COMPETITIVE ENTRANCE EXAMINATION INTO HTTTC BAMBILI	
CYCLE: 1ST CYCLE **LEVEL: 1ST YEAR** **OPTION: ALL**	**Session: 2012**
DURATION: 3hrs	

In your answer booklet, write only the letter of the answer chosen against the question number. This question paper must be submitted together with the answer booklet. Each question carries one (1) mark.

1.) How long will the annual investment at 5% p.a. compound interest to double?

   a) 15 years

   b) 14 years

   c) 10 years

   d) 16 years

2.) The following payments are replaced by a unique payment due after 4 years:

   10 000F CFA due after 2 years

   20 000F CFA due after 3 years

   15 000F CFA due after 6 years

   What would be the nominal value of the unique payment due at the

discount rate   ,   of 9% compound interest?

   a) 48 000F FCA

   b) 40 000F FCA

   c) 45 000F CFA

   d) 47 471F CA

3.) At what rate will a sum triple in 20 years?

a) 5%

b) 5.5%

c) 5.6%

d) 5.7%

4.) Mr. LENDO wants to substitute a capital of 2 000 000F CFA on 31st December 2011. What amount would he have invested on the 1st of January 2000, a 7% compounded annually?

a) 48 000F FCA

b) 40 000F FCA

c) 45 000F CFA

d) 47 471F CA

5.) The difference between the Commercial discount and Rational discount of a Bill of Exchange is 12 000FCFA. Knowing that the rate is 6% and that the duration is 60days. Determine the nominal value of the Bill?

a) 128 250 000FCFA

b) 130 000 000FCFA

c) 126 000 000FCFA

d) 125 000 000FCFA

6.) Keluh enterprise issued 20 000 annuities of 200FCFA nominal value yielding an interest (coupon) of 11FCFA. The reimbursement value is 120 FCFA drawing of the theoretical constant annuities. What would be the theoretical amortization?

a) 1835 debentures

b) 423 debentures

c) 927 debentures

d) 928 debentures

7.) A sum of 25 000FCFA continuously compounded at 6% p.a. had acquire a value of 33 455.6395FCFA. Determine the duration of investment.

a) 6 years

b) 4 years

c) 6 years

d) 10 years

8.) 3 000 000FCFA invested for 8 years is now 4 964 987FCFA. Calculate the annual compound rate.

a) 6%

b) 8.25%

c) 7%

d) 6.6%

9.) Three Bills of Exchange are in compounded procreation. Their product is 6210. What is the value of the first Bill?

a) 200 000FCFA

b) 100 000FCFA

c) 400 000FCFA

d) 500 000FCFA

10.) Mr. Ngong invested the sum of 200 000FCFA at 6% compounded annually for a certain period and realized an interest of 81 420FCFA. What is the duration of investment?

a) 5 years

b) 8 years

c) 6 years

d) 7years

11.) FEKAH Enterprise bought an equipment for 400 000FCFA. At what rate must the equipment be depreciated, using the diminishing balance method,

in order that its scrap value after 12 years is equal is one fifth of the cost price?

a) 12%

b) 13%

c) 13.5%

d) 12.5%

12.) The proprietor of Royal Dreams Restaurant had a contract to feed a group of kwashiorkor children for a certain duration with a specific amount spent on daily basis. He uses 9/80 of the daily budget for breakfast, 3/6 for launch and 6/45 for dessert. This enables him to save 19 500FCFA from the daily budget allocation. Determine the amount of this daily budget.

a) 45 000FCFA

b) 90 000FCFA

c) 80 000FCFA

d) 85 000FCFA

13.) Press book advertises a price decrease of 25% on an outdated article. If the new price is 8 600FCFA determine the original price.

a) 8 800FCFA

b) 8 000FCFA

c) 7 200FCFA

d) 8 600FCFA