**PATFIN HIGH SCHOOL, AKESAN, LAGOS STATE**

**FIRST TERM EXAMINATION [2018/2019]**

**SUBJECT: MATHEMATICS CLASS: J. S. S. 2**

**SECTION A OBJECTIVES**

**INSTRUCTION; answer all questions in this section DURATION: 2 hours**

1. Express 0.65 as a fraction
2. 2/5 b) 3/5 c) 13/20 d) 9/13
3. Find the HCF of 15,20 and 35
4. 2 b) 3 c) 4 d) 5
5. Find the HCF of 54,36 and 72
6. 18 b) 9 c) 12 d) 6
7. Express 3684 in standard form
8. 3.684×103 b) 3.684×10-3 c) 3.684×104 d) 3.684×10-2
9. Express 0.00569 in standard form
10. 5.69×10-1 b)5.69×103 c) 5.69×10-3 d) 5.69×102
11. Express 0.03076 to three significant figures
12. 0.030 b) 0.308 c) 0.0308 d) 0.03076
13. By selling an article at ₦600.00, a trader makes a profit of 20%. Find the cost price.
14. ₦720.00 b) ₦580.00 c) ₦480.00 d)₦500.00
15. Simplify √
16. 4/5 b) 3/5 c)9/25 d)2/5
17. Simplify 9-(-6) +(-9)
18. 16 b) 6 c) -9 d) -16
19. Simplify -47-(-16)
20. -31 b) +63 c) -23 d) +41
21. Remove the brackets and simplify 3(2x+3)-2(3x-4)
22. 17 b) 12x+17 c) 29 d) 12x-29
23. Simplify
24. b/a b) 1/b c) b/12a d) a/12b
25. Expand (2r-10)(3r+6)
26. r2-6r+18 b) 6r2-18r-60 c) 2r2-10r+20 d) r2-18r+6
27. Evaluate√1600
28. 400 b)100 c) 23 d) 40
29. Round off 2435 to the nearest 100.
30. 2000 b) 2440 c) 2430 d) 2400

**SECTION B SUB-OBJECTIVE**

**Provide the answers to the following questions.**

1. The highest common factor of 16ab and 24bc is \_\_\_\_\_\_\_\_\_\_\_\_\_\_.
2. Factorise 21x2 + 15xy.
3. 420kg increased by 25% is \_\_\_\_\_\_\_\_\_\_\_\_.
4. The simple interest on ₦2000 borrowed for 6 months at the rate of 4% is \_\_\_\_\_\_\_\_\_\_\_\_\_\_.
5. is \_\_\_\_\_\_\_\_\_\_\_\_

**SECTION C THEORY**

**Answer question one and any other three questions**

1. Simplify the following algebraic fractions
3. Expand and simplify the following
4. a) Mrs Janet borrowed ₦120,000 for 2 years to finance her building project. If the interest charge was ₦10,000
5. Find the amount she will pay back
6. Find the interest rate that was charged
7. When will the simple interest on ₦10,000 at 5% be ₦2400
8. Find the square root of :i) 5929 ii) 6400
9. a) The rate of heart beat per hour is 4.2×103 times. How many times does the heart beat in 52 weeks? Write your answer in standard notation.
10. Given that x = 2.5 × 104, y = 9.8 × 106 and z = 1.2 × 109, what is the value of xy/z?

6. Round off 23.7159 to the nearest

(i) 10 (ii) whole number (iii) tenth (iv) hundredth (v) thousandth