



**BUSINESS MATHEMATICS 1
5020**

JUNE XXXX

INTERMEDIATE LEVEL

Centre No. & Name	
Candidate No.	
Candidate Name	

Mobile phones and Calculators are NOT allowed in the examination room.

5020 BUSINESS MATHEMATICS 1: MULTIPLE CHOICE QUESTION PAPER

1 hour 30 minutes

INSTRUCTIONS TO CANDIDATES

Read the following instructions carefully before you start answering the questions in this paper. Make sure you have a soft HB pencil and an eraser for this examination.

1. USE A SOFT HB PENCIL THROUGHOUT THE EXAMINATION.
2. DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO.

Before the examination begins:

3. Check that this question booklet is headed “**Intermediate Level – 5020 BUSINESS MATHEMATICS 1.**”
4. Insert the information required in the spaces above.
5. Insert the information required in the spaces provided on the answer sheet using your HB pencil:

Candidate Name, Exam Session, Subject Code, Centre Number and Candidate Number.

Take care that you do not erase or fold the answer sheet or make any marks on it other than those asked for in these instructions.

How to answer the questions in this examination:

6. Answer **ALL** the **50** questions in this Examination. All questions carry equal marks.
7. Each question has **FOUR** suggested answers: **A, B, C** and **D**. Decide which answer is correct. Find the number of the question on the Answer Sheet and draw a horizontal line across the letter to join the square brackets for the answer you have chosen.

For example, if **C** is your correct answer, mark **C** as shown below:

[A] [B] **C** [D]

8. Mark only one answer for each question. If you mark more than one answer, you will score a zero for that question. If you change your mind about an answer, erase the first mark carefully, then mark your new answer.
9. Avoid spending too much time on any one question. If you find a question difficult, move on to the next question. You can come back to this question later.
10. Do all rough work in this booklet, using, where necessary, the blank spaces in the question booklet.
- 11.

You must not take this booklet and the answer sheet out of the examination room. All question booklets and answer sheets will be collected at the end of the examination.

Turn Over

1. From a cloth measuring 50m, a trader sold 9.85m, 15.95m and 13.95m. How many metres were left?
 A 39.75m
 B 11.25m
 C 25.8m
 D 10.25m
-
2. In a school of 102 students, there are 34 boys. What is the ratio of boys to girls?
 A 1:2
 B 2:1
 C 1:3
 D 2:3
-
3. The sum of 70,000FCFA is shared between MBAH and JOHN directly proportional to their ages 20 years and 15 years respectively. What is MBAH's share?
 A 35,000FCFA
 B 30,000FCFA
 C 20,000FCFA
 D 40,000FCFA
-
4. From the seats reserved for a party, 5% were vacant. How many seats were occupied from a total of 80,000 seats?
 A 4,000 seats
 B 76,000 seats
 C 80,000 seats
 D 84,000 seats
-
5. A figure with all four sides equal is called ;
 A Rectangle
 B Parallelogram
 C Square
 D Trapezium
-
6. The formula of simple interest expressed in months is ;
 A $\frac{Crt}{36000}$
 B $\frac{Crt}{100}$
 C $\frac{Crt}{1200}$
 D $\frac{Crt}{36500}$
-
7. A bag contains 20 balls of three colours. The probability of selecting a green ball is $\frac{1}{4}$ and that of a red ball is $\frac{1}{5}$. How many yellow balls are there?
 A 11
 B 4
-
- C 5
 D 9
-
7. In a party, 300 women paid 150,000FCFA and a total of 500,000FCFA was collected. How many men attended the party if a man is paying twice as a woman?
 A 500
 B 1000
 C 350
 D 700
-
8. BOB bought a television set in Britain for £2,000 and spent 800,000FCFA for shipment. What will be the cost price of the television in FCFA if £1=900FCFA?
 A 1,802,000FCFA
 B 1,800,000FCFA
 C 1,000,000FCFA
 D 2,600,000FCFA
-
9. A bill of 360,000FCFA was negotiated on the 01/10/2018. If this bill had to run for 63 days before maturing, then the maturity date of this bill will be ;
 A 17/11/2018
 B 03/12/2018
 C 30/07/2018
 D 03/11/2018
-
10. Three partners; NGU, NJI and NDAH contributed 2,000,000FCFA, 3,000,000FCFA and 5,000,000FCFA respectively to a partnership. From a profit of 200,000FCFA, a reserve of 10% is kept and the balance shared proportionally to shares. NDAH received ;
 A 90,000
 B 54,000
 C 36,000
 D 18,000
-
11. The median of the following scores 8, 12, 5, 3, 2 and 15 is ;
 A 4
 B 6.5
 C 5
 D 5.5
-
12. The distance between two cars is 20km and the speed of the first car is 50km/h while that of the second car is 70km/h. How much time is needed for the second car to overtake the first?
 A $17\frac{1}{7}$ minutes
 B 24 minutes
 C 1 minute
 D 60 minutes

Turn over

- A 18.5
B 12
C 19
D 17

13. MBO is paid 28,000FCFA plus 3% of sales above 1,500,000FCFA. How much did he take home if he sold 2,100,000FCFA?
A 73,000FCFA
B 46,000FCFA
C 89,000FCFA
D 91,000FCFA
14. What is the future value of a capital of 200,000FCFA compounded at the rate of 10% for 2 years?
A 245,000FCFA
B 220,000FCFA
C 242,000FCFA
D 240,000FCFA
15. The length of a rectangle is 2cm more than the width. If the width is 20cm, then the area of the rectangle is ;
A 40cm^2
B 440cm^2
C 44cm^2
D 42cm^2
17. From a credit balance of 350,000FCFA, a domiciled bill of 300,000FCFA was paid. The amount left in the account was;
A 50,000FCFA Credit
B 650,000FCFA Credit
C 50,000FCFA Debit
D 650,000FCFA Debit
18. An electronic shop owner bought a television set for 60,000FCFA and later sold it for 75,000FCFA. His make-up on sales is;
A 25%
B 15%
C 20%
D 30%
19. A businessman bought goods worth £10,000 and was granted a 10% discount. If £1=900FCFA, how much did he pay in FCFA?
A 8,100,000FCFA
B 9,000,000FCFA
C 9,900,000FCFA
D 900,000FCFA
20. In a class of 50 students, their ages were recorded as shown in the table below:
- | | | | | | |
|------------------------|----|----|----|----|----|
| Ages (x) | 14 | 15 | 16 | 17 | 18 |
| Number of students (f) | 06 | 08 | 12 | 19 | 05 |
- The modal age of this class is;
21. A card is chosen at random from a pack of 52 playing cards. The probability of it being a queen is;
A $\frac{1}{13}$
B $\frac{1}{4}$
C $\frac{1}{8}$
D $\frac{1}{52}$
22. A damaged car was sold by Mr. NGANG at a less of 12% of the cost price. If he bought the car for 2,000,000FCFA, he finally sold the car for;
A 240,000FCFA
B 2,240,000FCFA
C 176,000FCFA
D 1,760,000FCFA
23. To share 24,000FCFA to four students inversely proportional to the ratio 3: 10: 5: 6. The third student will receive;
A 3,000FCFA
B 5,000FCFA
C 6,000FCFA
D 10,000FCFA
24. A bill of 350,000FCFA had the following:
Discount: 12,000FCFA
Endorsement commission: 1,200FCFA
Service commission: 2,100.
Calculate the net amount.
A 365,300FCFA
B 15,300FCFA
C 334,700FCFA
D 14,100FCFA
25. A man had 150,000FCFA to be shared between his two sons. The first son had twice as much money as the second son. How much did the second son receive?
A 50,000FCFA
B 75,000FCFA
C 100,000FCFA
D 130,000FCFA
26. A transport agency bought a bus in Europe for €10,000, paid 1,000,000FCFA for shipment and 200,000FCFA for custom duties. What is the cost of the bus in FCFA if €1=650FCFA?
A 6,500,000FCFA

- B 7,500,000FCFA
C 5,300,000FCFA
D 7,700,000FCFA

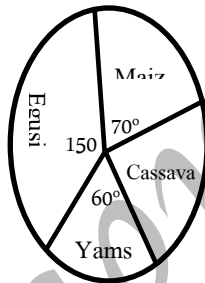
- B 102,000FCFA
C 90,200FCFA
D 92,000FCFA

27. Mr. EKO invested a certain capital C, in UBA bank at the rate of 5% for 8 months and obtained an interest of 12,500FCFA. What is the value of C?
A 312,500FCFA
B 387,500FCFA
C 375,000FCFA
D 350,000FCFA

28. If there are 11 palm trees, each 10m from the other on a straight line, the distance from the first palm tree to the last palm tree is;
A 100m
B 110m
C 90m
D 1100m

29. An agent received a commission of 190,000FCFA for sales above 5,000,000FCFA. If he sold goods worth 8,800,000FCFA, the rate of commission was;
A 3.8%
B 5%
C 5.6%
D 4%

30. A farmland is partitioned as follows:



What is the angle of sector for cassava?

- A 210°
B 56°
C 130°
D 80°
31. A man covered a distance of 90km in 1 hour 30 minutes. Calculate his speed.
A 90km/h
B 60km/h
C 120km/h
D 3km/h
32. A trader bought goods priced at 100,000FCFA. If he was given a trade discount of 10% and a cash discount of 2%, what is the cost of the goods if he paid 2,000FCFA for transport?
A 90,000FCFA

33. AMBE bought goods for 2,000,000FCFA and was granted a rebate of 50,000FCFA and trade discount of 4%. How much did he end up paying?
A 1,950,000FCFA
B 1,872,000FCFA
C 1,870,000FCFA
D 1,920,000FCFA

34. The proportional mean of 12 and 3 is;
A 0.25
B 36
C 6
D 4

35. An end-of-year bonus of 370,000FCFA was shared amongst JOAN, JOHN and JANE inversely proportional to their errors of 5, 6 and 4. JANE received;
A 150,000FCFA
B 120,000FCFA
C 100,000FCFA
D 60,000FCFA

36. The formula for the capacity of a cylindrical can is;
A $2\pi rh$
B $2\pi r^2h$
C πrh
D πr^2h

37. A bill of 181,800FCFA having 60 days to run, was discounted with the following results:
Discount: 1,000FCFA
Endorsement commission: 500FCFA
Manipulation commission: 300.
The real rate of discount was;
A 6%
B 5.94%
C 3%
D 3.3%

38. The probability of choosing a vowel from the subject BUSINESS MATHEMATICS is;
A $\frac{12}{19}$
B $\frac{8}{19}$
C $\frac{7}{19}$
D $\frac{11}{19}$

Turn over

39. What is the capital that will yield a compound interest of 21,000FCFA after 2 years at the rate of 10%?
 A 25,410FCFA
 B 121,000FCFA
 C 25,200FCFA
 D 100,000FCFA
-
40. A man took 1,000,000FCFA to Nigeria and spent ₦200,000. If ₦1=4FCFA, how much did he bring back in FCFA?
 A 250,000FCFA
 B 200,000FCFA
 C 800,000FCFA
 D 50,000FCFA
-
41. 22% of a certain capital is 1,100FCFA. What is the total capital?
 A 24,200FCFA
 B 39,000FCFA
 C 50,000FCFA
 D 78,000FCFA
-
42. The deed of partnership stipulates that from the profit realized, a reserve of 5% is kept, 50,000FCFA is given to the manager and the rest of the profit shared to partners. How much was shared from a profit of 600,000FCFA?
 A 520,000FCFA
 B 550,000FCFA
 C 522,500FCFA
 D 570,000FCFA
-
43. NZELLE worked for 48 hours where the normal hours of work is 40 hours. How much did he receive if overtime was paid at 120% for an hourly rate of 2,000FCFA?
 A 80,000FCFA
 B 115,200FCFA
 C 96,000FCFA
 D 99,200FCFA
-
44. The sum of two capitals is 100,000FCFA and their difference is 20,000FCFA. The value of the bigger capital is;
 A 40,000FCFA
 B 60,000FCFA
 C 80,000FCFA
 D 70,000FCFA
-
45. A reciprocal current account means that;
 A The amounts on the debit and credit sides are the same.
 B The numbers of days for debit and credit transactions are the same.
 C The debit and credit interest rates are the same.
 D The bank uses the same rate for discount and interest.
-
46. A volleyball court measures 18m by 6m. The perimeter is;
 A 48m
 B 108m
 C 24m
 D 54m
-
47. The range of the following averages; 6, 12, 9, 16, 18 and 13 is;
 A 12.5
 B 12.3
 C 18
 D 12
-
48. The net cost factor of an article sold at 20% and 10% less the marked price is;
- | | |
|---|------|
| A | 0.8 |
| B | 0.72 |
| C | 0.9 |
| D | 0.7 |
-
49. What is the duration in days of a capital of 150,000FCFA invested at the rate of 9% simple interest whose interest is 1,500FCFA?
 A 90 days
 B 30 days
 C 40 days
 D 135 days
-
50. In a class of 9 boys and twelve girls, two students are sent out of the class one after the other. The probability that one is a boy and the other a girl is;
- | | |
|---|-----------------|
| A | $\frac{6}{35}$ |
| B | $\frac{9}{35}$ |
| C | $\frac{18}{35}$ |
| D | $\frac{11}{35}$ |
-