

**UNIVERSITY OF UYO, UYO**  
**2006/2007 POST-UME SCREENING EXERCISE**  
**MATHEMATICS 2006/2007**

Instruction from the options letter A-D, pick the correct answer and shade accordingly.

1. Given that  $(1 \times 03)^4 = 11510$ , find x. A. 2 B. 0 C. 3 D. 1
2. A motorist starts from a point O and moves on a bearing of 0300 for 48km. He then moves 101km toward the west. How far is he now from O?  
A. 11km B. 14km C. 24km D. 38km.
3. If 7 and -3 are the roots of the quadratic equation  $x^2 + kx - 21 = 0$  what is the value of k?  
A. 10 B. 4 C. 4 D. 3.
4. A man receives an annual increase of N30 and after a period of 10 year service the man has salary of N1014. What was his initial salary? A N270 B. N774 C. N714 D. N135.
5. If the function  $f(x) = x^3 + 2x^2 + kx - 6$  is divisible by x find k.  
A. 3 B. -5 C. 2 D. -3.
6. A woman is 3 times as old as her daughter. 8 years ago, the product of their ages was 112. Find the mother's age.  
A. 12 B. 36 C. 24 D. 30.
7. If  $\log_a 2 = 0.693$  and  $\log_a 3 = 1.097$ , find  $\log_a 13.5$   
A. 1.404 B. 1.790 C. 2.79 D. 2.598.
8. Convert 15816 to a denary number.  
A. 3285 B. 505 C. 344 D. 4900.
9. Make d the subject of the formula  $A = gd(1 + 3h/d)$ .  
A.  $A - gh$  B.  $A^2 - 3gh$  C.  $A - 3gh$  D.  $g$   
 $g g A^2 - 3gh$
10. A salesman receives a basic monthly salary of N23200. He also gets  $\frac{1}{2}\%$  commission on sales. Out of his total income he pays 1% union dues and 3% as income tax. what was his net income for a month in which the sales were N2,595,000?  
A. N35,247 B. N34,728 C. N36,175 D. N29,167.
11. Evaluate without tables, the following expression, leaving your answer in standard form  $0.81 \times 10^{-5}$   
 $2.25 \times 10^{-7}$   
A.  $3.6 \times 10^{-12}$  B.  $6 \times 10^{-6}$  C.  $6 \times 10^{-7}$  D.  $36 \times 10^{-12}$

12. The fixed costs of a small manufacturing factory are N300,000. The variable cost, which are directly proportional to the sales, are N400,000 when the sales are N1million. Calculate the total cost when the sales are N900,000.  
A. N700,000 B. N600,000 C. N1.2million D. N660,000.
13. Simple  $18 + 32 - 50$   
A. 2 B. 2 2 C. 2 5 D. 3 2
14. If  $\tan\theta = \frac{3}{4}$  and  $180^\circ < \theta < 270^\circ$ , then  $\sec\theta$  is  
A.  $\frac{5}{4}$  b.  $-\frac{4}{5}$  C. 4 D.  $-\frac{5}{4}$
15. Find the quadratic equation whose roots are -2 and 3.  
A.  $x^2 - 2x + 1$  B.  $x^2 + x - 6$  C.  $x^2 - x - 6$  D.  $x^2 + x + 6$
16. Which of the following word is a member of the set of words in the sentence: "THIS IS AN EASY QUESTION"  
A. True B. False C. Questioning D. An iquity.
17. If  $\log_m 81 = \frac{4}{3}$ , find the value words of m.  
A.9 B. 27 C. 18 D.36.
18. The third term of a GP is 9 and the 5th is 81. Then two possible values of the common ration are: A.  $\pm 4$  B.  $\pm 2$  C.  $\pm 3$  D  $\pm 9$ .
19. Find the median of the following scores of students; 35, 42, 56, 83, 72, 58  
A. 56 B. 58 C. 57 D. 83.
20. What is the mean of the score in question 19?  
A. 56 B. 57.7 C. 57.6 D. 57.
21. Find the range of the following set of scores 1.02,1.12, 1.10, 1.05, 1.13, 1.04,1.15  
A. 13 B. 0.14 C. 0.13 D. 1.10
22. The sum of the internal angles of a pentagon is .....  
A. 1800 B. 36000 C. 5400 D. 72000
23. Evaluate  $(0.006)^3 + (0.004)^3$  in standard form.  
A.  $2.8 \times 10^{-8}$  B.  $2.8 \times 10^{-9}$  C.  $2.8 \times 10^{-7}$  D.  $2.8 \times 10^{-6}$
24. The base angle of an isosceles triangle whose vertices lie on a circle are 50° each. Determine the angle which the base of the triangle subtends at the center of the circle.  
A. 160° B. 100° C. 80° D. 130°.
25. Express 8m 5m a decimal of 1km.  
A. 0.0805km B. 0.00805km C. 00850km D.0.0850km.

**UNIVERSITY OF UYO, UYO**  
**2007/2008 POST-UME SCREENING EXERCISE**  
**MATHEMATICS 2007/2008**

Instruction from the options letter A-D, pick the correct answer and shade accordingly.

1. Add 11012 ,101112 and 1112. A. 1110112 B. 1101102 C. 1010112 D. 1010102.
2. If  $125x = 2010$ , find x. A. 2 B. 3 C. 4 D. 5.
3. Express 123456 to 3 significant figures.  
A. 123000 B. 124000 C. 125000 D. 126000.
4. Calculate the simple interest on N7500 for 8 years at 5% per annum  
A. N3000 B. N600 C. N300 D. N150
5. The cost of kerosene per litre increases from N60 to N85. What is the percentage rate of increase?  
A. 45% B. 41% C. 40% D. 25%.
6. Make Q the subject of the formula when  $L = \frac{4M}{3} PQ$   
A.  $2L^2$  B.  $3L$  C.  $\sqrt{3L}$  D.  $3L^2$   
 $16M^2P$   $4M^3P$   $4MP$   $16M^3P$
7. If  $x - 3$  is directly proportional to the square of y and  $x = 5$  when  $y = 2$ , find x when  $y = 6$ .  
A. 30 B. 21 C. 16 D. 12.
8. Find the exterior angle of a 12 sided regular polygon.  
A. 120 B. 210 C. 250 D. 300.
9. Find the capacity in litres of a cylindrical well of radius 1 metre and depth 14 metres.  
A. 44000 litres B. 4400 litres C. 440 litres D. 44 litres.
10. On a pie chart, there are six sectors of which four angles are 300, 450, 600, 900, and the remaining two angles are in the ratio 2 :1. Find the smaller angles of the remaining two angles.
11. The length of a notebook 15cm, was measured as 16.8cm, calculate the percentage error to 2 significant figures

Get the Complete Uniuyo Post UTME Past Questions at [uniuyoinfo.com/pq](http://uniuyoinfo.com/pq)

- A. 12.00% B. 11.00% C. 10.71% D. 0.12%.
12. A worker's present salary is N24,000 per annum. His annual increment is 10% of his basic salary. What would be his annual salary at the beginning of the third year?  
A. N23,800 B. N29,010 C. N31,200 D. 31,944.
13. Express the product of 0.0014 and 0.011 in standard form  
A.  $1.54 \times 10^{-2}$  B.  $1.54 \times 10^{-3}$  C.  $1.54 \times 10^{-4}$  D.  $1.54 \times 10^{-3}$ .
14. A market woman sells oil in cylindrical tins 10cm deep and 6cm in diameter at N15.00 each. She bought a full cylindrical tin 18cm in diameter for N50.00. How much did she make by selling all the oil?  
A. N62,50 B. N35,00 C. N31,00 D. N25,00.
15. A man is paid  $r$  naira per hour for normal work and double rate for overtime. If she does a 35-hour week which include  $q$  hours of overtime, what is his weekly earning in naira?  
A.  $r(35+q)$  B.  $q(35r-q)$  C.  $q(35+r)$  D.  $r(35r-q)$ .
16. If the population of a town was 240,000 in January 1998 and it increased by 2% each year, what would be the population of the town in January 2007  
A. 480,000 D. 249,696 C. 249,600 D. 244,800.
17. A man wishes to keep some money in a savings deposit at 25% compound interest so that after 3 years he can buy a car for N150,000. How much does he need to deposit now? A. N112,000.50 B. N96,000.00 C. N85,714.28 D. 76,800.00.
18. Audu bought an article for N50,000 and sold it to Femi at a loss of  $x\%$ . Femi later sold the article to Oche at a profit of 40%. If Femi made a profit of N10,000, find the value of  $x$ . A. 60 B. 50 C. 40 D. 20.
19. A trader realizes  $10x-x^2$  naira profit from the sale of  $x$  bags of corn. How many bags will give him the maximum profit?  
A. 4 B. 5 C. 6 D. 7.
20. In a regular polygon, each interior angle doubles its corresponding exterior angle, find the number of the sides of the polygon.  
A. 8 B. 6 C. 4 D. 3
21. A right pyramid is on a square base of side 4cm. The slanting side of the pyramid is  $2\sqrt{3}$ cm. calculate the volume of the pyramid.  
A.  $51/3\text{cm}^3$  B.  $102/3\text{cm}^3$  C.  $20\text{cm}^3$  D.  $32\text{cm}^3$
22. In a class of 80 students every student studies mathematics or statistics. If 63 students study maths and 50 study statistics, how many study both subjects?  
A. 30 B. 15 C. 45 D. 35.
23. Evaluate  $x^2+x-2$  when  $x=1$   $2x^2+x-3$  A. -2 B. -1 C.  $-\frac{1}{2}$  D. 1

24. If two triangles are similar, which of the following is true? Their  
A. corresponding sides are equal B. corresponding angles are equal C. areas are equal D. perimeters are equal
25. Two angles of a triangle are 410 and 490. Which is true?  
A. It is an equilateral triangle B. a right angled triangle C. an isosceles triangle. D. obtuse-angled triangle.
- 

*This is a free sample from the complete University of Uyo Post UTME Past Questions and Answers (updated 2016)*

*Here is the deal:*

*70% of those who see this Free sample that you're looking at will go get the **complete** genuine **updated** version at [Uniuyoinfo.com](http://Uniuyoinfo.com)*

*If you are also serious about your future; you should go get it too...*

*No,*

*Seriously, You need to get this Updated Past Questions.*

*[www.uniuyoinfo.com/pq](http://www.uniuyoinfo.com/pq)*

**Get the Complete Uniuyo Post UTME Past Questions at [uniuyoinfo.com/pq](http://uniuyoinfo.com/pq)**