \times 2 \times 120,000,000=12,000,000$
Total down payment altogether $=60,000,000+36,000,000+12,000,000$

$$
=108,000,000 /=
$$

(ii) Will be received by the company after 15 years

The total amount of money received = the value of the houses whose applications are accepted
$+1 \%$ (0.01) of the value $\times 15$ years for insurance

Total amount of money from category $A=80,000,000 \times 15+0.01 \times 80,000,000 \times 15 \times 15$
= 1,380,000,0000/=

Total amount of money from category $B=90,000,000 \times 8+0.01 \times 90,000,000 \times 8 \times 15$

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=828,000,0000 /=
$$

Total amount of money from category $\mathrm{C}=0$

Total amount of money from category $D=120,000,000 \times 2+0.01 \times 120,000,000 \times 2 \times 15$
= 276,000,000/=

Total amount of money received by the company in 15 years

$$
\begin{aligned}
& =1,380,000,000+828,000,000+0+276,000,000 \\
& =2,484,000,000 /=
\end{aligned}
$$

(b) For each category, how much money must be paid per annum if the payment has to be completed within 15 years?

Annual installment $=$ Balance to be paid divided by $15+1 \%$ of the value of a house for insurance
Annual installment for category $A=(0.95 \times 80,000,000) / 15+(0.01 \times 80,000,000)$
= 5,866,667/=

Total amount of money to be paid by categroy A per annum = 5,866x,667 x 15

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=88,000,000 /=
$$

Annual installment for category $B=(0.95 \times 90,000,000) / 15+(0.01 \times 90,000,000)$
$=6,600,000$
Total amount of money to be paid by categroy $B$ per annum $=6,600,00 \times 8$

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=52,800,000 /=
$$

Annual installment for category $D=(0.95 \times 120,000,000) / 15+(0.01 \times 120,000,000)$
= 6,600,000

Total amount of money to be paid by categroy B per annum $=8,800,00 \times 2$

$$
=17,600,000 /=
$$

(c) If houses in category A are meant to benefit low income earners, what challenges the scheme is likely to face?

- Delayed payment
- Failure to complete the payments
- Unable to affordable
(d) What challenges affects the housing and real estate industry in Uganda?
- High and rapidly rising cost of Land
- Poor land tenure system some land lacks titlein some place land is communally possessed.
- Delay in processing land titles
- Substandard building materials
- High cost of building materials
- Bureaucracy in land office and approval of building plans
- Scarcity of building materials
- Scarcity of skilled and technical personel
- Corruption in land offices
- Remotness of some places
- Rapidily changing Consumer Preferences and Expectations:
- Lack of proper rules and regulation
- High interest rate on housing finances
- High taxes on land and building materials
- Lack of reliable data on land and housing

Please comment

Thank you
Dr. Bbosa Science

