



ABOUT THIS PRACTICE PACK

Use this practice pack to extend your practice for the Nigerian Customs Recruitment aptitude test.

TEST FORMAT

This practice pack comprises of 4 sets of questions. Each set contains

20 MATHEMATICS

20 ENGLISH

20 CURRENT AFFAIRS

ENGLISH Section will include Comprehension and fill in the gap questions.

TIME: 60Minutes / 60 questions.

Here's a word of advice... Beyond just reading, please make sure you set a timer for yourself, and practice each section according to the allotted time. Your **Speed** and **Accuracy** is key! Also be current with the news and happenings in Nigeria. Goodluck.

Important Notice: You can find all the answers to the questions in the answer key section - at the end of each set.

Questions on this ebook are compiled from previous years.

MATHS SET 1

1. A number of cats got together and decided to kill between them 999919 mice. Every cat killed an equal number of mice. Each cat killed more mice than there were cats. How many cats do you think there were?

- A. 991
- B. 1009
- C. 997
- D. 999
- E. None of these

2. Find the value of $(598+194)^2 - (598-194)^2 \div 194$

- A. 404
- B. 4
- C. 792
- D. 312
- E. None of these

3. A rectangular plate with length 8 inches, breadth 11 inches and thickness 2 inches is available. What is the length of the circular rod with diameter 10 inches and equal to the volume of the rectangular plate?

- A. 2.24 inches
- B. 3.5 inches
- C. 4.25 inches
- D. 4.48 inches
- E. None of these

4. The mean temperature of Monday to Wednesday was 37°C and of Tuesday to Thursday was 34°C , if the temperature on Thursday was $\frac{4}{5}$ th that of Monday, then what was the temperature on Thursday?

- A. 36.5°C
- B. 36°C
- C. 35.5°C
- D. 34°C
- E. 33.5°C

5. The average number of visitors of a library in the first 4 days of a week was 58. The average for the 2nd, 3rd, 4th and 5th days was 60. If the number of visitors on the 1st

and 5th days were in the ratio 7:8 then what is the number of visitors on the 5th day of the library?

- A. 18
- B. 64
- C. 58
- D. 56
- E. None of these

6. Thirty men take 20 days to complete a job working 9 hours a day. How many hour a day should 40 men take in 20 days to complete the job?

- A. 6 hours/day
- B. 6.5 hours/day
- C. 7 hours/day
- D. 6.75 hours/day
- E. 7.75 hours/day

7. Susan can type 10 pages in 5 minutes. Mary can type 5 pages in 10 minutes. Working together, how many pages can they type in 30 minutes?

- A. 15
- B. 20
- C. 25
- D. 65
- E. 75

8. Find the least number when divided by 7 gives the remainder 6, when divided by 6 gives remainder 5, when divided by 5 gives remainder 4 and so on....

- A. 419
- B. 319
- C. 257
- D. 299
- E. None of these

9. A triangle is made from a rope. The sides of the triangle are 12 cm, 14 cm and 18 cm. What will be the area of the square made from the same rope?

- A. 196
- B. 324
- C. 121

- D. 144
- E. None of These

10. Find the largest number which gives out remainders 2 and 5 respectively when used to divide 80 and 122 .

- A. 19
- B. 17
- C. 13
- D. Infinite number of solutions
- E. None of these

11. If a and b are positive integers and $(a-b)/3.5 = 4/7$, then

- A. $b < a$
- B. $b > a$
- C. $b = a$
- D. $b \geq a$
- E. None of these

12. What will come in place of question mark in the following equation?

$$283 \times 56 + 252 = 20 \times ?$$

- A. 805
- B. 803
- C. 807
- D. 809
- E. None of these

13. Derrick was all bent on building a new house. He carefully got the blue print of his house designed by his friend Josh, a civil engineer. He wanted to build a room of dimension 27 by 48 ft and lay tiles in this room. Each tile was of dimension 2 by 3 ft. How many tiles should Derrick buy?

- A. 216
- B. 125
- C. 264
- D. 64
- E. None of these

14. Complete the series 2, 7, 22, 67, _

- A. 128
- B. 100
- C. 202
- D. 156

15. Direction: The question below consists of a question and two statements numbered I and II are given below it. You have to decide whether the data provided in the statements are sufficient to answer the question. Read both the statements and give answer.

What is the rate of interest?

I. Simple interest accrued on an amount of Rs.215000 in two years is less than the compound interest for the same period by Rs.250

II. Simple interest accrued in 10 years is equal to the principal.

- A. Data in Statement I alone are sufficient to answer the question, while the data in Statement II alone are not sufficient to answer the question.
- B. Data in Statement II alone are sufficient to answer the question, while the data in Statement I alone are not sufficient to answer the question.
- C. Data in Statement I alone or in statement II alone are sufficient to answer the question.
- D. Data in both the statements I and II are not sufficient to answer the question.
- E. Data in both the Statements I and II together are necessary to answer the question.

16. The least number which should be added to 2497 so that the sum is exactly divisible by 5, 6, 4 and 3 is:

- A. 23.0
- B. 13.0
- C. 3.0
- D. 33.0
- E. None of these

17. Find the number of sides of a regular convex polygon whose interior angle is 40 degrees?

- A. 5
- B. 9
- C. 4
- D. 6

E. Not possible

18. 3 types of chickens: Baby chickens cost 5 cents, hen chickens cost 3 dollars, and rooster chickens cost 5 dollars Buy 100 chickens for 100 dollars How many will you have from each?

- A. 20, 9, 71
- B. 70, 3, 27
- C. 18, 2, 80
- D. 80, 2, 18
- E. 90, 2, 8

19. The sum of two numbers is 45 and their product is 500. The HCF of the numbers is:

- A. 5
- B. 9
- C. 10
- D. 15
- E. None of the above

20. If $n=4p$, where p is a prime number greater than 2, how many different positive even divisors does n have including n ?

- A. 2
- B. 4
- C. 5
- D. 6
- E. 3

ANSWERS

1. A	2. B	3. A	4. B	5. B
6. D	7. E	8. A	9. C	10. E
11. A	12. A	13. A	14. C	15. C
16. A	17. E	18. D	19. A	20. B

EXPLANATION

1. Solution: A

We can write 999919 as product of 2 numbers in the following manner

$$\Rightarrow 999919 = 991 \times 1009$$

Also we have number of cats < rats killed by each cat.

Hence, we can safely assume that each cat has killed 1009 mice and there were 991 cats.

2. Solution: B

Now the given expression is

$$\Rightarrow (598+194)^2 - (598-194)^2 = 598 \times 194$$

Formula :

$$\text{We know } (A + B)^2 = A^2 + 2AB + B^2$$

$$(A - B)^2 = A^2 - 2AB + B^2$$

If $(A-B)^2$ is subtracted from $(A+B)^2$ then ,

$$(A+B)^2 - (A-B)^2 = (A^2 + 2AB + B^2) - (A^2 - 2AB + B^2) = 4AB$$

Using the above formula we can see that it is similar to $(A+B)^2 - (A-B)^2$. Where A is 598 and B is 194

$$= (598+194)^2 - (598-194)^2 = 598 \times 194 = 4 \times 598 \times 194$$

$$= 4$$

Hence the answer is 4.

3. Solution: A

We have volume of rectangular plate = Length \times Breadth \times Height

$$= 8 \times 11 \times 2$$

$$= 176 \text{ inch}^3$$

We have area of rod = πr^2

$$\Rightarrow (22/7) \times (10/2) \times (10/2) = 550/7 \text{ inch}^2$$

Volume of rod = Area \times Length = volume of plate

$$\text{Length of rod} = \text{volume of plate} / \text{area} = 176 / (550/7)$$

$$= 176 \times 7 / 550$$

$$= 1232 / 550$$

$$= 2.24 \text{ inches}$$

4. Solution: B

Let's denote Monday by Mo, Tuesday by Tu, Wednesday by We, and Thursday by Th

Given

$$\text{Mo} + \text{Tu} + \text{We} = 3 \times 37 \text{ ----- (Eq.1)}$$

$$\text{Tu} + \text{We} + \text{Th} = 3 \times 34 \text{ ---- (Eq.2)}$$

$$\text{Eq.1} - \text{Eq.2}$$

$$\Rightarrow \text{Mo} - \text{Th} = 3 \times (37 - 34) = 9 \text{(Eq.3)}$$

Given,

$$\text{Th} = (4/5) \times \text{Mo}$$

$$\Rightarrow \text{Mo} = (5/4) \times \text{Th}$$

Put it in Equation (3)

$$\Rightarrow ((5/4) - 1) \times \text{Th} = 9$$

$$\Rightarrow \text{Th} = 36^\circ\text{C}$$

5. Solution B

Let number of visitors on first 5 days of a week be a, b, c, d, e respectively

Hence we have

$$\Rightarrow a + b + c + d/4 = 58$$

$$\Rightarrow a + b + c + d = 58 \times 4$$

$$\Rightarrow a + b + c + d = 232 \text{-----}[1]$$

Now we have

$$\Rightarrow b + c + d + e /4 = 60$$

$$\text{Hence, } b + c + d + e = 240 \text{-----}[2]$$

Now, [2] - [1]

$$\Rightarrow (b + c + d + e) - (a + b + c + d) = 240 - 232$$

$$\Rightarrow e - a = 8$$

We are also given that $e : a = 8 : 7$

Hence, let $e = 8m$ then $a = 7m$

We are given $8m - 7m = 8$

$$\Rightarrow m = 8$$

Hence, number of visitors of fifth day = $e = 8m$

$$= 8 \times 8$$

$$= 64$$

6. Solution: D

Let the hours required = x

$$\text{Total hour} = 20 \times 9 = 180 \text{ hours}$$

We know that

$$\text{Work} = \text{strength} \times \text{time}$$

$$\therefore \text{Strength} \times \text{time}$$

$$\text{work} = 1$$

$$\therefore 30 \times 180$$

$$1$$

$$= 40 \times x$$

1

$$\Rightarrow x = 135 \text{ hours}$$

For a completing the job in 20 days 40 men have to do = $135/20 = 6.75$ hours a day

7. Solution: E

We know that Susan can type 10 pages in 5 minutes.

Hence, number of pages she can type in 30 mins = $10/5 \times 30$

$$\Rightarrow 60$$

We know that Mary can type 5 pages in 10 minutes

Hence, number of pages she can type in 30 mins = $5/10 \times 30$

$$\Rightarrow 15$$

Total number of pages typed by both in 30 minutes = $60 + 15$

$$\Rightarrow 75$$

8. Solution: A

Let us have that number as m .

Then we have, when m is divided by 7 gives the remainder 6, when divided by 6 gives remainder 5, when divided by 5 gives remainder 4 and so on

Hence we can say that $m+1$ should be perfectly divisible by 7, 6, 5, 4, 3, 2 and 1.

Hence, we have $m+1 = \text{LCM}(1, 2, 3, 4, 5, 6, 7)$

$$\Rightarrow m + 1 = 420$$

$$\Rightarrow m = 420 - 1$$

$$\Rightarrow m = 419$$

9. Solution: C

Let the side of the square formed = a

Perimeter of the square = $4a$

$$\Rightarrow 4a = \text{length of the rope} = \text{Perimeter of triangle} = 12 + 14 + 18 = 44$$

$$\Rightarrow 4a = 44$$

$$\Rightarrow a = 11$$

$$\text{Area of square} = a \times a = 11 \times 11 = 121$$

10. Solution: E

Since when 80 is divided by the number remainder is 2. Hence $80 - 2 = 78$ will be divisible by the number.

Similarly, when 122 is divided by the number remainder is 5. Hence $122 - 5 = 117$ will be divisible by the number

Finding out the HCF of 78 and 117

$$\Rightarrow \text{HCF}(78, 117) = 39$$

11. Solution: A

Given expression is-

$$(a - b)/3.5 = 4/7$$

$$\Rightarrow (a - b) = 3.5 \times (4/7)$$

$$\Rightarrow (a - b) = 14/7$$

$$\Rightarrow (a - b) = 2$$

$$\Rightarrow a = b + 2$$

We can see that

$$a > b$$

12. Solution: A

$$283 \times 56 + 252 = 20 \times ?$$

$$\Rightarrow 15848 + 252 = 20x$$

$$\Rightarrow x = 805$$

13. Solution: A

Since area of a rectangle = Length \times breadth

$$\therefore \text{Total area of the room} = 27 \times 48$$

$$= 1296 \text{ sq ft}$$

∴ Area of 1 tile = 2×3

= 6 sq feet

Hence, number of tiles required = $1296 / 6$

= 216 tiles

14. Solution: C

$$2 + 5 = 7$$

$$7 + 15 = 22$$

$$22 + 45 = 67$$

$$67 + 135 = 202$$

15. Solution: C

$$\text{C.I.} = A - P = P(1 + R/100)^T - P$$

$$\text{S.I.} = (P \times R \times T)/100$$

Where, C.I. = Compound Interest,

A = Amount,

P = Principal = 215000

R = % of Rate

T = Time Period = 2 years

S.I. = Simple Interest

Statement 1

$$\Rightarrow \text{C.I.} - \text{S.I.} = 250$$

$$\Rightarrow P(1 + R/100)^T - P - (P \times R \times T)/100 = 250$$

Clearly, in above equation the unknown is only R

Hence the equation can be solved for R

⇒ Statement 1 alone can solve the question

Statement 2 :

$$\Rightarrow \text{S.I.} = (PRT)/100$$

$$\Rightarrow \text{For } T = 10 \text{ years, } P = 10PR/100$$

$$\Rightarrow R = 10$$

\Rightarrow Statement 2 alone can solve the question

Both statements alone are sufficient to solve the equation

16. Solution: A

For a number to be divisible by 5, 6, 4, 3, it should be divisible by their LCM.

Their LCM = 60

So, we want the least number greater than 2497 which is divisible by 60.

When 2497 is divided by 60, we get a remainder of 37 and quotient of 41.

So, we need another $(60 - 37) = 23$ to make the number divisible by 60.

So, 23 need to be added to 2497.

$$(2497 + 23 = 2520 = 60 \times 42)$$

17. Solution: E

We have interior angle as 40 degrees.

Hence Let n be the number of sides of that polygon,

Then formula is

$$\Rightarrow 180 \times (n-2) = 40 \times n$$

$$\Rightarrow 180n - 360 = 40n$$

$$\Rightarrow 140n = 360$$

Since, no integer value of n is possible, hence such a polygon cannot exist

18. Solution: D

Say we buy B , H and R amounts of Baby, Hen and Rooster chickens.

$$\text{Given } (B \times 0.05) + (H \times 3) + (R \times 5) = 100 \text{ Dollars}$$

$$\text{Also given that } (B + H + R) = 100 \text{ Chickens.}$$

We have three variables and only two equations to solve the problem. We have to use trial and error to try all possible combinations.

We know that R should be less than 20 or else the cost would go beyond 100 dollars.

We try for $R = 19$

$\Rightarrow B + H = 81$ and $0.05B + 3H = 5$, this has no integer solution.

We try for $R = 18$

$\Rightarrow B + H = 82$ and $0.05B + 3H = 10$

$\Rightarrow B = 80$ and $H = 2$

$\therefore B, H$ and $R = 80, 2$ and 18 respectively.

19. Solution: A

Let the 1st no. = a

Let the 2nd no. = b

$\Rightarrow a + b = 45$ (i)

$\Rightarrow a \times b = 500$ (ii)

Substituting Value of " b " from (i) in (ii)

$\Rightarrow a \times (45 - a) = 500$

$\Rightarrow a^2 - 45a + 500 = 0$

$\Rightarrow a^2 - 20a - 25a + 500 = 0$

$\Rightarrow a(a - 20) - 25(a - 20) = 0$

$\Rightarrow (a - 25)(a - 20) = 0$

$\Rightarrow a = 25$ or $a = 20$

From eq (i)

we get $b = 20$ or $b = 25$

Either Case two numbers are 20 & 25

HCF is greatest common Factor

$20 = 2 \times 2 \times 5$

$25 = 5 \times 5$

Clearly seen from prime factorization of both numbers that the $HCF = 5$

20.Solution: B

Given that p is a prime number and it should be greater than 2 ,

So p will be odd number which is greater than 2

Since $n = 4p$, n is even number

This means that n has 4 even divisors which are: 2, 4, $2p$, $4p$

\Rightarrow Ex: if we take $p = 3$, then $n = 12$

$$12 = 2 \times 6 = 3 \times 4 = 1 \times 12$$

Even Divisors of 12 = 2, 4, 6 ($2p$), 12 ($4p$) = 4 even divisors

SET 1 ENGLISH

1. Standard English refers to the authoritative and correct usage of the language, the medium of expression for government and education. Its opposite is a dialectal variant of the language, that is, accepted and recognised words, expressions and structures peculiar to a smaller group of language users who are generally set apart from standard usage by cultural group or geographical region. For example, Nigerian, American, Irish and British English differ from one another in many respects and each is identifiable, yet in every case the standard variety approaches a single and hypothetical classification known as international English. As one moves towards informality and away from the observance of strict rules, emphasis falls on the differences between dialects. In addition to American English being distinguishable from British English, it is also true that British English is not uniform within the United Kingdom. The level of formality is determined by education and aspiration, while dialects vary from region to region.

One characteristic of a dialect as mentioned in the passage is _____.

- A. informality
- B. possession of various forms
- C. distinction from British English
- D. restricted area of usage

2. Standard English refers to the authoritative and correct usage of the language, the medium of expression for government and education. Its opposite is a dialectal variant of the language, that is, accepted and recognised words, expressions and structures peculiar to a smaller group of language users who are generally set apart from standard usage by cultural group or geographical region. For example, Nigerian, American, Irish and British English differ from one another in many respects and each is identifiable, yet in every case the standard variety approaches a single and hypothetical classification known as international English. As one moves towards informality and away from the observance of strict rules, emphasis falls on the differences between dialects. In addition to American English being distinguishable from British English, it is also true that British English is not uniform within the United Kingdom. The level of formality is determined by education and aspiration, while dialects vary from region to region.

According to the author, Nigerian, American, Irish and British English can be regarded as _____.

- A. registers
- B. standards
- C. styles
- D. languages

Read the passage carefully and answer the question.

3. Standard English refers to the authoritative and correct usage of the language, the medium of expression for government and education. Its opposite is a dialectal variant of the language, that is, accepted and recognised words, expressions and structures peculiar to a smaller group of language users who are generally set apart from standard usage by cultural group or geographical region. For example, Nigerian, American, Irish and British English differ from one another in many respects and each is identifiable, yet in every case the standard variety approaches a single and hypothetical classification known as international English. As one moves towards informality and away from the observance of strict rules, emphasis falls on the differences between dialects. In addition to American English being distinguishable from British English, it is also true that British English is not uniform within the United Kingdom. The level of formality is determined by education and aspiration, while dialects vary from region to region.

According to the passage, International English is _____.

- A. a kind of arbitrary classification
- B. an imaginary classification
- C. an informal standard
- D. a recognised formal standard

4. Standard English refers to the authoritative and correct usage of the language, the medium of expression for government and education. Its opposite is a dialectal variant of the language, that is, accepted and recognised words, expressions and structures peculiar to a smaller group of language users who are generally set apart from standard usage by cultural group or geographical region. For example, Nigerian, American, Irish and British English differ from one another in many respects and each

is identifiable, yet in every case the standard variety approaches a single and hypothetical classification known as International English. As one moves towards informality and away from the observance of strict rules, emphasis falls on the differences between dialects. In addition to American English being distinguishable from British English, it is also true that British English is not uniform within the United Kingdom. The level of formality is determined by education and aspiration, while dialects vary from region to region.

The author refers to Standard English as _____.

- A. a dialectal variant of language that is accepted and recognized
- B. language spoken by users who are set apart by culture or geography
- C. an official and accurate usage of language
- D. accepted and recognized words, expressions and structures

From the options lettered A – E, choose the one that is NEAREST IN MEANING to the word written in capital letters.

5. The politician was given a TUMULTOUS welcome when he came to address the rally.

- A. pleasant
- B. noisy
- C. discouraging
- D. strange
- E. well organised

From the options lettered A – E, choose the one that is NEAREST IN MEANING to the word written in capital letters.

6. Mr. Jonah plays the piano with great DEXTERITY.

- A. wisdom
- B. power
- C. force
- D. skill

E. style

Choose from the options lettered A-E, the most appropriate interpretation for the given statement.

7. The children were all ears as the teacher narrated the story. This means that they were _____.

- A. anxious
- B. attentive
- C. restless
- D. patient
- E. distracted

From the options lettered A-E, choose the interpretation that you consider most appropriate for the sentence.

8. Some candidates take examinations in their stride. This means that they _____.

- A. prepare hard for them
- B. do not worry about them
- C. find them insurmountable
- D. are familiar with them
- E. are reluctant about taking examinations

From the options lettered A-E, choose the interpretation that you consider most appropriate for the sentence.

9. My book has become dog-eared through use. This means that _____.

- A. the corners of the pages of my book are crumpled
- B. my book is designed like dog's ears.
- C. my book is torn.
- D. my book is indispensable
- E. my book has been unused

From the options lettered A-E, choose the interpretation that you consider most appropriate for the sentence.

10. His decision to reconcile with his former agent paid off. This means that the reconciliation _____.

- A. yielded positive results
- B. cost him a lot of money
- C. was successful
- D. caused him some trouble.
- E. paid his bills

Choose from the options lettered A-E, the most appropriate interpretation for the given statement.

11. Incoming students are expected to start registration immediately to avoid bottlenecks. This means they are expected to start registration immediately to avoid _____.

- A. being arrested
- B. being embarrassed by the school authority
- C. forfeiting the admission
- D. unnecessary delay
- E. being expelled

The correct answer is option [D]

From the options lettered A-E, choose the interpretation that you consider most appropriate for the sentence.

12. The beauty of Bimpe's garden shows that she has green fingers. This means that Bimpe _____.

- A. always paints her fingers green
- B. is good at growing plants
- C. turns everything she touches to green

- D. likes keeping green objects
- E. steals seed to plant

Choose from the options lettered A-E, the most appropriate interpretation for the given statement.

13. Well, it seems Alao got out of bed on the wrong side today. This means that he _____.

- A. is in a bad mood
- B. woke up late
- C. is extremely excited
- D. is ill
- E. slept on the wrong side

From the options lettered A-E, choose the interpretation that you consider most appropriate for the sentence.

14. Her husband's death has forced her to tighten her belt. This means that she has _____.

- A. become more economical
- B. adjusted her belt
- C. become very aggressive.
- D. become very greedy
- E. started wearing tight belts

15. The principal queried our teacher for always taking a French leave. This means that our teacher always _____.

- A. travels to France during the holidays
- B. eats french leaves
- C. likes going on leave
- D. leaves the school without permission

E. taking a long leave

16. Which of the following phrases (1), (2), (3), (4) given below in the statement should replace the phrase printed in bold in the sentence to make it grammatically correct? If the sentence is correct as it is given and 'No Correction is required', mark (5) as the answer.

Our neighbours are always trying to keep up with our lifestyle.

- A. to keep on
- B. to keep at
- C. to keeping on
- D. to keep off
- E. No Correction is required

17. Select the correct tense.

Kiran had been working in a bank for some years.

- A. Simple past
- B. Past continuous
- C. Past perfect continuous
- D. Past perfect.
- E. None of the above

18. Select the correct tense:

I had seen him earlier.

- A. Past continuous
- B. Past perfect
- C. Past perfect continuous
- D. Future perfect
- E. Simple Past

19. Select the correct tense:

She had played carom.

- A. Future perfect
- B. Past perfect
- C. Present perfect
- D. Simple present
- E. None of the above

20. Select the correct plural form for the given word:

Country

- A. Countrys
- B. Countryes
- C. Countries
- D. Countrees
- E. None of the above

ANSWERS

1. D	2. D	3. B	4. C	5. B
6. D	7. B	8. A	9. A	10. A
11. D	12. B	13. A	14. A	15. D
16. E	17. C	18. B	19. B	20. C

EXPLANATION

1. The correct answer is Option [D]

2. The correct answer is option [D]

3. The correct answer is option [B]

4. The correct answer is option [C]

5. The correct answer is option [B].

Tumultuous means noisy, turbulent, violent

Pleasant means a feeling of enjoyment, pleasure or satisfaction. it also means to be friendly, kind, or good-natured.

Noisy means loud, ear-splitting sound.

Discouraging means not encouraging or dissuading...

Strange means peculiar or unusual.

Well organised means done properly or in an orderly manner.

6. The correct answer is option [D].

Dexterity implies skill and ease in the use of the hands.

7. The correct answer is option [B]

8. The correct answer is option [A]

9. The correct answer is option [A]

10. The correct answer is option [A]

11. The correct answer is option [D]

12. The correct answer is option [B]

13. The correct answer is option [A]

14. The correct answer is option [A]. After the sentence, a list of possible interpretations is given. Choose the interpretation that you consider most appropriate for the sentence.

15. The correct answer is option [D]

16. The correct answer is option [E]

'Keep up' (with someone/something) means to stay at the same level as someone or something and fits the context of the sentence. Also none of 'keep on' to continue doing something, 'keep at' means to persevere and 'keep off' means avoid encroaching on or touching, is implied in the sentence.

17. The correct answer is option [C]

(Had + been + root + ing) is used to make past perfect continuous tense and indicates that an activity was being carried on in the past, continued for some time and is no longer continued.

18. The correct answer is option [B]

This is an easy one: the use of 'had + past participle' clearly indicates that it is in the Past Perfect tense.

19. The correct answer is option [B]

'Past perfect tense' uses 'had + past participle' form of the verb, same as given in the sentence.

20. The correct answer is option [C]

Words whose singular form ends in 'y' have their plural forms ending in 'ies'. E.g. Cherry – Cherries, Party – Parties, Pastry – Pastries etc. Along the same lines, we have country – countries.

SET 1 CURRENT AFFAIRS

1. Who formed the first political party in Nigeria?

- A Obasanjo
- B Osama
- C Obi
- D Herbert Macaulay

2. What was the first political party in Nigeria?

- A APC
- B PDP
- C NNDP
- D AD

3. What Year was Nigerian Customs Service founded

- A. 1880
- B. 1990
- C. 1891
- D. 2014

4. Who is the Comptroller-General of The Nigerian Customs

- A. Mr. Ayodele Diyan
- B. Alhaji Shehu A. Musa,
- C. Mr. Henny Etim Duke
- D. Col. Hameed Ibrahim Ali

5. Who is the current president of Nigeria?

- A. Obasanjo
- B. Saraki
- C. Buhari
- D. Jonathan

6. Who is the current vice president of Nigeria?

- A. Osibanjo
- B. Atiku
- C. Peter obi
- D. Namadi sambo

7. What Year was The Board of Customs & Excise set up

- A. 1 June, 1972
- B. 4 April, 1962
- C. 31 January, 1900
- D. 6, May, 1999

8. Under What Arm of the Government is The Nigerian Customs

- A. Legislative
- B. Executive
- C. Judiciary
- D. None

9. What does the eagle in the Nigerian coat of arm represent?

- A peace
- B Terror
- C. Agriculture
- D. Strength

10. Representative democracy is best characteristic by

- A. free elections and proper registers of voters
- B. a politically educated electorate
- C. rule by the interest group
- D. proper constituencies and a real choice of candidates

11. The Chairman of the Nigerian Custom Service Board is same as the _____

- A. Minister of Finance
- B. Head of The Customs Service
- C. Comptroller General of Customs
- D. President of Nigeria

12. The first Nigerian Chairman of the Board of the NCS is _____

- A. Late Mr. James Lawanson
- B. Mr. Ayodele Diyan
- C. Alhaji Shehu A. Musa,
- D. Mr. Henny Etim Duke

13. While political parties aim at forming a government, pressure groups aim at

- A. causing social unrest
- B. influencing governmental decisions
- C. controlling nation's economy
- D. getting workers to unite

14. When the electorate vote for representatives who in turn vote on their behalf we say it is

- A. an indirect election
- B. an unfair election
- C. a disputed election
- D. a rigged election

15. The first Nigerian Chairman of the Board of the NCS was appointed in the Year _____

- A. 1908
- B. 1955
- C. 1964
- D. 1999

16. The first Director of the Department of Customs and Excise is _____

- A. Alhaji Shehu A. Musa,
- B. Snr. James Bruce
- C. Mr. Kunle Bankole
- D. Mr. Idris Johnson

17. An election which is conducted to fill a vacant seat in a legislature is called a

- A. by election
- B. general election
- C. referendum
- D. plebiscite

18. Which of these countries does NOT operate a federal constitution

- A. USA
- B. Nigeria
- C. Canada
- D. France

19. The first major reorganization of The NCS took place in _____

- A. 1990
- B. 1975
- C. 1900
- D. 2012

20. The First Director-General of Customs is

- A. Mr. T. A. Wall
- B. Mr. Solanke Sodiq
- C. Sir Isaac Lawal
- D. Mr Lawson Green

ANSWERS

1. D	2. C	3. C	4. D	5. C
6. E	7. A	8. B	9. D	10. A
11. A	12. B	13. B	14. A	15. C
16. A	17. B	18. D	19. B	20. A

MATHS SET 2

1. Find the smallest 8-digit number which gives 15 as a remainder when divided by 38, 22 and 16.

- A. 10002004
- B. 10002015
- C. 10001919
- D. 10000015
- E. None of these

2. In a flight of 600 km, an aircraft was slowed down due to bad weather. Its average speed for the trip was reduced by 200 km/hr and the time of flight increased by 30 minutes. The duration of the flight is:

- A. 1 hour
- B. 2 hours
- C. 3 hours
- D. 4 hours
- E. 5 hours

3. Water flows into a tank $200\text{ m} \times 150\text{ m}$ through a rectangular pipe of $1.5\text{ m} \times 1.25\text{ m}$ @ 20 kmph. In what time (in minutes) will the water rise by 2 metres?

- A. 48 min
- B. 96 min
- C. 108 min
- D. 36 min
- E. None of these

4. What is the next number of the following sequence 32, 29, 26, 64, 61, 58, 96, 93, ...

- A. None of these
- B. 90, 138, 1157

- C. 90, 27, 126
- D. 90, 128, 125
- E. 128, 90, 27

5. Area of a square is given as 12800 sq miles, find the time taken by a lady to move across a diagonal with speed of 15 miles per hour.

- A. 8 hours
- B. 9 hours
- C. 8.5 hours
- D. 10 hours
- E. None of these.

6. What should be missing term in the following number series?

8, 6, 17, 14, 35, 30, 71, 143

- A. 62
- B. 56
- C. 54
- D. 64
- E. None of these

7. Complete the Series: 3, 10, 20, 27, _____, 44

- A. 39.0
- B. 37.0
- C. 34.0
- D. 35.0

8. If the ratio of production of 3 different companies A,B & C is 4:7:5 and overall production last year was 4 lac tonnes and if each company had an increase of 20% in production level this year what is the production of company B this year?

- A. 2.1 lac tonnes
- B. 1.5 lac tonnes
- C. 3.6 lac tonnes
- D. 2.25 lac tonnes
- E. None of these

9. What will come in place of question mark in the following equation?

$$\frac{1}{4}\text{th of } \frac{1}{2} \text{ of } \frac{3}{4}\text{th of } 52000 = ?$$

- A. 4875
- B. 4857
- C. 4785
- D. 4865
- E. None of these

10. What approximate value will come in place of question mark (?) in the following question? (You are not expected to calculate the exact value)

$$[(7.99)^2 - (13.001)^2 + (4.01)^3] \div 2 = ?$$

- A. -1800
- B. 1450
- C. -1680
- D. 1681
- E. -1450

11. If $9x - 3y = 12$ and $3x - 5y = 7$ then $6x - 2y = ?$

- A. -5
- B. 4
- C. 2
- D. 8

E. 5

12. Find the 25th word if the word JACKED is arranged in dictionary order....

A. ACDEJK

B. ADCEJK

C. AECDJK

D. AEDCJK

E. AJCDEK

13. 22, 21, 23, 22, 24, 23, ... What number should come next?

A. 25.0

B. 22.0

C. 24.0

D. 26.0

14. Find the missing term in the following series:

5, 3, 12, 7, 26, 15, __?

A. 47

B. 27

C. 108

D. 31

E. 32

15. The problems below contain a question and two statements giving certain data. You have to decide whether the data given in the statements are sufficient for answering the questions.

Was David early, on time or late for work?

(I) He thought his watch was 10 minutes fast.

(II) Actually his watch was 5 minutes slow.

- A. If statement (I) alone is sufficient but statement (II) alone is not sufficient.
- B. If statement (II) alone is sufficient but statement (I) alone is not sufficient.
- C. If both statements together are sufficient but neither of statements alone is sufficient.
- D. If both together are not sufficient.
- E. None of the above

16. Three cards are drawn at random from an ordinary pack of cards. Find the probability that they will consist of a king, a queen and an ace.

- A. $48/14785$
- B. $48/16575$
- C. $22/8750$
- D. $154/23584$
- E. None of these

17. There are two boxes, one containing 10 red balls and the other containing 10 green balls. You are allowed to move the balls between the boxes so that when you choose a box at random and a ball at random from the chosen box, the probability of getting a red ball is maximized. This maximum probability is:

- A. $1/2$
- B. $14/19$
- C. $37/38$
- D. $3/4$
- E. $2/3$

18. There is a 5-digit no. Sum of 3 pairs of digits is eleven each. Last digit is 3 times the first one. 3rd digit is 3 less than the second. 4th digit is 4 more than the second one. Find the number.

- A. 25296
- B. 26594
- C. 24569
- D. 26458
- E. None of these

19. Maximum numbers that can be formed using all the 4 digits 6, 4, 8, 1 without repetition and which is divisible by 9?

- A. 0
- B. 450
- C. 900
- D. 150
- E. None of these

20. A two-digit number is 18 less than the square of the sum of its digits. How many such numbers are there?

- A. 1
- B. 2
- C. 3
- D. 4
- E. 5

ANSWERS				
21. C	22.A	23.B	24.D	25.E
26.A	27. B	28.A	29.A	30.D
31. D	32. B	33.A	34.A	35.D
36.B	37. B	38.A	39.A	40.B

EXPLANATION

1. Solution: C

Let us first find out the LCM of 38,22 and 16.

$$\Rightarrow \text{LCM}(22,38,16)$$

$$\Rightarrow 2 \times 11 \times 19 \times 8$$

$$= 3344$$

Hence, every number which is divisible by 3344 is automatically divisible by 38, 22 and 16.

Now we divide 10000000 which is the least number of 8 digits to find out if it is divisible by 3344

We need 10001904 to make is completely divisible by 3344.

Hence, since 15 is the remainder which is left in every case, hence, we can say that $10001904 + 15$

ie 10001919 is the least number which when divided by 38, 22 and 16 leaves a remainder of 15 in every case.

2. Solution: A

Let, the original duration of flight be (t) hrs.

$$\therefore \text{Average Speed} = \text{Total Distance} / \text{Time}$$

Total Distance of the flight is 600 km.

So, original average speed = $600/t$

Due to bad weather speed of trip is reduced by 200 km/hr and time of flight is increased by 30 minutes i.e. 0.5 hr.

∴ Reduced average speed = $(600/t) - 200$

And New duration of flight = $(t + 0.5)$ hrs

So, the new average speed = $600/(t + 0.5)$

Equating,

$$\Rightarrow 600t - 200 = 600(t + 0.5) \Rightarrow 3t - 1 = 3t + 0.5 \Rightarrow 3 - t = 3 + 0.5$$

$$\Rightarrow t^2 + 0.5t - 1.5 = 0$$

$$\Rightarrow 2t^2 + t - 3 = 0$$

$$\Rightarrow 2t^2 - 2t + 3t - 3 = 0$$

$$\Rightarrow (t - 1)(2t + 3) = 0$$

$$\Rightarrow (t - 1) = 0$$

$$\therefore t = 1 \text{ hr}$$

3. Solution: B

We know that, formula:

Volume of any Cuboid = Length \times Breadth \times Height

According to the given question:

$$\Rightarrow \text{Volume of the water required in the tank} = (200 \times 150 \times 2) \text{ m}^3 = 60000 \text{ m}^3 \dots$$

$$\therefore \text{Length of water column flown in 1 min} = (20 \times 1000)/60 \text{ m} = 1000/3 \text{ m}$$

$$\therefore \text{Volume flown per minute} = 1.5 \times 1.25 \times (1000/3) \text{ m}^3 = 625 \text{ m}^3.$$

$$\therefore \text{Required time} = (60000/625) \text{ min} = 96 \text{ min.}$$

Hence, the required answer is 96 minutes.

4. Solution: D

The pattern of the given number series is as:

Here the number series in the form of sets of 3 – 3 terms. i.e. among first 3 numbers 2nd and 3rd term is equal to the 3 subtracted from 1st terms and 2nd term respectively and 4th term is multiplication of 1st term and 2 and again same process is applied.

$$\rightarrow 32,$$

$$\rightarrow 32 - 3 = 29,$$

$$\rightarrow 29 - 3 = 26,$$

$$\rightarrow 32 \times 2 = 64,$$

$$\rightarrow 64 - 3 = 61,$$

$$\rightarrow 61 - 3 = 58,$$

$$\rightarrow 32 \times 3 = 96,$$

$$\rightarrow 96 - 3 = 93,$$

$$\rightarrow 93 - 3 = 90,$$

$$\rightarrow 32 \times 4 = 128,$$

$$\rightarrow 128 - 3 = 125,$$

$$\rightarrow 125 - 3 = 122,$$

Hence, the required term of the given number series is 90, 128, 125, 122.

5. Solution: E

We have, area of a square = 12800 sq miles.

$$\text{Hence side}^2 = 12800$$

$$\text{Side} = \sqrt{12800}$$

$$\Rightarrow \text{Side} = 80\sqrt{2}$$

We know that diagonal of a square = $\sqrt{2} \times \text{side}$

$$= \sqrt{2} \times 80\sqrt{2}$$

$$= 160 \text{ miles.}$$

Hence we know that speed = distance/time

$$\text{Time} = \text{distance/speed}$$

$$\text{Time} = 160/15$$

$$= 10.66 \text{ miles/hr.}$$

6. Solution: A

We have the terms of the series as

$$\Rightarrow 17 = (8) \times 2 + 1$$

$$\Rightarrow 14 = (6) \times 2 + 2$$

$$\Rightarrow 35 = (17) \times 2 + 1$$

$$\Rightarrow 30 = (14) \times 2 + 2$$

$$\Rightarrow 71 = (35) \times 2 + 1$$

$$\Rightarrow ? = (30) \times 2 + 2$$

$$\Rightarrow ? = 62$$

$$\Rightarrow 143 = (71) \times 2 + 1$$

7. Solution: B

$$3 + 7 = 10$$

$$10 + 10 = 20$$

$$20 + 7 = 27$$

$$27 + 10 = 37$$

8. Solution: A

Let production of companies A, B and C in last year was = 4m, 7m and 5m respectively.

Hence,

We are given that

$$\Rightarrow 4m + 7m + 5m = 4 \text{ lac tonnes}$$

$$\Rightarrow 16m = 4 \text{ lac tonnes}$$

$$\Rightarrow m = 4/16 \text{ lac tonnes}$$

$$\Rightarrow m = 0.25 \text{ lac tonnes}$$

Hence, production of company B last year = 7m

$$= 7 \times 0.25 \text{ lac tonnes}$$

$$= 1.75 \text{ lac tonnes}$$

After an increase of 20%, production of company B this year = 1.75 + 20% of 1.75

$$= 1.75 + (20/100) \times 1.75$$

$$= 1.75 + 0.35$$

$$= 2.1 \text{ lac tonnes}$$

9. Solution: A

$$1/4\text{th of } 1/2 \text{ of } 3/4\text{th of } 52000 = 14 \times 12 \times 34 \times 52000 = 4875$$

Hence, option A

10. Solution: D

Since we want to find out approximate value,

So we can write these values to their nearest integers.

Given expression is –

$$[(7.99)^2 - (13.001)^2 + (4.01)^3]^2 = ?$$

$$\Rightarrow ? \approx [82 - 132 + 43]^2$$

$$\Rightarrow ? = [64 - 169 + 64]^2$$

$$\Rightarrow ? = [-41]^2$$

$$\Rightarrow ? = 1681$$

11. Solution: D

$$9x - 3y = 12 \dots\dots\dots(i)$$

$$3x - 5y = 7 \dots\dots\dots(ii)$$

Multiplying eq. (ii) by (-3)

$$\Rightarrow -3 (3x - 5y = 7)$$

$$\Rightarrow -9x + 15y = -21 \dots\dots\dots(iii)$$

Adding equation (iii) & Equation (i)

$$(9x - 3y) + (-9x + 15y) = 12 + (-21)$$

$$\Rightarrow 9x - 3y - 9x + 15y = -9$$

$$\Rightarrow 12y = -9$$

$$\Rightarrow y = (-9/12) \dots\dots\dots (iv)$$

Putting equation (iv) in equation (i)

$$\Rightarrow 9x - 3(-9/12) = 12$$

$$\Rightarrow 9x + (9/4) = 12$$

$$\Rightarrow 9x = 12 - (9/4) = (39 / 4)$$

$$\Rightarrow x = (13 / 12) \dots\dots\dots (v)$$

Putting Values of x, y from eq (iv) & (v) respectively in required expression

$$\Rightarrow 6x - 2y = ?$$

$$\Rightarrow 6(13/12) - 2(-9/12) = ?$$

$$\Rightarrow 39/6 + 9/6 = ?$$

$$\Rightarrow 48 / 6 = ?$$

$$\Rightarrow 8 = ?$$

12. Solution: B

As in JACKED total number of letters are 6 and the lowest letter as per dictionary is A so words starting with A are = 5! (number of letters left in JACKED other than A)

= $5 \times 4 \times 3 \times 2 \times 1 = 120$ words so 25th word will definitely start with A

And after A next letter is C so words starting with AC are = 4! (number of letters left in JACKED other than A, C) = $4 \times 3 \times 2 \times 1 = 24$. So 25th word can't start with AC.

And after AC in dictionary combination, to start words will be with AD and so 25th word will start with AD which is ADCEJK (letters other than AD are arranged in alphabetical order because dictionary follows this pattern)

13. Solution: A

In this simple alternating subtraction and addition series; 1 is subtracted, then 2 is added, and so on.

14. Solution: A

given series 5, 3, 12, 7, 26, 15,

There are two alternative series

alternative terms 5, 12, 26, P

and Remaining terms 3, 7, 15,

From the first series 5, 12, 26,

$$\Rightarrow 12 = 5 + (1 \times 7)$$

$$\Rightarrow 26 = 12 + (2 \times 7)$$

$$\Rightarrow P = 26 + (3 \times 7)$$

$$\Rightarrow P = 47$$

15. Solution: D

Statement 1

\Rightarrow According to David the actual time is 10 minutes less than what was being shown on his watch

\therefore Statement 1 alone is not sufficient to answer the question whether he was early or late

Statement 2

\Rightarrow Actually The time was 5 minutes more than what was being shown on his watch

\therefore Statement 2 alone is not sufficient to answer the question whether he was early or late

\Rightarrow Both the statements together neither tell us about the time shown on the watch neither about the office timings

16. Solution: B

Probability of getting first card as king = $4/52$

Probability of getting second card as queen = $4/51$

Probability of getting third card as ace = $4/50$

Hence, Total probability = $3! \times 4/52 \times 4/51 \times 4/50$

$$= 6 \times 4/52 \times 4/51 \times 4/50$$

$$= 384/132600$$

$$= 48/16575$$

17. Solution: B

Probability of getting a red ball can be maximized by taking only one red ball in one box and transferring all other red balls into other boxes.

Now probability of choosing each box is $(1/2)$.

Probability of choosing red box = $(1/2) \times 1 + (1/2) \times (9/19)$

$$= (1/2) \times (28/19) = 14/19$$

18. Solution: A

We are given a 5-digit number

Let first digit be 'X'

then 5th digit is '3X'

let 2nd digit be 'Y'

then 3rd digit is 'Y - 3'

and 4th digit is 'Y + 4'

then the no is '(X)(Y) (Y - 3) (Y + 4) (3X)'

from the above we can say $3X \leq 9$

so $X \leq 3$ and any of the digit in the number is ≤ 9

and also given that 3 pairs sum is 11...

Also $Y - 3 \geq 0$ and $Y + 4 \leq 9$

$\Rightarrow Y \geq 3$ and $Y \leq 5$ i.e. $Y = 3, 4$ or 5

for $x = 1$, all the conditions won't be satisfied.

For $x = 2$,

Let $Y = 5$

\therefore The number is 25296

19. Solution: A

Since we need to use all 4 digits of the given number, we need to see that the sum of digits $6, 4, 8, 1 = 19$

And divisibility rule of 9 says that

For a number to be divisible by 9, the sum of its digits should be divisible by 9.

Hence, we can say that no numbers can be formed using all 4 digits and still divisible by 9.

20. Solution: B

Say $10x + y$ is the number with y in unit's place and x in ten's place.

Given, number is 18 less than square of sum of digits

$$\Rightarrow 10x + y + 18 = (x + y)^2$$

$$\therefore (x+y)(x+y) - (x+y) = 18 + 9x$$

$$\Rightarrow (x+y)^2 - (x+y) = 9(x+2)$$

Say $(x+y) = p$

$$\Rightarrow p^2 - p - k = 0, \text{ where } k = 9(x+2)$$

Solving for p gives $p = 0.5 + 0.5 \times \sqrt{1+4k}$

For p to be integer we need $1+4k$ to be a perfect square.

$\Rightarrow 1+4k = 1 + 4 \times (9x + 18) = 73 + 36x$ should be a perfect square and x is an integer from 0 to 9

By trial and error, we get $x = 6$ and $x = 8$ as possible solutions.

\therefore There are two numbers satisfying the given conditions.

ENGLISH SET 2

Read the passage carefully and answer the question.

1. As the stranger approached, Shola noticed that he was handsome and her excitement increased. It was of such a man she had dreamt. He had a fine, arrogant carriage, like a soldier or someone in authority. When he reached the end of the pier, he addressed them in a rich, deep voice that disturbed her as the voluptuous rising of the tide had done.

'You're Tunde Onu, I'm told,' he said to her father.

'That's right,' said her father.

'The bus conductor told me you take people to the islands,' the man continued. 'I'd like to go there if you can take me.'

Her father examined the man from head to foot, shrewdly measuring his capacity to pay. Then he said:

'When were you thinking of going?'

'Right away.'

'That's a different story, for my boatman is gone to Badagry and won't be back before nightfall.

'Oh! said the stranger,' That's too bad. You couldn't get someone else instead of him?'

'I would have to think hard', he said gloomily, 'for it's not everyone that would do for the job of going with me beyond the bay to the islands at this time of the year.'

Shola understood her father's manoeuvre and felt ashamed.

Which of the following is true of the passage?

- A. The stranger could not afford to miss the boat ride because he had come from a very far place.
- B. Though the stranger had a rich deep voice, Shola's father was more outspoken than him.
- C. Shola and her father were idle when the stranger approached them.
- D. Shola's father sized the stranger's capability to pay.

Read the passage carefully and answer the question.

Read the passage carefully and answer the question.

2. As the stranger approached, Shola noticed that he was handsome and her excitement increased. It was of such a man she had dreamt. He had a fine, arrogant carriage, like a soldier or someone in authority. When he reached the end of the pier, he addressed them in a rich, deep voice that disturbed her as the voluptuous rising of the tide had done.

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'That's right,' said her father.

'The bus conductor told me you take people to the island', the man continued. 'I'd like to go there if you can take me.'

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'When were you thinking of going?'

'Right away.'

'That's a different story, for my boatman has gone to Badagry and won't be back before nightfall'.

'Oh!', said the stranger, 'That's too bad. You couldn't get someone else instead of him?'

'I would have to think hard', he said gloomily, 'for it's not everyone that would do for the job of going with me beyond the bay to the island at this time of the year.'

Shola understood her father's manoeuvre and felt ashamed.

How would you describe Shola's father?

- A. A greedy boat man.
- B. An energetic but good-for-nothing man.
- C. A loving father who wants to safeguard the interest of his daughter.
- D. A talkative fool.
- E. An arrogant man

3. As the stranger approached, Shola noticed that he was handsome and her excitement increased. It was of such a man she had dreamt. He had a fine, arrogant carriage, like a soldier or someone in authority. When he reached the end of the pier, he addressed them in a rich, deep voice that disturbed her as the voluptuous rising of the tide had done.

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'I would have to think hard', he said gloomily,' for it's not everyone that would do for the job of going with me beyond the bay to the islands at this time of the year.'

Shola understood her father's manoeuvre and felt ashamed.

'Manoeuvre' as used in the passage means _____.

- A. shrewdness
- B. cleverness
- C. attitude
- D. strategy
- E. game

4. As the stranger approached, Shola noticed that he was handsome and her excitement increased. It was of such a man she had dreamt. He had a fine, arrogant carriage, like a soldier or someone in authority. When he reached the end of the pier,

he addressed them in a rich, deep voice that disturbed her as the voluptuous rising of the tide had done.

'You're Tunde Onu, I'm told,' he said to her father.

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'Oh! Said the stranger,' that's too bad. You couldn't get someone else instead of him?'

'I would have to think hard', he said gloomily, 'for it's not everyone that would do for the job of going with me beyond the bay to the islands at this time of the year.'

Shola understood her father's manoeuvre and felt ashamed.

Which of the following is NOT true of the passage?

- A. Shola did not approve of her father's behaviour towards the stranger.
- B. Shola's father could row the stranger to the island alone if he so wished.
- C. Shola's father exaggerated the difficulties in order to raise his fee.
- D. Tunde Onu's boatman is the only man who knows how to sail beyond the bay to the island.
- E. The stranger had a fine, arrogant carriage.

Read the passage carefully and answer the question.

5. As the stranger approached, Shola noticed that he was handsome and her excitement increased. It was of such a man she had dreamt. He had a fine, arrogant carriage, like a soldier or someone in authority. When he reached the end of the pier, he addressed them in a rich, deep voice that disturbed her as the voluptuous rising of the tide had done.

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'I would have to think hard', he said gloomily,' for it's not everyone that would do for the job of going with me beyond the bay to the islands at this time of the year.'

Shola understood her father's manoeuvre and felt ashamed.

Which of the following is true of the stranger in the passage?

- A. He was a good looking man with a deep voice, but very proud.
- B. He was familiar with the people on the island.
- C. He was a fine gentleman in need of help.
- D. He was too proud to reciprocate Shola's love.
- E. Shola knew the stranger and was excited to see him again.

6. Select the correct plural form for the given word:

Mouse

- A. Mice
- B. Mouses
- C. Mices
- D. Mouese

E. None of the Above

7. Select the correct plural form for the given word: brush

A. Brushes

B. Brushs

C. Brushies

D. Brush

E. None of the above

8. Select the correct plural form for the given word: child

A. Childs

B. Childrens

C. Children

D. Child

E. None of the above

9. Choose the best word/phrase to replace the underlined part in accordance with grammatical usage, wherever necessary.

In his middle age even he preferred working hard to amuse himself.

A. Even in his middle age

B. In his middle age too

C. In his middle age even

D. Also in his middle age

E. In his middle age

10. Select the correct plural form for the given word: radius

A. Radiuses

B. Radii

- C. Radiis
- D. Radia
- E. None of the above

OPPOSITE IN MEANING to the capitalised word.

11. We should regard donations as _____ and not COMPULSORY.

- A. mandatory
- B. necessary
- C. voluntary
- D. gratuitous
- E. obligatory

Choose the word OPPOSITE IN MEANING to the word in capital letters.

12. Lou APPROVED of the behavior of his sons during the Church service last week.

- A. disliked
- B. disappointed
- C. sanctioned
- D. rejected
- E. endorsed

From the options lettered A-E, choose the word that is most nearly opposite in meaning to the underlined word and will, at the same time, correctly fill the gap in the sentence.

13. Usually, Joseph is articulate in his speech, but today he sounds ____

- A. clear
- B. turgid
- C. timid
- D. incoherent

E. eloquent

From the options lettered A-E, choose the word that is most nearly opposite in meaning to the underlined word and will, at the same time, correctly fill the gap in the sentence.

14. The man's first wife is loyal, while the second is _____.

- A. unfaithful
- B. unkind
- C. selfish
- D. hostile
- E. harsh

Choose the option OPPOSITE IN MEANING to the word written in capital letters.

15. The pastor decided to EXORCISE the evil spirit as the afflicted member of his congregation cried for help.

- A. expel
- B. drive
- C. invite
- D. charm
- E. pacify

From the options lettered A to E, choose the word that is nearest in meaning to the underlined word as it is used in the sentence.

16. The winner of the wrestling contest was commended for his tenacity.

- A. strength
- B. wisdom
- C. doggedness
- D. gentility

E. willingness

From the options lettered A - E, choose the one that is NEAREST IN MEANING to the words written in capital letters..

17. The boss made a CLEAN SWEEP of all the old hands in the office.

A. The boss completely got rid of all the old hands in the office.

B. The boss promoted all the old hands in the office.

C. The boss made a ridicule of all the old hands in the office.

D. The boss gave a quick charge to all the old hands in the office.

E. The boss made an adjustment to the positions of all the old hands in the office.

Choose from the options lettered A -E, the one that is nearest in meaning to the word written in italics in the sentence below.

18. He has been mandated to search for a new candidate for the post.

A. compelled

B. convinced

C. assigned

D. demanded

E. requested

Choose the word OPPOSITE IN MEANING to the word in capital letters.

19. The soldiers RETREATED because their commander was shot.

A. scattered

B. surrendered

C. separated

D. advanced

E. submitted

From the options lettered A - E, choose the one that is OPPOSITE IN MEANING to the word written in capital letters.

20. My friend was reduced to BEGGARLINESS by various ill-advised business deals.

- A. affluence
- B. penury
- C. influence
- D. poverty
- E. impoverished

ANSWERS

1. D	2. A	3. D	4. D	5. C
6. A	7. A	8. C	9. A	10. B
11. C	12. D	13. D	14. A	15. C
16. C	17. A	18. C	19. D	20. A

EXPLANATION

1. The correct answer is option [D].

2. The correct answer is option [A].

Her father examined the man from head to foot, shrewdly measuring his capacity to pay.

3. The correct answer is option [D]

Manoeuvre means a clever plan or movement, especially one used to deceive people.

4. The correct answer is option [D].

5. The correct answer is option [C].

6. The correct answer is option [A]

The plural of 'mouse' is 'mice'. One can't always apply the rule of adding an 's' to change singular to plural. Some nouns have different (irregular) plural forms.

child – children

woman – women

man – men

mouse – mice

goose – geese

7. The correct answer is option [A]

For nouns that end in 'ch', 'x', 'ss', 's', or 'sh' sounds we add 'es' to obtain the plural.
E.g.

box – boxes

watch – watches

boss – bosses

bus – buses

bush – bushes

8. The correct answer is option [C]

This is one of the nouns where we can't obtain the plural by modifying the singular form of the word. These nouns have different plural forms because these are irregular. In this case, the plural of 'child' is 'children'.

9. The correct answer is option [A]

'Even', 'also' and 'too' all nearly mean the same thing but there are differences in their usage. 'Also' and 'too' are used when talking about an additional object. 'Even' is used to talk about a case that is out of the ordinary. Like in this case – it wouldn't be expected at his age to work hard instead of amusing himself. But in his case, despite being that age, he did. So we use 'even'. Also note that when using 'even' this way, it is used at the beginning of the phrase and not at the end. The correct phrase would then be 'Even in his middle age'. Since 'to' is being used as a preposition here and not as an infinitive, the -ing form of the verb can follow 'to'. The base form is used when 'to' is the part of an infinitive. Eg: She came to pay the rent.

10. The correct answer is option [B]

The plural of 'radius' is 'radii'. One cannot always apply the rule of adding an 's' to change from singular to plural

11. The correct answer is option [C].

Compulsory means being required by law or rule.

Mandatory is synonym of compulsory.

Voluntary means to arise, act or do something out of free will; resulting from somebody's choice or decision without an external force/influence/pressure.

Gratuitous means to give or do something free without being paid.

Obligatory is a synonym of compulsory.

12. The correct answer is option [D]

13. The correct answer is option [D]

14. The correct answer is option [A]

15. The correct answer is option [C].

16. The correct answer is option [C]

- 17. The correct answer is option [A].
- 18. The correct answer is option [C]
- 19. The correct answer is option [D]
- 20. The correct answer is option [A].

SET 2 ENGLISH

1. The major advantage of the secret ballot is that
 - A. it is faster than other systems
 - B. nobody can be prevented from voting
 - C. it ensures the anonymity of each voter
 - D. losers can ask for another secret voter

2. In a one party state
 - A. there are no free citizens
 - B. the communist party is the only legal party
 - C. the ruling party is the only legal party
 - D. elections to be legislature are held at the party's conferences

3. The First DG of the Customs was appointed in the Year
 - A. 2014
 - B. 1905
 - C. 1891
 - D. 1855

4. The early duty of The Customs was primarily _____
 - A. chasing of thieves
 - B. collection of inland Revenue
 - C. sending crime reports to the government
 - D. publicizing the country's G.D.P

5. A cabinet system of government is practiced in
 - A. Britain and Canada
 - B. the soviet union
 - C. all European Countries including Britain
 - D. the United State of America

6. A proclamation by the head of state ending a session of parliament is called

- A. a dissolution
- B. an adjournment
- C. a prorogation
- D. a devolution

7. The name 'Department of Customs and Excise' emerged in _____

- A. 1914
- B. 2000
- C. 2004
- D. 1922

8. The early divisions of 'The Customs and Excise Preventive' service was 'Maritime' and _____

- A. Financial
- B. Transport
- C. Revenue
- D. Preventive

9. The constitution of the federal republic of Nigeria

- A. promotes unity in diversity
- B. allows for the dominance of the minority ethnic groups
- C. concentrates governmental power at on one level of government
- D. ensures the dominance of one political party.

10. The transfer of authority to local government council is known as

- A. delegation
- B. fusion
- C. fragmentation
- D. devolution

11. The Nigeria Customs Service is headed by the _____

- A. Head of The Customs Service
- B. Minister of Customary affairs
- C. Comptroller-General
- D. President of The Federal Republic

12. In The NCS, there is/are _____ Deputy Comptroller-General(s)

- A. ten
- B. two
- C. six
- D. one

13. The principle of anonymity of civil servants means that they

- A. are not the servant of a particular government
- B. are trained for the duties they perform
- C. are credited or blamed for anything they do
- D. they are seen but not heard

14. The six registered political parties in Nigeria in 1982 were

- A. UPN, NPN, PPA, PPP, NPP, and NAP
- B. UPN, GNPP, NAP, PRP, NPP, NPN,
- C. NPN, UPN, NPP, PRP, PPP NNDP,
- D. NPC, GNPP, PRP, UPN, NPP and PPA

15. Which of the following is not an assigned unit under the NCS _____

- A. Security and Smuggler arrest unit
- B. Enforcement, Investigation, and Inspection unit
- C. Finance Administration and Technical Service unit

D. Tariff & Trade unit

16. The Assistant Comptroller-Generals are higher in rank than the Deputy Comptroller-Generals

A. True

B. False

C. They are equal

D. It depends

17. Which of the following is NOT a pressure group in Nigeria

A. farmers

B. the Nigerian union of teachers (NUT)

C. Nigeria medical associate (NMA)

D. academic staff union of university (ASUU)

18. The N.C.N.C sent a delegation to London in 1947 to protest against the

A. burns constitution

B. Richards constitution

C. Littleton constitution

D. Macpherson constitution

19. ACG (Headquarters) reports directly to the Comptroller-General

A. True

B. False

C. He/she doesn't have to report

20. Where is The NCS headquarters located

A. Wuse, Abuja

B. Yaba, Lagos

C. Apapa, Lagos

D. Kaduna, Kaduna

ANSWERS

1. C	2. B	3. C	4. B	5. A
6. A	7. D	8. D	9. A	10. A
11. C	12. C	13. D	14. D	15. A
16. B	17. A	18. C	19. A	20. A

EXPLANATION

1. Answer: C

2. Answer: B

3. Answer: C

4. Answer: B

5. Answer: A

6. Answer: A

7. Answer: D

8. Answer: D

9. Answer: A

10. Answer: A

11. Answer: C

12. Answer: C

13. Answer: D

14. Answer: D

15. Answer: A

16. Answer: B

17. Answer: A

18. Answer: C

19. Answer: A

20. Answer: A

MATHS SET 3

1. In school there are some bicycles and 4 wheeler wagons. There are 18 students each own either a bicycle or a wagon. One Tuesday there are 58 wheels in the campus. How many bicycles are there?

- A. 10
- B. 9
- C. 7
- D. 12
- E. 6

2. Evaluate:

$$986 \times 237 + 986 \times 863$$

- A. 1084600
- B. 1084800
- C. 986000
- D. 986860
- E. None of these

3. If $A/B = 3/5$, then $15A = ?$

- A. 10B
- B. 15B
- C. 9B
- D. 25B
- E. None of these

4. A Pipe can fill in 20 minutes and Pipe B in 30 mins and Pipe C can empty the same in 40 mins. If all of them work together, find the time taken to fill the tank?

- A. 140/7 mins

- B. $120/6$ mins
- C. $80/6$ mins
- D. $120/7$ min
- E. $140/8$ min

5. What is a percent of b divided by b percent of a ?

- A. 1
- B. $ab/10$
- C. $(a+b)/10$
- D. $a + b/a$
- E. Depends on a and b

6. By observation, we observe that the decimal value of $39/50$ is greater than the decimal value of $3/5$. So, the fraction must be greater too.

If $x = y = 2z$ and $xyz = 256$ then what is the value of x ?

- A. 12
- B. 8
- C. 16
- D. 6
- E. Cannot be determined

7. The price of a product is reduced by 30%. By what percentage should it be increased to make it 100%?

- 1. 50 %
- 2. 42.85 %
- 3. 30 %
- 4. 46.87 %
- 5. 45.83%

8. Which of the following fractions is less than $\frac{1}{3}$?

- A. $\frac{22}{62}$
- B. $\frac{15}{46}$
- C. $\frac{2}{3}$
- D. 1
- E. None of These

9. A is twice as good a workman as B and together they finish a piece in 18 days. In how many days will A alone finish the work?

- A. 20 days
- B. 27 days
- C. 24 days
- D. 16 days
- E. None of these

10. If on an item a company gives 25% discount, they earn 25% profit. If they now give 10% discount, then what is the profit percentage?

- A. 40%
- B. 55%
- C. 35%
- D. 30%
- E. 50%

11. What is the selling price of a car if the cost of the car is \$60 and a profit of 10% over cost price is earned?

- A. \$ 66
- B. \$ 54
- C. \$ 72

- D. \$ 64
- E. None of these

12. How many alphabets need to be there in a language if one were to make 1 million 3 letter initials using the alphabets of the language?

- A. 140
- B. 1000
- C. 10
- D. 120
- E. 100

13. Three partners started a business with \$ 80000. At the end of the year they receive \$ 1800, \$ 3000 and \$ 4800 as profit. Find the investment of the second person.

- A. \$ 27000
- B. \$ 7030
- C. \$ 8510
- D. \$ 32000
- E. None of these

14. Mr and Mrs Smith have invited 9 of their friends and their spouses for a party at the Waikiki Beach resort. They stand for a group photograph. If Mr Smith never stands next to Mrs Smith (as he says they are always together otherwise). How many ways the group can be arranged in a row for the photograph?

- A. $20!$
- B. $19! + 18!$
- C. $18 \times 19!$
- D. $2 \times 19!$
- E. None of these

15. What should come in place of question mark '?' in the following number series?

121, 112, 97, 91, 86

- A. 102
- B. 108
- C. 99
- D. 104
- E. None of these

16. In 1988, a kg of paper was sold at Rs25/-. If the paper rate increases at 1.5% more than the inflation rate which is 6.5% a year, then what will be the cost of a kg of paper after 2 years?

- A. 28.8
- B. 29.8
- C. 29.16
- D. 27.5
- E. 29

17. Time and Work

George can do a piece of work in 8 hours Paul can do the same work in 10 hours, Hari can do the same work in 12 hours George, Paul and Hari start the same work at 9 am, while George stops at 11 am, the remaining two complete the work. Approximately at what time will the work complete?

- A. 11.30 am
- B. 12 noon
- C. 12.30 pm
- D. 1 pm
- E. 2 pm

18. If PQIRST is a parallelogram what is the ratio of triangle PQS & parallelogram PQIRST?

- A. $\frac{3}{2}$
- B. $\frac{1}{3}$
- C. $\frac{4}{3}$
- D. $\frac{2}{3}$
- E. $\frac{1}{2}$

19. A cylinder of diameter 14 cm and height 7 cm is converted into a cone of radius 6 cm. Now, what could be the height of the new shape?

- A. 28.58 cm
- B. 26.58 cm
- C. 27.48 cm
- D. 27.74 cm
- E. None of these

20. 23 people are there, they are shaking hands together, how many handshakes possible, if they are in pair of cyclic sequence?

- A. 250
- B. 252
- C. 242
- D. 253
- E. 23

ANSWERS				
41. C	42. A	43. C	44. D	45. A
46. B	47. B	48. B	49. B	50. E
51. A	52. E	53. E	54. C	55. D
56. C	57. D	58. E	59. A	60. D

EXPLANATION

1. Solution: C

Let there are B bicycles and W wagons.

Total number of wheels = $2 \times B + 4 \times W$

Given 58 wheels $\Rightarrow 2B + 4W = 58$

$\Rightarrow B + 2W = 29$ (Eq.1)

Also given $B + W = 18$ (Eq.2)

\therefore Eq.1 – Eq.2

$\Rightarrow W = 11$

$\Rightarrow B = 18 - W$

$\Rightarrow B = 18 - 11 = 7$ Bicycles.

2. Solution: A

We are given $986 \times 237 + 986 \times 863$

Hence taking 986 common

We have $986 \times (237 + 863)$

$= 986 \times 1100$

$= 108460018$

3. Solution: C

$$A/B = 3/5$$

Cross Multiplying

$$\Rightarrow 5 \times A = 3 \times B$$

$$\Rightarrow 5A = 3B$$

Multiplying both sides of the equation by 3

$$\Rightarrow 15A = 9B$$

Hence option (C)

4. Solution: D

In one min work done by A = $1/20$

In one min work done by B = $1/30$

In one min work done by C = $1/40$

\therefore A and B both fill the tank and C empty the tank

\therefore Total work done in one min to fill the tank = $1/20 + 1/30 - 1/40 = 6+4-3/120 = 7/120$

\therefore Time take to fill the tank = $120/7$ mins

5. Solution: A

Let the two numbers are a and b

a percent of b = $(a/100) \times b = ab/100$ (i)

b percent of a = $(b/100) \times a = ab/100$ (ii)

Dividing (i) by (ii), we get 1, since they are both the same

6. Solution: B

$$xyz = x \cdot x \cdot x/2 = x^3/2$$

$$\text{Now, } x^3/2 = 256$$

$$\Rightarrow x^3 = 512$$

$$\Rightarrow x = 8$$

7. Solution: B

Let the cost price be x

Discount = 30%

New Price = Cost Price - Discount

$$\text{New Price} = x - (30/100)x = (70/100)x = (7/10)x$$

Now the New Price = $(7/10)x$

% increase to bring it back to its original price (i.e. x) = y

$$\Rightarrow (7/10)x + (y/100) \times (7/10)x = x$$

$$\Rightarrow (7/10) + (y/100) \times (7/10) = 1$$

$$\Rightarrow (y/100) \times (7/10) = (3/10)$$

$$\Rightarrow y = (3/7) \times 100 = 42.85 \%$$

8. Solution: B

Converting Each into decimal and comparing

$$1/3 = 0.33333$$

$$22/62 = .354$$

$$15/46 = .326$$

$$2/3 = 0.666$$

$$1 = 1$$

Hence Comparing it can be easily find out that $(15/46) < (1/3)$

Hence Option (B)

9. Solution: B

Let number of days taken by A to finish the work alone = m

Part of work done by A in 1 day = $1/m$

Since, A is twice as good as

Then number of days taken by B to finish the work = $2m$

Part of work done by B in 1 day = $1/2m$

We have

$$\Rightarrow 1m + 12m = 118$$

$$\Rightarrow 1m + 12m = 118$$

$$\Rightarrow 2 + 12m = 118$$

$$\Rightarrow 2 + 12m = 118$$

$$\Rightarrow \frac{3}{2}m = \frac{1}{18}$$

$$\Rightarrow m = 18 \times \frac{3}{2}$$

$$\Rightarrow m = 27$$

10. Solution: E

Let the Marked price of the object is Rs.100

Given that company gives 25% discount, the object is sold at 75% price = 0.75×100
= Rs.75

\therefore Rs.75 fetches 25% profit, this implies $\frac{25}{100} = \frac{(75 - \text{Cost})}{\text{Cost}}$ [Cost is cost incurred by company]

[From percentage gain formula, Percentage profit = $\frac{(\text{Selling price} - \text{cost})}{\text{Cost}} \times 100$]

$$0.25 \times \text{cost} = 75 - \text{cost}$$

$$\Rightarrow \text{Cost} = 75/1.25$$

$$\Rightarrow \text{Cost} = \text{Rs.60}$$

Now the company gives only 10% discount \Rightarrow Selling price = $0.90 \times 100 = \text{Rs.90}$

Profit made = Rs.90 - Rs.60 = Rs.30

Profit Percentage = $\frac{(30/60)}{1} \times 100 = 50\%$

11. Solution: A

Selling Price = Cost Price + Profit

Cost Price = 60

Profit = 10%

$$\text{Selling price} = 60 + (10/100) \times (60)$$

$$\text{Selling price} = 60 + 6$$

$$\text{Selling price} = 66$$

Hence Option (A)

12. Solution: E

Suppose we have A number of alphabets in a language.

$$\Rightarrow \text{Number of ways to make a 3 letter initial} = A \times A \times A = A^3$$

$$\text{Given, number of ways to make 3 letter initial} = 1 \text{ million} = 10^6$$

$$\Rightarrow A^3 = 10^6$$

$$\Rightarrow A = 10^2 = 100$$

\therefore The language needs 100 alphabets

13. Solution: E

$$\text{Ratio of their profit} = 1800 : 3000 : 4800 = 3 : 5 : 8$$

As they receive profit in the ratio 3 : 5 : 8, their capital will also be divided in that ratio

So, the investment brought in by the second person will be in the ratio of 5/16 of the entire capital

$$= (5/16) \times 80000 = 25000$$

$$\text{So, investment of 2nd person} = \$ 25000$$

14. Solution: C

$$\text{We have total number of friends} = 9$$

$$\text{Total number of spouses} = 9$$

$$\text{Hence total number of people in picture} = 9 + 9 + 2 \text{ (the hosts)}$$

$$= 20$$

Hence they can be arranged in 20! Ways

When Mr and Mrs Smith are together, assume both as a group. Now total people = 19

Number of arrangement, when Mr and Mrs Smith are together = $19! \times 2!$

So, Number of ways arrangement when Mr and Mrs Smith are not together in the photograph

$$= 20! - 19! \times 2!$$

$$= 20 \times 19! - 19! \times 2$$

$$= 18 \times 19!$$

15. Solution: D

We have the terms of the given series formed as

$$\Rightarrow 112 = 121 - 9$$

$$\Rightarrow ? = 112 - 8$$

$$\Rightarrow ? = 104$$

$$\Rightarrow 97 = 104 - 7$$

$$\Rightarrow 91 = 97 - 6$$

$$\Rightarrow 86 = 91 - 5$$

16. Solution: C

Actual rate of increase in price of paper = $6.5 + 1.5 \% = 8\%$

Cost of 1 kg paper in 1988 = 25

Cost of 1 kg paper in 1989 = $25 + 8\% \text{ of } 25$

$$= 25 + 8/100 \times 25$$

$$= 25 + 2$$

$$= 27$$

Cost of 1 kg paper in 1990 = $27 + 8\% \text{ of } 27$

$$= 27 + 8/100 \times 27$$

$$= 27 + 2.16$$

$$= 29.16$$

17. Solution: D

Amount of work George can do in one hour = $\frac{1}{8}$

Amount of work Hari can do in one hour = $\frac{1}{12}$

Amount of work Paul can do in one hour = $\frac{1}{10}$

Amount of work all together can do in one hour = $(\frac{1}{8}) + (\frac{1}{10}) + (\frac{1}{12}) = \frac{37}{120}$

All three work for two hours i.e. from 9 am to 11 am

\Rightarrow Work done = $2 \times (\frac{37}{120}) = \frac{37}{60}$

Remaining work = $1 - (\frac{37}{60}) = \frac{23}{60}$

Amount of work Paul and Hari can do in one hour = $(\frac{1}{10}) + (\frac{1}{12}) = \frac{11}{60}$

Time taken by Paul and Hari to complete $\frac{23}{60}$ of work = $\frac{23}{11}$ hours.

= 2 hours and $(\frac{60}{11})$ minutes. = 2 hours (approximating)

So the work gets completed by 11 am + 2 hours = 1 pm

18. Solution: E

Area of parallelogram is = base \times height (1)

Area of triangle = $(\frac{1}{2}) \times (\text{base} \times \text{height})$ (2)

\therefore Triangle PQS inside the parallelogram PQRST.

\therefore Base \times height will be same for both.

Ratio = $\frac{\text{Area of triangle PQS}}{\text{Area of Parallelogram PQRST}} = \frac{1}{2}$

19. Solution: A

We have the volume of the cylinder as $\pi r^2 h$

We have radius = diameter/2 = $\frac{14}{2} = 7$ and height = 7

Hence, volume of cylinder = $\pi \times 7 \times 7 \times 7$

= 343π

We also know that volume of cone = $\frac{\pi r^2 h}{3}$

We have volume of cone = Volume of cylinder

Hence $343 \pi = \frac{\pi r^2 h}{3}$

$$\Rightarrow 343 \times 3 = 6 \times 6 \times h$$

$$\Rightarrow 1029 = 36 \times h$$

$$\Rightarrow h = 1029/36$$

$$\Rightarrow h = 28.58 \text{ cm}$$

20.Solution: D

Every person shakes hand with every other person = 22 hand shakes

$$\Rightarrow \text{Total handshakes} = 22 \times 23$$

But A handshaking with B is same as B Handshaking A

$$\Rightarrow \text{Total handshakes} = (22 \times 23)/2 = 253$$

ENGLISH SET 3

1. This passage sums up the two problems peculiar to the book trade which make it different from any other trade – the problem of selection and the problem of stocking. How is the book seller to tell what, in an enormous output, will prove saleable, before the full weight of unsold items affects the balance of his business, and how is he, at the same time, to hold a stock large enough to enable the public to choose freely? He may seek to escape from this dilemma by becoming the passive sales representative of large publishing houses or distribution networks, but he is then no longer a book seller. He may take refuge in the sale of safe items to a restricted circle of customers, but he hereby cuts himself off from all that is vital in his trade and dooms himself to mediocrity and stagnation.

On the other hand, he may protect his business from the danger of idle stock by speculating on the latest publications, but this is a dangerous game in that it implies a constantly changing clientele: readers remain faithful to their own discoveries and failure to follow up a book, an author or a type of literature means dismissing the public responsible for their success.

This brings us back to the fact that books are undefinable. The story is told of a certain country with a great many generals where it was decided to present a rare and valuable edition of an old book to a general about to retire. The old soldier looked at the volume and remarked, 'A book? What's the point? I've already got one!'

How many solutions to the bookseller's problems are offered in this passage?

- A. Two
- B. Three
- C. Four
- D. Five
- E. One

2. As the stranger approached, Shola noticed that he was handsome and her excitement increased. It was of such a man she had dreamt. He had a fine, arrogant carriage, like a soldier or someone in authority. When he reached the end of the pier, he addressed them in a rich, deep voice that disturbed her as the voluptuous rising of the tide had done.

'You're Tunde Onu, I'm told,' he said to her father.

'That's right,' said her father.

'The bus conductor told me you take people to the islands,' the man continued. 'I'd like to go there if you can take me.'

Her father examined the man from head to foot, shrewdly measuring his capacity to pay. Then he said:

'When were you thinking of going?'

'Right away.'

'That's a different story, for my boatman is gone to Badagry and won't be back before nightfall.

'Oh! Said the stranger,' that's too bad. You couldn't get someone else instead of him?'

'I would have to think hard', he said gloomily, 'for it's not everyone that would do for the job of going with me beyond the bay to the islands at this time of the year.'

Shola understood her father's manoeuvre and felt ashamed.

Which of the following is NOT true of the passage?

- A. Shola did not approve of her father's behaviour towards the stranger.
- B. Shola's father could row the stranger to the island alone if he so wished.
- C. Shola's father exaggerated the difficulties in order to raise his fee.
- D. Tunde Onu's boatman is the only man who knows how to sail beyond the bay to the island.
- E. The stranger had a fine, arrogant carriage.

Read the passage carefully and answer the question.

3. This passage sums up the two problems peculiar to the book trade which make it different from any other trade – the problem of selection and the problem of stocking. How is the book seller to tell what, in an enormous output, will prove saleable, before the full weight of unsold items affects the balance of his business, and how is he, at the same time, to hold a stock large enough to enable the public to choose freely? He may seek to escape from this dilemma by becoming the passive sales representative of large publishing houses or distribution networks, but he is then no longer a book seller. He may take refuge in the sale of safe items to a

restricted circle of customers, but he hereby cuts himself off from all that is vital in his trade and dooms himself to mediocrity and stagnation.

On the other hand, he may protect his business from the danger of idle stock by speculating on the latest publications, but this is a dangerous game in that it implies a constantly changing clientele: readers remain faithful to their own discoveries and failure to follow up a book, an author or a type of literature means dismissing the public responsible for their success.

This brings us back to the fact that books are undefinable. The story is told of a certain country with a great many generals where it was decided to present a rare and valuable edition of an old book to a general about to retire. The old soldier looked at the volume and remarked, 'A book? What's the point? I've already got one!'

Of all the solutions proposed for the bookseller's problems, how many actually have positive effects?

- A. Two
- B. Three
- C. Four
- D. None
- E. One

Read the passage carefully and answer the question.

4. This passage sums up the two problems peculiar to the book trade which make it different from any other trade – the problem of selection and the problem of stocking. How is the book seller to tell what, in an enormous output, will prove saleable, before the full weight of unsold items affects the balance of his business, and how is he, at the same time, to hold a stock large enough to enable the public to choose freely? He may seek to escape from this dilemma by becoming the passive sales representative of large publishing houses or distribution networks, but he is then no longer a book seller. He may take refuge in the sale of safe items to a restricted circle of customers, but he hereby cuts himself off from all that is vital in his trade and dooms himself to mediocrity and stagnation.

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The story of the old soldier and the book in the passage is an illustration of the point that _____.

- A. the general had already got a book
- B. a book is of interest only to one who values it
- C. soldiers do not like to read books
- D. booksellers face a real dilemma because of constantly changing clientele
- E. rare and valuable editions of books are no longer wanted

Read the passage carefully and answer the question.

5. This passage sums up the two problems peculiar to the book trade which make it different from any other trade – the problem of selection and the problem of stocking. How is the book seller to tell what, in an enormous output, will prove saleable before the full weight of unsold items affects the balance of his business, and how is he at the same time to hold a stock large enough to enable the public to choose freely? He may seek to escape from this dilemma by becoming the passive sales representative of large publishing houses or distribution networks, but he is then no longer a book seller. He may take refuge in the sale of safe items to a restricted circle of customers, but he hereby cuts himself off from all that is vital in his trade and dooms himself to mediocrity and stagnation.

On the other hand, he may protect his business from the danger of idle stock by speculating on the latest publications, but this is a dangerous game in that it implies a constantly changing clientele; readers remain faithful to their own discoveries. Failure to follow up a book, an author or a type of literature means dismissing the public responsible for their success.

This brings us back to the fact that books are undefinable. The story is told of a certain country with a great many generals where it was decided to present a rare and valuable edition of an old book to a general about to retire. The old soldier looked at the volume and remarked, 'A book? What's the point? I've already got one!'

Books are different from other goods because _____.

- A. customers for the book trade are much restricted
- B. unlike other goods, books are printed
- C. one cannot tell so easily which books will prove saleable
- D. books can be kept in stock much longer than other goods
- E. booksellers are always idle

From the options lettered A - E, choose the one that is OPPOSITE IN MEANING to the word written in capital letters.

6. The climate of Nigeria is an ENERVATING one.

- A. a debilitating
- B. a weak
- C. an invigorating
- D. a harmonious
- E. exhausting

From the options lettered A - E, choose the one that is OPPOSITE IN MEANING to the word written in capital letters.

7. The chairman's verdict REDRESSED the injustice meted out by the secretary.

- A. corrected
- B. criticised
- C. aggravated
- D. addressed
- E. calmed

Choose the option OPPOSITE IN MEANING to the word written in capital letters.

8. Since mortality is the lot of man, argued the preacher, we must all accept death with EQUANIMITY.

- A. placidity
- B. uncertainty
- C. serenity
- D. anxiety
- E. unpreparedness

From the options lettered A – E, fill in the blank space with the word OPPOSITE IN MEANING to the capitalised word.

9. Osemudiamen complained that while his colleagues were ELEVATED, he was _____.

- A. interdicted
- B. prompted
- C. suspended
- D. dismissed
- E. demoted

10. Identify the synonym of the given word

Zest

- A. pleasure
- B. distaste
- C. flop
- D. encircles
- E. enthusiasm

11. Fill in the blank with suitable word.

Barking dogs ____ bite.

- A. regularly
- B. rarely

- C. seldom
- D. frequently
- E. don't

12. Choose an appropriate word from the options to suitably fill the blank in the sentence below so that the sentence makes sense, both grammatically and contextually.

Focus on solving the refugee problems and drawing plans for development was less evident.

- A. short-range
- B. sustainable
- C. needless
- D. merit
- E. regarding

13. Choose an appropriate word from the options to suitably fill the blank in the sentence below so that the sentence makes sense, both grammatically and contextually.

The groups were feared but at the same time by the locals.

- A. revered
- B. detested
- C. rebelled
- D. loathed
- E. loved

14. Choose an appropriate phrase from the options to suitably fill the blank in the sentence below so that the sentence makes sense, both grammatically and contextually.

.....; the logo and the product were repeatedly flashed with jingle that dinned the name into our heads.

- A. There was a time when visual advertising styles were blatantly direct
- B. It was this kind of advertising that paved the way
- C. There was no escape from the bombardment
- D. Similar products are clubbed together by a brand inspired generic name
- E. When there was no technology

15. Read the sentence to find out whether there is any error in it. The error, if any, will be in one part of the sentence. The number of that part is the answer. If there is no error, the answer is (5). Ignore errors of punctuation, if any.

No sooner had (1)/ he begun to speak (2)/ when the opposition members (3)/ started shouting slogans. (4)/ No error (5)

- A. 1
- B. 2
- C. 3
- D. 4
- E. 5

16. Pick out the most effective word from the given words to fill in the blank to make the sentence meaningfully complete.

His interest in the study of human behavior is indeed very.....

- A. strong
- B. large
- C. broad
- D. vast
- E. deep

17. Comprehension:

Below, a passage is given with five blanks labelled (A)–(E). Below the passage, five options are given for each blank. Choose the word that fits each blank most appropriately in the context of the passage, and mark the corresponding answer.

In the 1920s, new technology allowed filmmakers to ___(A)___ to each film a soundtrack of speech, music and sound effects ___(B)___ with the action on the screen. These sound films were initially distinguished by calling them talking pictures, or talkies. The next major step in the development of cinema was the introduction of colour. While the addition of sound to film revolutionized the medium, quickly driving ___(C)___ silent movies, colour was adopted more gradually. The public was relatively indifferent to colour photography as opposed to black-and-white. But as colour processes improved and became as ___(D)___ as black-and-white film, more and more movies were filmed in colour after the end of World War II, as the industry in America came to view colour as an essential to attracting audiences in its competition with television, which remained a black-and-white medium until the mid-60s. By the end of the 1960s, colour had become the ___(E)___ for filmmakers.

Which of the following words most appropriately fits the blank labelled (A)?

- A. Give
- B. Attach
- C. Present
- D. Take
- E. Fill

Choose from the options lettered A -E, the one that is nearest in meaning to the word written in *italics* in the sentence below.

18. He has been mandated to search for a new candidate for the post.

- A. compelled
- B. convinced
- C. assigned
- D. demanded
- E. requested

From the options lettered A - E, choose the one that is NEAREST IN MEANING to the words written in capital letters.

19. It was their custom to KEEP AN OPEN HOUSE on Sundays.

- A. To welcome visitors.

- B. To keep the shutters open for proper ventilation.
- C. To leave the house open to only strangers.
- D. To put up the house on rent.
- E. To open their doors.

Fill in the blank space with the most appropriate option.

20. Air travel is becoming increasingly popular with travellers who go from one country to another. A look at the international time table of any major airlines such as Pan America or Air France will show hundreds of flights departing at fixed times every week. Besides these scheduled flights, you can travel nowadays on flights arranged by a club for its members which hires an airplane for the journey. Fares on these ____ flights are low because the club ensures that all seats are filled.

- A. airline
- B. private
- C. popular
- D. chartered
- E. excursion

ANSWERS

1. B	2. D	3. D	4. B	5. C
6. C	7. C	8. D	9. E	10. E
11. C	12. B	13. A	14. A	15. C
16. E	17. B	18. C	19. A	20. D

EXPLANATION

1. The correct answer is option [B].

2. The correct answer is option [D].

3. The correct answer is option [D].

Look at the solutions again and observe that each proposed solution has a side effect afterwards.

4. The correct answer is option [B].

5. The correct answer is option [C].

6. The correct answer is option [C].

ENERVATING means deprive of vigour or vitality.

7. The correct answer is option [C].

REDRESSED means to make up for; do something that compensates for (wrongdoing).

8. The correct answer is option [D].

9. The correct answer is option [E].

Elevated means being exalted in rank.

Interdicted deals with a prohibited action.

Prompted means incited or urged.

To suspend means to debar temporarily from an office or a function.

Dismissed means sent away or terminated from one's employment.

Demoted means being reduced in rank or status; given a lesser responsibility or office.

10. The correct answer is option [E]

Zest means great energy and enthusiasm. 'Pleasure' is 'feeling of happiness or satisfaction'. 'Distaste' is aversion or dislike. 'Flop' is to fail. 'Encircle' is to surround. Thus, 'enthusiasm' is the correct synonym. Let us explore its use in a sentence:

The zest the old man portrayed towards life was admirable.

11. The correct answer is option [C]

The statement is an idiom which means that 'a man who speaks too much never acts'.

12. The correct answer is option [B]

Using 'regarding' would be grammatically wrong as it is a preposition and cannot come immediately after another preposition 'for'.

We need an adjective or a noun to fill the blank. Besides, there is little help available from the context for deciding among rest of the options and you will have to rely on your reading experience to figure it out. Of late, the term 'sustainable development' (which means development that meets the needs of the present without compromising the ability of future generations to meet their own needs) has become a favourite with planners and policy-makers and thus it makes the most sense among the given options.

'Short-range', though not grammatically wrong, isn't a very meaningful adjective for 'development'. Similarly, 'merit' is not as meaningful as 'sustainable' when used with 'development' and unless the author is being sarcastic, 'needless' is not appropriate either.

13. The correct answer is option [A]

We need a word which is a contrast in meaning to 'feared' because of the phrase 'but at the same time'. 'Revered' means respected and something can be feared and respected at the same time. In fact, there is a term 'reverential fear' which essentially means the same thing. 'Love' and 'fear' cannot be simultaneously felt by someone. 'Detested' and 'loathed' are synonyms but do not suit the context here. 'Rebelled' would be contextually and grammatically incorrect.

14. The correct answer is option [A]

If you remember the html element <blink> then you can probably guess what this sentence is talking about. It was distracting, 'blatantly direct' and in-your-face method of advertising. This tag is no longer supported by modern browsers. The second option contains too many pronouns and it would be inappropriate to put it at the start. The third option is not as appropriate as the first one in the given context since such type of advertisements have ceased to exist and an 'escape' has been found.

15. The correct answer is option [C]

‘No sooner’ requires to be followed by ‘than’ and not ‘when’. Thus, the correct sentence should be ‘No sooner...than the opposition members started shouting slogans’.

16. The correct answer is option [E]

We need a predicative adjective for the noun ‘interest’. A predicative adjective is one which describes the subject of the sentence and is connected by a linking verb. Of the given options, only ‘deep’ goes well with ‘interest’.

Note that there are no specific rules for deciding whether a particular adjective suits a noun or not. The adjective-noun combination should be meaningful and should be idiomatic in nature else it will sound weird. To be able to make proper choice of adjectives, you will need to be well-read and have a good vocabulary.

17. The correct answer is option [B]

‘Take’ and ‘fill’ clearly don’t fit the context. ‘Present’ and ‘Give’ do not go well with the technical term like soundtrack. ‘Attach’ is the only word which fits the context and also goes well with the other terms.

18. The correct answer is option [C]

19. The correct answer is option [A].

20. The correct answer is option [D].

1. A popular policy of colonial administration in British west Africa was

- (A) association
- (B) indirect rule
- (C) paternalism
- (D) assimilation

2. The first governor-general of colonial Nigeria was

- (A) sir, Hugh Clifford
- (B) sir James Robertson
- (C) lord Lugard
- (D) sir Ralph moore.

3. The NCS has _____ total number of zones

- A. 4
- B. 6
- C. 18
- D. 36

4. The Zonal division of The NCS is according to the number of _____

- A. Geo-political Zones
- B. States in the Country
- C. States that are along the national boarder
- D. None of the above

5. The first military government in Nigeria was headed by

(A) General Yakubu Gowon

(B) General Agunyi Ironsi

(C) General M. Mohammed

(D) General O. Obasanjo.

6. The first general election in Nigeria was hold in

(A) 1933

(B) 1952

(C) 1955

(D) 1959

7. The Headquarter office of The NCS is headed by a/an _____

A. Compt

B. ACG

C. DCG

D. Chairman

8. The Headquarter of Zone B of the NCS is located in _____

A. Benue

B. Bauchi

C. Kaduna

D. P/Harcourt

9. The supreme organ of the U.N O is the

A. general assembly

B. secretary general

C. world court

D. world bank

10. Traditional rulers were restricted to ceremonial rules by the local government reforms of

- A. 1966
- B. 1976
- C. 1984
- D. 1987

11. The Headquarter of Zone C of the NCS is located in

- A. Benue
- B. Bauchi
- C. Kaduna
- D. P/Harcourt

12. The sub-division of 'Zone' is _____

- A. District
- B. Area Command
- C. Council
- D. Region

13. Which of The following is not a Zonal Location of The NCS

- A. Lagos
- B. Kaduna
- C. Port/Harcourt
- D. Enugu

14. Bauchi is a Zonal Division of The NCS

- A. True

- B. False
- C. Cannot tell

15. The NCS has _____ area commands

- A. 25
- B. 30
- C. 36
- D. 5

16. Indirect rule refers to situation in which

- a. the rulers are subject to the supreme laws of the land.
- b. Laws are supreme
- c. The judiciary is independent
- d. The British authority rule through our local elites

17. An important principle of the civil service is

- a. Authoritarianism
- b. Anonymity
- c. Nepotism
- d. Partisanship

18. Which of these is a **core** function of The NCS

- A. Making of revenue-related laws
- B. Collection of Revenue i.e. Import and Excise Duties
- C. Trade Facilitation
- D. Combating money laundering

19. The NCS has corroborative functions with Police

- A. True
- B. False
- C. Cannot tell

20. It is mandatory for The NCS to Protect businesses against illegal trade malpractices

- A. True
- B. False
- C. Cannot tell

ANSWERS

1. A	2. C	3. A	4. D	5. B
6. D	7. B	8. C	9. A	10. B
11. D	12. B	13. D	14. A	15. A
16. D	17. A	18. B	19. A	20. A

MATHS SET 4

1. An unbiased die is tossed. find the probability of getting a multiple of 3

- A. $\frac{1}{2}$
- B. $\frac{1}{3}$
- C. $\frac{1}{4}$
- D. $\frac{1}{6}$
- E. None of these

2. Capacity of a cylindrical vessel is 25,872 cm³. If the height of the cylinder is 200% more than the radius of its base, what is the area of the base in square cm?

- A. 336 cm²
- B. 1232 cm²
- C. 616 cm²
- D. 308 cm²
- E. Cannot be determined

3. What is the next number of the following sequence

48, 49, 57, 59, 36, 39, 28, 32, x, y

- A. 24,18
- B. 24,19
- C. 13,18
- D. 13,19

4. Find the value of $464 \div (16 \times 2.32)$

- A. 12.5
- B. 14.5
- C. 10.5
- D. 8.5
- E. None of these

5. What is the next number of the following sequence

13, 24, 36, 23, 34, 56, 33, 44, 96, 43, 54, 116

- A. 53.0
- B. 65.0
- C. 167.0

D. 169.0

6. Three coins are tossed. The probability of getting at least one head is----?

- A. $\frac{1}{3}$
- B. $\frac{2}{5}$
- C. $\frac{3}{8}$
- D. $\frac{7}{8}$
- E. None of these

7. A sum was put at simple interest at a certain rate for 2 years Had it been put at 1% higher rate, it would have fetched \$24 more. The sum is:

- A. \$600
- B. \$1200
- C. \$800
- D. \$480
- E. \$960

8. Machine A produces bolts at a uniform rate of 120 every 40 second, and Machine B produces bolts at a uniform rate of 100 every 20 seconds. If the two machines run simultaneously, how many seconds will it take for them to produce a total of 200 bolts?

- 1. 20 seconds
- 2. 24 seconds
- 3. 26 seconds
- 4. 25 seconds
- 5. 30 seconds

9. What will be the value of 'x' in the following question?

$$2x + 152 - 332 = 97$$

- A. 133
- B. 312
- C. 134
- D. 130
- E. None of these

10. A man has 3 shirts, 4 pairs of trousers and 6 ties. What are the numbers of ways in which he can dress himself with a combination of all the three?

- A. 72
- B. 36
- C. 54
- D. 120
- E. 81

11. Two dice are thrown together. What is the probability that the sum of the number on the two faces is divisible by 4 or 6?

- A. $\frac{9}{16}$
- B. $\frac{1}{2}$
- C. $\frac{11}{18}$
- D. $\frac{7}{18}$
- E. None of these

12. In a box, there are 8 red, 7 blue and 6 green balls. One ball is picked up randomly. What is the probability that it is neither red nor green?

- A. $\frac{6}{21}$
- B. $\frac{8}{21}$
- C. $\frac{7}{19}$
- D. $\frac{1}{3}$
- E. None of these

13. Find the ratio of the volumes of a sphere and cone of same radius. Also the height of the cone is twice its radius.

- A. 3: 1
- B. 4: 3
- C. 4: 1
- D. 2: 1
- E. None of these

14. The perimeter of a square and a rectangle is the same. If the rectangle is 12 cm by 10 cm, then by what percentage is the area of the square more than that of the rectangle?

- A. 1%
- B. 3%
- C. 56%
- D. 12%
- E. 34%

15. Six friends decide to share a big cake. Since all of them like the cake, they begin quarrelling who gets to first cut and have a piece of the cake. One friend suggests that they have a blindfold friend choose from well shuffled set of cards numbered one to six. You check and find that this method works as it should simulate a fair throw of a die. You check by performing multiple simultaneous trials of picking the cards blindfold and throwing a die. You note that the number shown by the method of picking up a card and throwing a real world die, sums to a number between 2 and 12.

Which total would be likely to appear more often – 8, 9 or 10?

- A. 8
- B. All are equally likely
- C. 9
- D. 10
- E. None of these

16. Find the missing number in the given sequence: 1,2,3, 5,13, 21,

- A. 8,34
- B. 10,26
- C. 9,25
- D. 9,32

17. A man buys 12 litres of Solution A which contains 20% of the liquid and the rest is water. He then mixes it with 10 litres of another Solution B with 30% of liquid. What is the % of water in the new mixture?

- A. 24.55 %
- B. 75.45 %
- C. 75.90 %
- D. 24.50 %
- E. None of these

18. In a simultaneous throw of pair of dice. Find the probability of getting the total more than 7.

- A. $\frac{5}{12}$
- B. $\frac{7}{12}$
- C. $\frac{1}{3}$
- D. $\frac{1}{4}$

E. None of these

19. Samuel is younger than Rick by 7 years. If the ratio of their ages is 7: 9, find the age of Samuel.

- A. 12.5 years
- B. 24.5 years
- C. 23.5 years
- D. 14.5 years
- E. None of these

20. Simplify: $78 \times 78 \times 78 - 45 \times 45 \times 45$

- A. 123
- B. 78
- C. 45
- D. 33
- E. None of these

ANSWERS				
61. B	62. C	63. C	64. A	65. A
66. D	67. B	68. D	69. E	70. A
71. D	72. D	73. D	74. C	75. A
76. A	77. B	78. A	79. B	80. D

EXPLANATION

1. Solution: B

We have been given a dice which is unbiased in nature.

Hence,

All possible outcomes = 1, 2, 3, 4, 5 and 6.

Hence total possible outcomes = 6

Multiple of 3's = 3, 6

Hence total favorable outcomes = 2

Hence probability = Total favorable outcomes/total possible outcomes.

= $\frac{2}{6}$

= $\frac{1}{3}$

2. Solution: C

Let the radius of vessel be R and height be H

Given that height is 200% more than radius

$H = R + (200/100) \times R = 3R$

Volume of the cylinder $V = \pi R^2 H$

Given volume of cylinder = 25872 cm^3

$$\Rightarrow \frac{22}{7} \times R^2 \times H = 25872$$

Since $H = 3R$

$$\Rightarrow \frac{22}{7} \times R^2 \times 3R = 25872$$

$$\Rightarrow R^3 = 25872 \times \left(\frac{7}{66}\right)$$

$$\Rightarrow R^3 = 2744$$

$$\Rightarrow R = 14 \text{ cm}$$

Area of the base $A = \pi R^2$

$$\Rightarrow A = \left(\frac{22}{7}\right) \times R^2 = \left(\frac{22}{7}\right) \times 14^2$$

$$\Rightarrow A = 616 \text{ cm}^2$$

3. Solution: C

Next numbers will be: 24, 19. Explanation: (48, 49, 57, 59)(36, 39, 28, 32),(x,y) First number decreasing by 12 so $x = 24$ if you observe the difference of consecutive terms:

$$\Rightarrow 49 - 48 = 1$$

$$\Rightarrow 59 - 57 = 2$$

$$\Rightarrow 39 - 36 = 3$$

$$\Rightarrow 32 - 28 = 4$$

$$\Rightarrow 18 - 13 = 5$$

4. Solution: A

Applying BODMAS rule, the priority is

Bracket

Of

Division

Multiplication

Addition

Subtraction

So following the BODMAS rule, we simplify the bracket first.

$$\Rightarrow 464 \div (16 \times 2.32)$$

$$= 464 \div (37.12)$$

$$= 12.5$$

5. Solution: A

(13, 24, 36), (23, 34, 56), (33, 44, 96), (43, 54, 116) In each group, 1st number increases by "10" {13, 23, 33, 43, x} \Rightarrow so x = 53

6. Solution: D

When three coins are tossed:

Sample space $n(S) = 2^3 = 8$,

To get at least one head,

Favorable events $n(E) = \{(H,T,T), (T,H,T), (T,T,H), (H,H,T), (H,T,H), (T,H,H), (H,H,H)\} = 7$,

We know that probability of happening an event 'E',

$$P(E) = n(E)/n(S)$$

\therefore Required probability = $7/8$.

7. Solution: B

Say P is the sum put at simple interest and R is the initial rate of interest.

Formula for Simple interest is, $I = P \times T \times R/100$, where T is the time period.

\therefore Initial interest $I = P \times 2 \times R/100$

When rate of interest is $(R+1)$, interest is $(I+24)$

$$\Rightarrow I+24 = P \times 2 \times (R+1)/100 = P \times 2 \times R/100 + P \times 2/100$$

$$\Rightarrow I + 24 = I + [(P \times 2)/100]$$

$$\Rightarrow (P \times 2) = 24 \times 100$$

$$\Rightarrow P = \$1200$$

8. Solution: D

Machine A produces 120 bolts for every 40 seconds

Number of bolts produced by machine A per second = $120/40 = 3$

Machine B produces 100 bolts for every 20 seconds

Number of bolts produced by machine B per second = $100/20 = 5$

If two machines run simultaneously number of bolts produced per second = $5 + 3 = 8$

Time required to produce 200 bolts by both machines = $200/8 = 25$ seconds

9. Solution: E

$$2x + 152 - 332 = 97$$

$$\Rightarrow 2x = 97 + 332 - 152 = 277$$

$$\Rightarrow x = 138.5$$

10. Solution: A

Since the man has 3 shirts, 4 pairs of trousers and 6 ties,

Hence he can dress himself in $3 \times 4 \times 6$ ways

$$= 72 \text{ ways}$$

11. Solution: D

When 2 dices are thrown together, there are a total of 36 possible outcomes.

Out of the 36 possible outcomes,

Only the following will give us favorable outcomes

(1,3), (3,1), (2,2), (1,5), (2,4), (3,3), (4,2), (5,1), (2,6), (3,5), (4,4), (5,3), (6,2) and (6,6)

Hence total favorable outcomes = 14

Total possible outcomes = 36

Probability = Total favorable outcomes/total possible outcomes.

$$= 14/36$$

$$= 7/18$$

12. Solution: D

We have a total of $8 + 7 + 6 = 21$ balls

Let E be the event such that the ball drawn is neither red nor green i.e., event that the ball drawn is blue.

We have $n(E)$ as the favorable outcomes and $n(s)$ as the total possible combinations.

$$\Rightarrow n(E) = 7$$

$$\Rightarrow n(S) = 21$$

$$\text{Probability} = 7/21$$

$$= 1/3$$

13. Solution: D

Let the radius of a cone and a sphere be r cm.

Then we have

$$\text{Volume of sphere} = \frac{4}{3} \times \pi r^3$$

We are given that height of cone = $2r$

$$\text{Hence, volume of cone} = \frac{1}{3} \times \pi r^2 h$$

$$\text{Volume of cone} = \frac{1}{3} \times \pi r^2 \times 2r$$

$$\text{Volume of cone} = \frac{2}{3} \times \pi r^3$$

$$\text{Hence ratio of volume of sphere and cone} = (\frac{4}{3} \times \pi r^3) : (\frac{2}{3} \times \pi r^3)$$

$$= 2:1$$

14. Solution: C

$$\text{Perimeter of square} = 4 \times a$$

Where, a = Side of the square

$$\text{Perimeter of rectangle} = 2(l + b)$$

Where, l = length of the rectangle = 12 cm

b = breadth of the rectangle = 10 cm

Given, perimeter of square = perimeter of rectangle

$$4 \times a = 2(l + b)$$

$$\Rightarrow 4 \times a = 2(10 + 12)$$

$$\Rightarrow 4 \times a = 44$$

$$\Rightarrow a = 11$$

$$\therefore \text{Area of square} = a \times a = 11 \times 11 = 121$$

$$\therefore \text{Area of rectangle} = l \times b = 12 \times 10 = 120$$

Percentage of Area of square is more than area of rectangle = area difference / rectangle area

$$\Rightarrow \frac{121-120}{120} \times 100 = \frac{1}{120} \times 100 = 56\%$$

15. Solution: A

Given that there are two cases

One is choosing a card from well shuffled cards and other one is throwing a die

In first case there are 6 possible ways (1, 2, 3, 4, 5, 6)

In second case also there are 6 possible ways (1, 2, 3, 4, 5, 6)

When we use both cases simultaneously there are 36 possible cases

Possibility of getting sum 8 = (2,6), (6,2), (3,5), (5,3), (4,4) = 5

Possibility of getting sum 9 = (3,6), (6,3), (4,5), (5,4) = 4

Possibility of getting sum 10 = (4,6), (6,4), (5,5) = 3

When we use two methods simultaneously more often occurring sum = 8

16. Solution: A

The given sequence is a Fibonacci series. any third number can be got by summing the first and second numbers

$$2+3=5$$

$$3+5=8$$

$$5+8=13$$

$$8+13=21$$

$$13+21=34$$

Ans 8 & 34

17. Solution: B

% of Liquid in Solution A = 20%

⇒ % of Water in Solution A = 80%

Volume of Solution A = 12 Litres

Volume of Water in Solution A = $(80/100) \times 12 = 9.6$ Litres

% of Liquid in Solution B = 30%

⇒ % of Water in Solution A = 70%

Volume of Solution B = 10 Litres

Volume of Water in Solution B = $(70/100) \times 10 = 7$ Litres

If Solution A is mixed with Solution B

⇒ Net Total Volume of Solution = $(12 + 10) = 22$ Ltrs

⇒ Net Total Volume of Water in Solution = $(9.6 + 7) = 16.6$ Ltrs

% of Water in New Mixture = $(\text{Volume of Water in New Mixture} / \text{Volume of New Mixture}) \times 100$

% of Water in New Mixture = $(16.6 / 22) \times 100 = 75.45\%$

18. Solution: A

Here total number of possible outcomes, $n(S) = (6 \times 6) = 36$

Let (n) is event of getting a total more than 7

Possible pairs of numbers with sum $> 7 = \{(2, 6), (3, 5), (3, 6), (4, 4), (4, 5), (4, 6), (5, 3), (5, 4), (5, 5), (5, 6), (6, 2), (6, 3), (6, 4), (6, 5), (6, 6)\}$

Therefore, total number of favorable outcomes = 15

$P(E) = n(E)/n(S)$

$P(E) = 15/36$

$P(E) = 5/12$.

19. Solution: B

Let's say Rick is x years' old

So Samuel is $x - 7$ years' old

So, as per the question,

$$x - 7 = 79$$

$$\Rightarrow 9x - 63 = 7x$$

$$\Rightarrow 2x = 63$$

$$\Rightarrow x = 31.5$$

So, Samuel's age is $31.5 - 7 = 24.5$ years

20.Solution: D

We have the formula

$$\Rightarrow a^3 - b^3 = (a - b)(a^2 + ab + b^2)$$

$$\Rightarrow 78 \times 78 \times 78 - 45 \times 45 \times 45 = (78 - 45)(78 \times 78 + 78 \times 45 + 45 \times 45)$$

$$\Rightarrow (78 - 45)(78 \times 78 + 78 \times 45 + 45 \times 45)$$

Hence we have

$$\Rightarrow ? = 78 - 45 = 33$$

ENGLISH SET 4

Read the passage carefully and answer the question.

1. Standard English refers to the authoritative and correct usage of the language, the medium of expression for government and education. Its opposite is a dialectal variant of the language, that is, accepted and recognised words, expressions and structures peculiar to a smaller group of language users who are generally set apart from standard usage by cultural group or geographical region. For example, Nigerian, American, Irish and British English differ from one another in many respects and each is identifiable, yet in every case the standard variety approaches a single and hypothetical classification known as international English. As one moves towards informality and away from the observance of strict rules, emphasis falls on the differences between dialects. In addition to American English being distinguishable from British English, it is also true that British English is not uniform within the United Kingdom. The level of formality is determined by education and aspiration, while dialects vary from region to region.

According to the author, Nigerian, American, Irish and British English can be regarded as _____.

- A. registers
- B. standards
- C. styles
- D. languages

Read the passage carefully and answer the question.

2. Standard English refers to the authoritative and correct usage of the language, the medium of expression for government and education. Its opposite is a dialectal variant of the language, that is, accepted and recognised words, expressions and structures peculiar to a smaller group of language users who are generally set apart from standard usage by cultural group or geographical region. For example, Nigerian, American, Irish and British English differ from one another in many respects and each is identifiable, yet in every case the standard variety approaches a single and hypothetical classification known as international English. As one moves towards informality and away from the observance of strict rules, emphasis falls on the differences between dialects. In addition to American English being distinguishable from British English, it is also true that British English is not uniform within the United Kingdom. The level of formality is determined by education and aspiration, while dialects vary from region to region.

According to the passage, International English is _____.

- A. a kind of arbitrary classification
- B. an imaginary classification
- C. an informal standard
- D. a recognised formal standard

Read the passage carefully and answer the question.

3. Standard English refers to the authoritative and correct usage of the language, the medium of expression for government and education. Its opposite is a dialectal variant of the language, that is, accepted and recognised words, expressions and structures peculiar to a smaller group of language users who are generally set apart from standard usage by cultural group or geographical region. For example, Nigerian, American, Irish and British English differ from one another in many respects and each is identifiable, yet in every case the standard variety approaches a single and hypothetical classification known as International English. As one moves towards informality and away from the observance of strict rules, emphasis falls on the differences between dialects. In addition to American English being distinguishable from British English, it is also true that British English is not uniform within the United Kingdom. The level of formality is determined by education and aspiration, while dialects vary from region to region.

The author refers to Standard English as _____.

- A. a dialectal variant of language that is accepted and recognized
- B. language spoken by users who are set apart by culture or geography
- C. an official and accurate usage of language
- D. accepted and recognized words, expressions and structures

Read the passage carefully and answer the question.

4. Standard English refers to the authoritative and correct usage of the language, the medium of expression for government and education. Its opposite is a dialectal variant of the language, that is, accepted and recognised words, expressions and structures peculiar to a smaller group of language users who are generally set apart from standard usage by cultural group or geographical region. For example, Nigerian, American, Irish and British English differ from one another in many respects and each is identifiable, yet in every case the standard variety approaches a single and hypothetical classification known as international English. As one moves towards informality and away from the observance of strict rules, emphasis falls on the differences between dialects. In addition to American English being distinguishable from British English, it is also true that British English is not uniform within the United Kingdom. The level of formality is determined by education and aspiration, while dialects vary from region to region.

One characteristic of a dialect as mentioned in the passage is _____.

- A. informality
- B. possession of various forms
- C. distinction from British English
- D. restricted area of usage

Choose the option OPPOSITE IN MEANING to the word written in capital letters.

5. Being NAIVE, he believed all the stories his friend told him.

- A. artless
- B. indifferent
- C. difficult

- D. experienced
- E. innocent

From the options lettered A - E, choose the word that is NEAREST IN MEANING to the word written in capital letters.

6. As a result of the terrible sufferings he had undergone, he became very DESPONDENT about the future.

- A. mischievous
- B. agitated
- C. indignant
- D. aggressive
- E. hopeless

Choose the option OPPOSITE IN MEANING to the word written in capital letters.

7. My friend was reduced to BEGGARLY by various ill-advised business deals.

- A. affluence
- B. penury
- C. influence
- D. poverty
- E. destitution

From the options lettered A - E, choose the one that is OPPOSITE IN MEANING to the word written in capital letters.

8. The awareness of MORTALITY has always imposed some restraint on man's excesses.

- A. celestialty
- B. eternity
- C. continuity
- D. inexistence

E. corruption

Fill in the blank space with the most appropriate option.

9. By the time we were due to ____ the following day, everybody heaved a sigh of relief.

- A. check out
- B. leaving
- C. check off
- D. check on
- E. check up

From the options lettered A - E, choose the one that is OPPOSITE IN MEANING to the word written in capital letters.

10. The man who had been seriously ill was CONVALESCING at a sea-side resort.

- A. regaining health
- B. deteriorating in health
- C. recuperating
- D. relaxing
- E. getting better

From the options lettered A - E, choose the one that BEST INTERPRETS the word written in capital letters.

11. Your extreme patience sometimes INFURIATES me.

- A. impresses
- B. annoys
- C. frustrates
- D. amuses
- E. excites

From the options lettered A-E, choose the word that is most nearly opposite in meaning to the underlined word and will, at the same time, correctly fill the gap in the sentence.

12. The now famous park was until recently _____ even in the neighbourhood.

- A. anonymous
- B. obscure
- C. hidden
- D. infamous
- E. known

From the options lettered A - E, choose the one that is OPPOSITE IN MEANING to the word written in capital letters.

13. Binta SOBBED by the door because she had lost her mother's precious necklace.

- A. disguised
- B. hid
- C. wept
- D. laughed
- E. cried

14. The _____ is used in measuring body temperature.

- A. barometer
- B. odometer
- C. speedometer
- D. ammeter
- E. thermometer

From the options lettered A to E, choose the word that is nearest in meaning to the underlined word as it is used in the sentence.

15. What do you intend to do with these inanimate objects?

- A. lively
- B. fascinating
- C. precious
- D. lifeless
- E. costly

Choose the word OPPOSITE IN MEANING to the word in capital letters.

16. Environmentalists around the world fight to PRESERVE the world's natural beauty and resources for future generations to come.

- A. divert
- B. safeguard
- C. conserve
- D. destroy
- E. nurture

Choose the option NEAREST IN MEANING to the word written in capital letters.

17. Looking after many active little children is a LABORIOUS task.

- A. compulsory
- B. easy
- C. hard
- D. simple
- E. tactful

From the options lettered A – E, choose the one that is NEAREST IN MEANING to the word written in capital letters.

18. COLLOSAL

- A. A break in column
- B. Gigantic

- C. Huge waste
- D. A calamity
- E. The sale of colos

From the options lettered A – E, choose the one that is NEAREST IN MEANING to the word written in capital letters.

20. The Preacher warned the congregation against worrying unduly about MUNDANE things.

- A. worldly
- B. celestial
- C. unimaginable
- D. immoral
- E. evil

1. The correct answer is option [D]
2. The correct answer is option [B]
3. The correct answer is option [C]
4. The correct answer is Option [D]
5. The correct answer is option [D].
6. The correct answer is option [E].

DESPONDENT means to be in low spirit from loss of hope or courage.

MISCHIEVIOUS means to have intentions to cause harm or trouble.

AGITATED means made to be anxious or excited; moved vigorously or briskly; aroused the public about something.

INDIGNANT means to be unworthy.

AGGRESSIVE means to be very angry or hostile, excessively forceful.

HOPELESS means to be without hope.

7. The correct answer is option [A].
8. The correct answer is option [B].

MORTALITY means being subject to death.

9. The correct answer is Option [A].
10. The correct answer is option [B].

Convalescing means regaining health after illness.

11. The correct answer is option [B].

Infuriate means to irritate greatly or make greatly annoyed.

12. The correct answer is option [B]
13. The correct answer is option [D].
14. The correct answer is option [E].

Barometer is an instrument used for measuring atmospheric pressure

Odometer is also same as a milometer which is an instrument for measuring the number of miles covered by a vehicle.

Speedometer is an instrument used to measure the speed of a vehicle.

Ammeter is an instrument used for the measurement of current.

Thermometer is an instrument used for the measurement of temperature.

15. The correct answer is option [D]

16. The correct answer is option [D]

17. The correct answer is option [C]

18. The correct answer is option [C]

19. The correct answer is option [B].

Colossal connotes something that is very immense; gigantic.

20. The correct answer is option [A].

CURRENT AFFAIRS SET 4

1. Which of these constitution recognized local government as the third tier of government

- A. The 1946 Constitution
- B. The 1960 constitution
- C. The 1963 constitution
- D. the 1979 constitution

2. A condition for judicial independence is the appointment of judges by the

- A. Civil service commission
- B. Judicial service Commission
- C. Low Review Commission
- D. The 1979 constitution

3. The minorities Commission appointed in Nigeria in 1957 recommend that

- A. More states should be created in the federation
- B. No more states should created before independence
- C. Nigeria should revert to a unitary structure
- D. the legislature should Legislate for the minority areas
- E the minorities should constitute one state

4. The NCS is fondly called 'The Nigeria gatekeepers'

- A. True
- B. False
- C. Cannot tell

5. To The NCS, the import of which of the following is NOT prohibited

- A. Live Chicken

- B. Chicken Egg
- C. Refined Oil
- D. Motor Vehicle of ten years from manufacture

6. In the NCS, the importation of Bagged cement is prohibited

- A. True
- B. False
- C. Cannot tell

7. The second military coup d'état in Nigeria took place on

- A July 15, 1966
- B. October 1, 1966
- C. July 29, 1966
- D. July 29, 1975
- E. February 13, 1976

8. One of these was in existence before the outbreak of the second world war

- A. The OAU
- B. The League of Nations
- C. The UNO
- D. The Commonwealth of Nations
- E. ECOWAS

9. An important advantage of creating more constitution in a federal state is to

- A. Enhance the People participation
- B. Enable ambitious Politicians gain political power
- C. Make the states gain more power from the federal government

D. Curb the excess of the federal government.

10. In the NCS, the importation of Spaghetti/Noodles is prohibited

- A. True
- B. False
- C. Cannot tell

11. In the NCS, it is generally not an offence for Nigerians to re-export an imported good

- A. True
- B. False
- C. Cannot tell

12. In The NCS, Which of the following is prohibited for export by Nigeria

- A. Timber
- B. Fruit Juice
- C. Cocoa Butter
- D. Soaps and Detergents

13. Under the Presidential system

- A. The party with the majority of seat forms the Executive
- B. There is the principle of collective responsibility
- C. The president may come from any of the parties
- D. The states take instruction from the federal government

14. Public opinion is important because it

- A. Tells government what action it must take
- B. Lets government know what the people want

- C. Allows Police to manage crisis
- D. Mothers the minorities in resource lean areas
- E. Guarantees peoples freedom and rights

15. Bicameral legislature exists

- A. Where two cameras are used to monitor court proceedings
- B. To prevent the concentration of power on legislative house
- C. To provide jobs for more politicians
- D. To ensure that just laws are passed

16. To The NCS, it is forbidden to export all of the following except_____

- A. Raw hides and skin
- B. Bottled Drinks
- C. Maize
- D. Scrap Metals

17. Till date, The Nigerian Custom Service has remained loyal to the use of just one colour of the uniform

- A. True
- B. False
- C. Cannot tell

18. A parliamentary system, who ensures that members are in the house to vote on major issues

- A. Party leaders
- B. Speaker of the House
- C. Clerk of the House
- D. Whip

19. A system in which no single person serves as the chief executive is known as

- A. Republican
- B. Revolutionary
- C. Collegial
- D. Parliamentary

20. A social system in which power is derived from control over land is called

- A. Oligarchy
- B. Feudalism
- C. Socialism
- D. Welfarism

ANSWERS

81. D	82. B	83. A	84. A	85. D
86. A	87. A	88. D	89. D	90. A
91. B	92. A	93. C	94. B	95. D
96. B	97. B	98. B	99. D	100. B

EXPLANATION

1. Answer: C
2. Answer: B
3. Answer: C
4. Answer: B
5. Answer: A
6. Answer: A
7. Answer: D
8. Answer: D
9. Answer: A
10. Answer: A
11. Answer: C
12. Answer: C
13. Answer: D
14. Answer: D
15. Answer: A
16. Answer: B
17. Answer: A
18. Answer: C
19. Answer: A
20. Answer: A

BONUS PRACTICE

These questions were pulled from previous NIS exam (Nigerian Immigration Service). This may likely also apply to Nigerian Customs, since the format and style are the same and they were administered by the same board. (JAMB).

MATHEMATICS

1. What is the probability of having an odd number in a single toss of a fair die

- (a) $\frac{1}{6}$ (b) $\frac{1}{3}$
(c) $\frac{1}{2}$ (d) $\frac{2}{3}$

Use the following information for question 2 and 3

The surname of 40 children in a class were arranged in alphabetical order ,
16 of the surnames begins with O and 9 of the surnames begins with A.
14 letters of the alphabet do not appear as the first letter of a surname.

2. What is the probability that the surname of a child picked at random from the class begins with either O and A?

- (a) $\frac{5}{8}$ (b) $\frac{7}{8}$ (c) $\frac{9}{16}$ (d) $\frac{14}{25}$

3. If more than one surname begins with a letter besides A and O, how many surnames begin with the letter? (a) 2 (b) 3 (c) 4 (d) 6

The table gives the score of a group of students in an English language test.

Scores	2	3	4	5	6	7
No of Students	2	4	7	2	3	2

4. If a student is chosen at random from the group, what is the probability that he scored at least 6 marks?

- (a) $\frac{3}{20}$ (b) $\frac{1}{5}$ (c) $\frac{1}{4}$ (d) $\frac{3}{10}$

5. What is the probability that three customers waiting in a bank will be served in the sequence of their arrival at the bank?

- (a) $\frac{1}{6}$ (b) $\frac{1}{3}$ (c) $\frac{1}{2}$ (d) $\frac{2}{3}$

6. The probability that Kodjo and Adoga pass an examination are $\frac{3}{4}$ and $\frac{3}{5}$ respectively. Find the probability of both boys failing the examination.

- (a) $\frac{1}{10}$ (b) $\frac{3}{10}$ (c) $\frac{1}{2}$ (d) $\frac{2}{3}$

7. The mean of 20 observations in an experiment is 4. If the observed largest value is 23, find the mean of the remaining observations.

- (a) 4 (b) 3
(c) 2.85 (d) 2.60

8. A group of eleven people can speak either English or French or both. Seven can speak English and six can speak French. What is the probability that a person chosen at random can speak both English and French?

- (a) $\frac{2}{11}$ (b) $\frac{4}{11}$ (c) $\frac{5}{11}$ (d) $\frac{11}{13}$

If events X and Y are mutually exclusive, $P(X) = \frac{1}{3}$ and $P(Y) = \frac{2}{5}$, Use the information to answer questions 9 & 10.

9. $P(X \cap Y)$ is (a) 0 (b) $\frac{2}{15}$ (c) $\frac{4}{15}$ (d) $\frac{11}{15}$

10. $P(X \cup Y)$ is (a) 0 (b) $\frac{2}{15}$ (c) $\frac{4}{15}$ (d) $\frac{11}{15}$

11. A box contains 2 white and 3 blue identical marbles. If two marbles are picked at Random, one after the other, without replacement, What is the probability of picking two marbles of different colours?

- (a) $\frac{2}{3}$ (b) $\frac{3}{5}$ (c) $\frac{2}{5}$ (d) $\frac{7}{20}$

12. Mrs. Jones is expecting a baby. The probability that it will be a boy is $\frac{1}{2}$ and the probability that the baby will have blue eyes is $\frac{1}{4}$. What is the probability that she will have a blue-eyed boy?

- (a) $\frac{1}{8}$ (b) $\frac{1}{4}$ (c) $\frac{3}{8}$ (d) $\frac{1}{2}$

13. Convert the speed 90 km per hour of a car to metres per second

- (a) 1.5 ms^{-1} (b) 2.5 ms^{-1} (c) 25 ms^{-1} (d) $1.5 \times 10^3 \text{ ms}^{-1}$

14. Uche and Chidi shared a sum of money on the ratio m:n. If Chidi's share was N4,200.00, what was Uche's share?

- (a) $\frac{N4,200n}{m}$ (b) $\frac{N4,200}{mn}$ (c) $\frac{N4,200m}{n}$ (d) $\frac{N4,200}{n}$

15. A husband contributes 7% of his income into a fund and his wife contributes 4% of her income. If the husband earns N5,500 per annum (p.a) and his wife earns N4,000 p.a, find the sum of their contribution to the fund.

- (a) N1,045 (b) N605 (c) N545 (d) N490

16. A car is traveling at an average speed of 80 kmh^{-1} . Its speed in metres per second (m/s) is (a) 13.3m/s (b) 22.2m/s (c) 133.3m/s (d) 222.2m/s

17. If the children share N10.50K among themselves in the ratio 6:7:8, How much is the largest share?

- (a) N3.00 (b) N3.50 (c) N4.00 (d) N4.50

18 A trader makes a loss of 15% when selling an article. Find the ratio, selling price: cost price.

- (a) 3:20 (b) 3:17 (c) 17:20 (d) 20:23

19 A car travels at x km per hour for 1 hour at y km per hour for 2 hours. Find its average speed.

- (a) $2x+2y\text{kmh}^{-1}/3$ (b) $x+y\text{kmh}^{-1}/3$ (c) $x+2y\text{kmh}^{-1}$ (d) $2x+y\text{kmh}^{-1}/3$

20 The ages of three men are in the ratio 3:4:5. If the difference between the ages of the oldest and youngest is 18 years, find the sum of the ages of the three men.

- (a) 45 years (b) 72 years (c) 108 years (d) 216 years

21 A bicycle wheel of radius 42cm is rolled over a distance of 66m. How many revolutions does it make? [Take $\pi=22/7$]

- (a) 2.5 (b) 5 (c) 25 (d) 50

22 In a bag of oranges, the ratio of the good ones to the bad ones is 5:4. If the number of bad ones in the bag is 36, how many oranges are there altogether?

- (a) 81 (b) 72 (c) 54 (d) 45

23 A man is four times as old as his son. The difference between their ages is 36. Find the sum of their ages.

- (a) 45 years (b) 48 years (c) 60 years (d) 74 years

24 If $4m+3n = 5$, find the ratio $m:n$ $\frac{4m-3n}{3}$

- (a) 7:4 (b) 4:3 (c) 3:4 (d) 4:7

25 If $2x : (x+1) = 3:2$, what is the value of x ?

- (a) $\frac{1}{2}$ (b) 1 (c) $1\frac{1}{2}$ (d) 3

26 The ratio of the number of men to the number of women in a 20 member committee is 3:1. How many women must be added to the 20 member committee so as to make the ratio of men to women 3:2 ?

- (a) 2 (b) 5 (c) 7 (d) 9

27 Three men, Bedu, Bakare and Kofi shared N500 in the ratio 3:2: x respectively. If Bedu's share is N150, find the value of x .

- (a) 1 (b) 3 (c) 5 (d) 6

28 The sides of two cubes are in the ratio 2:5, what is the ratio of their volumes?

- (a) 4:5 (b) 8:15 (c) 6:125 (d) 8:125

29 Lena bought 400 Alpha Company shares at N1.50 each and sold them at N2.05 each. What was her gain?

- (a) N0.55 (b) N20.00 (c) N220.00 (d) N330.00

30 Amma buys 100 oranges at 20 for C 30.00 and another 200 oranges at 4 for C 10.00. If she sells all her oranges at C3.00 each, what was her profit?

- (a) C150.00 (b) C250.00 (c) C500.00 (d) C650.00

31 The price of a litre of petrol is increased from C30.00 to C 39.00. What is the percentage increase in the cost of a litre of petrol ?

- (a) 90% (b) 30% (c) 34% (d) 39%

32 A trader sold a pair of shoes for C 2,800.00 making a loss of 20% on his cost price. Find his loss as a percentage of his selling price.

- (a) $16\frac{2}{3}\%$ (b) 2% (c) 25% (d) 75%

33 An article bought for D5,000.00 depreciate by 15% of its value during the first year. Find its value after a year.

- (a) D425.00 (b) D750.00 (c) D4,250.00 (d) D4,985.00

34 A house bought for N100,000 was later auctioned for N80,000, Find the loss percent.

- (a) 20% (b) 30% (c) 40% (d) 50%

35 The side of a square is increased from 20cm to 21cm. Calculate the percentage increase in its area.

- (a) 2.5% (b) 9.3% (c) 10.0% (d) 10.25%

36 A man bought 2220 mangoes at N5x. He sold each for 3x kobo and made gain of N8. Find the value of x.

- (a) 2 (b) 5 (c) 6 (d) 10

37 A car moves at an average speed of 30kmh^{-1} , how long does it take to cover 200 metres?

- (a) 2.4sec (b) 24sec (c) 144sec (d) 240sec

38 A man bought a television set on hire purchase for N25, 000 out of which he paid N10, 000. If he is allowed to pay the balance in eight equal installments, find the value of each installment

- (a) N1250 (b) N1578 (c) N1875 (d) N3125

39 If the simple interest on N2, 000 after 9 months is N6, at what rate per annum is the interest charged?

- (a) $21\frac{1}{4}\%$ (b) 4% (c) 5% (d) 6%

- 40 A student bought 3 notebooks and 1 pen for N35. After misplacing these items, she again bought 2 note books and 2 pens, all of the same type for N30. What is the cost of a pen?
(a) N5.00 (b) N7.50 (c) N10.00 (d) N15.00

ENGLISH LANGUAGE

Choose the word nearest to the word in bold

1. After many years of struggle as a trader, he **struck gold**
(a) Became quite rich (b) Won a big contract (c) he became a gold miner (d) became a goldsmith
2. One significant character of the jet age is that it encourages people to **cut corners**
(a) Not to face all problems (b) to want to become rich quickly (c) to want to avoid unnecessary hardships (d) forfeit the opportunity of further education.
3. The lady who won the beauty contest had a good **gait**
(a) Stature (b) figure (c) elegance (d) carriage
4. It would need a **high flyer** to make a first class degree in the university
(a) A smart performer (b) an outright genius (c) an outstanding scholar (d) an unmitigated swot
5. What you will find in the book is a **bird's eye view** of the subject
(a) A detailed account (b) a balanced account (c) a biased treatment (d) a general survey
6. Hers was a **chequered career**
(a) An interesting and successful career (b) a career full of sorrow and tears (c) a bright and memorable career (d) a career full of ups and downs
7. If experience is anything to go by, this action will prove a **political mine field**
(a) A source of political benefits (a) a way out of political trouble (c) a cause for political joy (d) an invitation to political problems.
8. In my view, the play didn't **come off**
(a) Succeed (b) fail (c) attract applause (d) take place

9. **When the chips are down**, we will know those who have the courage to stand
(a) when we get to a crisis point (b) in the final analysis (c) when the blocks are lowered
(d) when we get to the end of the road
10. she said boxing is, in fact her **pet aversion**
(a) something she likes very much (b) something she dislikes very much (c) a hobby she loves to pursue (d) one thing she can't miss
11. the gateman does his work **perfunctorily**
(a) without commitment (b) with speed (c) mother's pet (d) father's pet
12. members of the panel were working at **cross-purposes**
(a) harmony (b) in disunity (c) for selfish purposes (d) stretch
13. the young man who distributed political pamphlets on campus was promptly **repudiated**
(a) disowned (b) arrested (c) warned (d) killed
14. Adayi is a **die-hard** criminal
(a) hard to kill (b) hard to arrest (c) remorseless (d) relentless

Fill each gap with most appropriate option from the list following the gap

15. In moments of serious economic hardship, many people are _____ to turn to God.
(a) Concerned (b) inclined (c) disposed (d) propensed
16. We cannot all wear expensive shoe in situation of _____
(a) Diverent demand and supply (b) uneven wear and tear (c) different purchasing power
(d) unpredictable national income
17. The centre – forward was _____ consequently the goal was not allowed
(a) In an offside position (b) very well positioned (c) brilliant player (d) the captain of the team
18. AIDS is ____ disease that kills slowly but surely
(a) Too much a deadly (b) Very deadly a (c) so deadly (d) such deadly a
19. We had a dull evening because _____

(a) Hardly the talk had begun when the lights went off (b) hardly had the talk begun when the light went off (c) the talk had hardly begun when the light had gone out (d) the lights had hardly gone out when the talk began

20. Soyinka's masterful _____ of the atmosphere of his childhood helped to make his book, **Ake**, an outright success

(a) Evocation (b) invocation (c) convocation (d) revocation

21. Students will always blame their teachers when examination results are unfavourable

(a) Won't they (b) wouldn't they (c) isn't it (d) cant they

22. Okonkwo is a stubborn man; he will never _____ his words

(a) Chew (b) spit (c) eat (d) bite

23. Kindly _____ me your book because my friend has _____ mine

(a) Borrow / borrowed (b) borrow /rent (c) lend / lent (d) lend/borrowed

24. Three quarters of the church _____ painted by members the previous day

(a) Were (b) was (c) is (d) are

25. The young boys have been caught with parts of the stolen machine but _____ admitted stealing it

(a) Neither of them has (b) neither of them have (c) none of them has (d) none of them have.

26. Watching carefully, I could see the fish _____ along the bottom

(a) Dotting (b) crawling (c) diving (d) darting

27. Emeka is now a _____ student but it took him years to _____

(a) Matured/mature (b) mature/mature (c) mature/matured (d) matured/matured

28. The rebels will soon fight back. We have been informed _____ their _____

(a) Of/predicament (b) about/ indulgence (c) on/rearmament (d) as for/advancement

29. Ali was honest and quite as a school boy but too much drinking has now changed his _____ and _____ his tongue

(a) Temperature/injured (b) character/tightened (c) temperament/loosened (d) innocence/worsened

30. The hospital was closed _____ because there were no beds to put patients

(a) Again/upon (b) off/on (c) down/at (d) up/in

31. The judge with his son _____ travelling to Lagos now

(a) Were (b) shall (c) is (d) are

32. A university teacher is an _____

(a) Academic (b) academics (c) academician (d) academia

33. The adventurers ran into many _____ in the forest

(a) Dear (b) dears (c) deers (d) deer

34. The argument between the tow neighbous degenerated into ____

(a) A free-for all (b) a free for all fight (c) a flee for all (d) a free fight

35. The class _____ more girls than boys this session

(a) Comprise of (b) comprises of (c) comprise (d) comprises

36. The tourist bought _____

(a) A brown, small, Nigerian earthen pot (b) a small, brown Nigerian earthen pot (c) an earthen, brown, small Nigerian pot (d) a Nigerian small brown earthen

37. I have already _____ the picture on the sitting-room wall

(a) Hanged (b) hunged (c) hang (d) hung

38. Most of us will attend the conference _____ at Ibadan later this year

(a) Holding (b) held (c) being held (d) to hold

39. I shall work hard so that I can _____ a distinction in English

(a) Secure (b) make (c) receive (d) grab

40. The baby was rather _____ than I could bear

(a) Much more troublesome (b) much too troublesome (c) so much troublesome (d) very much troublesome

41. Students were forbidden _____ secret society

(a) From joining (b) in joining (c) to join (d) on joining

42. Of course, we al saw the culprit _____ and hit the man on the head
(a) Approached (b) approaching (c) approach (d) approaches
43. A child that shows mature characteristics at any early age may be described as
(a) Preconceived (b) premature (c) ingenuous (d) precocious
44. The company Director showed the contractor a _____ of the proposed office complex
(a) Prototype (b) photograph (c) microfilm (d) photocopy
45. _____ you come early to the new house, clean up my flat
(a) While (b) by chance (c) should (d) should in case
46. This imposing edifice _____ a fortune to build
(a) Had costed (b) have cost (c) costed (d) cost
47. They let him go in _____ to his age
(a) Respect (b) regard (c) disregard (d) consideration
48. Some scientists are trying to _____ human beings in their laboratories
(a) Imitate (b) replicate (c) implicate (d) fabricate
49. He does not seem to know how to solve the problem _____
(a) Does not he (b) does he not (c) does he (d) doesn't he?
50. These villagers _____ to grow rice
(a) Used (b) are used (c) were used (d) use

CURRENT AFFAIRS

- 1) Which of following is the core duty of the Nigeria immigration
(a) Persecuting offenders (b) enforcing of Laws (c) issuance of all Nigerian travel document
(d) deporting of foreigners
- 2) The NIS was brought out of the Nigerian Police Force (NPF) in
(a) 1946 (b) 1956 (c) 1958 (d) 1964
- 3) The NIS was formally established by the act of parliament in
(a) 1963 (b) 1957 (c) 1964 (d) 1976
- 4) The first African country to introduce E-passport was
(a) South-Africa (b) Ghana (c) Liberia (d) Nigeria
- 5) How many comptroller general has the NIS gotten since the inception till date
(a) 10 (b) 12 (c) 8 (d) 15
- 6) The present comptroller general of NIS is
(a) Umar Dahiru (b) Uhuru Kayidee (c) Boniface Cosmos (d) David Parradang
- 7) The first Secretary general of Common wealth was
(a) George Washington (b) Tulma Goldie (c) Arnold Smith (d) Joseph Garba
- 8) Lagos became a crown colony in
(a) 1862 (b) 1861 (c) 1841 (d) 1886
- 9) The first war 1 was between
(a) 1911-1914 (b) 1914-1916 (c) 1916-1918 (d) 1914-1918
- 10) The western and eastern Nigeria became self governed in
(a) 1959 (b) 1960 (c) 1957 (d) 1956
- 11) The first head of government of Nigeria was
(a) Yakubu Gowon (b) Aguiyi Ironsi (c) Tafawa Balewa (d) Nnamdi Azikiwe
- 12) The first militant president of Nigeria was
(a) Sanni Abacha (b) Ibrahim Babangida (c) Aguiyi Ironsi (d) Yakubu Gowon

- 13) Nigeria became a republic in
(a) 1963 (b) 1960 (c) 1976 (d) 1961
- 14) The Northern and Southern protectorate was amalgamated in
(a) 1914 (b) 1919 (c) 1921 (d) 1900
- 15) The first Executive president was
(a) Nnamdi Azikiwe (b) Olusegun Obasanjo (c) Sheu Shagari (d) Goodluck Jonathan
- 16) The first colonial governor general of Nigeria was
(a) Tulma Goldie (b) James Robertson (c) Huge Clifford (d) Lord Lugard
- 17) The highest court in Nigeria is
(a) Court of Appeal (b) Supreme court (c) Federal High Court (d) Magistrate court
- 18) ECOWAS was established in _____ and has its administrative headquarter in
(a) 1967 Lome (b) 1975 Lome (c) 1975 Lagos (d) 1967 Lagos
- 19) The first general election in Nigeria was held in
(a) 1959 (b) 1960 (c) 1963 (d) 1999
- 20) Nigeria practice one of the following system of government
(a) Con-federalism (b) Unitarism (c) Paliamentarism (d) Federalism
- 21) The last colonial governor general of Nigeria was
(a) James Robertson (b) Jimmy Carter (c) Lord Lugard (d) Huge Clifford
- 22) The first Militam coup de'tat in Nigeria was in
(a) 1964 (b) 1966 (c) 1960 (d) 1999
- 23) The establishment of states started in Nigeria on
(a) May 27 1967 (b) Feb. 13 1966 (c) April 8 1960 (d) Oct. 1 1960
- 24) The Biafra Civil war was between
(a) 1967-1968 (b) 1968-1971 (c) 1967-1970 (d) 1970-1975
- 25) The national youth service corp was established in
(a) 1960 (b) 1973 (c) 1980 (d) 1997

- 26) The Nigeria Police Force belongs to which organ of government
(a) Judiciary (b) Executive (c) Legislative (d) None of the above
- 27) Africa consists of how many countries
(a) 54 (b) 55 (c) 60 (d) 70
- 28) The Secretary general of OPEC is
(a) Abdulsaleam Kanuri (b) Abudullahi El-badri (c) Utuhu Kamirideen (d) Philip Effiong
- 29) The current secretary general of United Nations is
(a) Ban Ki Moon (b) Trugve Lie (c) Koffi Annan (d) Boustro-Brouste Ghali
- 30) Which of the following pairs of countries consist of the permanent security council of UN
(a) Brazil, Germany, France, USA, China (b) France, China, USSR, USA, Britain (c) France, Britain, Brazil, New Zealand (d) France, Germany, Japan, China
- 31) In order to qualify for the post of President in Nigeria the person must be _____ and above
(a) 35yr (b) 20 yrs (c) 40 yrs (d) 55yrs
- 32) The name Nigeria coined out of _____
(a) Niger Forest (b) Niger Area (c) Niger River (d) Niger Textures
- 33) The first Inspector General of the Police Force was
(a) Teslim Balogun (b) Louis Edet (c) Ademola Adetokunbo (d) Elias Balogun
- 34) The current secretary general or commission chairman of Africa Union is
(a) Dlamini Zuma (b) Allasane Quattara (c) Emeka Anaoku (d) H. Desategn
- 35) The current president of commission or secretary is of ECOWAS
(a) H. Desategn (b) Kadre Desire Quedraogo (c) Allasane Quattara (d) Ike Ekweremalu
- 36) The headquarter of UN is in
(a) New York (b) Washington (c) Geneva (d) Vienna
- 37) UNO was founded in San Francisco in
(a) 1939 (b) 1914 (c) 1945 (d) 1950

- 38) The first military coup-de'tat in Africa was in
(a) Libya (b) Liberia (c) Egypt (d) Nigeria
- 39) Nigeria became 36 states under the regime of
(a) Olusegun Obasanjo (b) Sanni Abacha (c) Ibrahim Babagida (d) Yakubu Gowon
- 40) The first military head of state was
(a) Yakubu Gowon (b) Aguiyi Ironsi (c) Olusegun Obasanjo (d) Ernest Shonekan
- 41) Oil can be found in one of the following state in Nigeria
(a) Lagos (b) Anambra (c) Ondo (d) Ekiti
- 42) Tin is majorly found in
(a) Jos (b) Enugu (c) Kano (d) Imo
- 43) Oil was first discovered by Shell-BP in Nigeria _____
(a) Oloibiri (b) Idanre (c) Warri (d) Kabba
- 44) Which of the following may be regarded as a regional organization
(a) ECOWAS (b) OAU (c) UN (d) OPEC
- 45) The last military head state of Nigeria was
(a) Abdulsaleem Abubakar (b) Sanni Abacha (c) Olusegun Obasanjo (d) Yakubu Gowon
- 46) The name Nigeria was coined by _____
(a) Flora Shaw (b) Mary Slessor (c) Lord Lugard (d) Juman Goldie
- 47) The legislature in Nigeria is called
(a) House of assembly (b) House of lords (c) National Assembly (d) House of Representative
- 48) The legislature in Britain is referred to as _____
(a) House of common (b) White house (c) Congress (d) Parliament
- 49) Nigeria changed from pounds to Naira in
(a) 1960 (b) 1973 (c) 1959 (d) 1963

- 50) The first Nigeria president to die in office was _____ and he died on _____
- (a) Murtala Mohammed Feb 13 1976 (b) Sanni Abacha June 8 1998 (c) Ya'ardua May 5 2010 (d) Aguiyi Ironsi July 29

ANSWERS

MATHEMATICS

- 1) A 2) A 3) B 4) C 5) B 6) A 7) A 8) B 9) A 10) A
11) D 12) B 13) C 14) C 15) C 16) B 17) C 18) C 19) C 20) C
21) C 22) A 23) C 24) A 25) D 26) B 27) C 28) D 29) C 30) B
31) B 32) C 33) C 34) A 35) D 36) C 37) C 38) C 39) B 40) C

ENGLISH

- 1.A 2.B 3.B 4.D 5.D 6.D 7.D 8.D 9.D 10.A
11.B 12.A 13.B 14.A 15.C 16.C 17.A 18.D 19.A 20. A
21.A 22.C 23.D 24.B 25.B 26.C 27.B 28.C 29.C 30.D
31.C 32.A 33.D 34.A 35.D 36.B 37.D 38.A 39.B 40.A
41.A 42.C 43.D 44.A 45.C 46.D 47D 48.B 49.C 50.A

CURRENT AFFAIRS

- 1.C 2.C 3.A 4.D 5.B 6.D 7.C 8.A 9.D 10.C
11.C 12.B 13.A 14.A 15.C 16.D 17.B 18. 19.A 20.D
21.A 22.B 23.A 24.C 25.B 26.B 27.A 28.B 29.A 30.B
31.A 32.B 33.B 34.A 35.B 36.A 37.C 38.C 39.B 40.B
41.C 42.A 43.A 44.B 45.A 46.A 47.C 48.D 49.B 50.C