GEOGRAPHY

1 Correct Answer: Option D

2. Correct Answer: Option C

3.Correct Answer. Option D

4. Correct Answer: Option D

5. Correct Answer: Option D

AGRICULTURAL SCIENCE

6. Correct Answer: Option C

7. Correct Answer: Option C

8. Correct Answer: Option A

9. Correct Answer: Option B

10. Correct Answer: Option D

CHEMISTRY

11.Correct Answer: Option B

Explanation

Sublimation is the transition of a substance directly from the solid phase to the gas phase without passing through the intermediate liquid phase

12.Correct Answer: Option D

Explanation

P [6] = 2, 4

Q [11] = 2, 8, 1

R [15] = 2, 8, 5

S [17] = 2, 8, 7

Given the above is the electronic arrangement of PQRS elements, Q will form an electrovalent bond with S

Further explanation was provided by our student by name (Odebiyi Dare D-cent) via our facebook page. Thus he says:

without argument, D is the answer cos electrovalent involves the transfer of electron. Already, Q is 11 with elect configuration of 2,8,1, i.e having 1 valency electron which is ready to be loss by that atom of element Q, also, S is 17, with electronic configuration, with 2,8,7. There the 7valence electron of S attracts that nly 1 electron to attain a stable octet structure.

13.Correct Answer: Option A

Explanation

this question expresses the law of multiple proportions which states that if two elements A and B combine together to form more than one compound, the various masses of element B which combines with a fixed mass of B are in simple whole number ratios.

14. Correct Answer: Option D

15. Correct Answer: Option C

Explanation

The rate of diffusion of a gas is proportional to the square root of the density.

16 and 7 secs

36 or 6 will be proportional to

7/16 x 6

7/4 x 6

But volume of chlorine is twice that of oxygen. The rate of escape of chlorine is

2/1 x 7/4 x 6/1 = 7 x 3; = 21 sec

PHYSICS

16.Correct Answer: Option D

Explanation

A Vernier caliper is an instrument used to measure both the outer and inner diameters of a tube.

17.Correct Answer: Option C

Explanation

Let the forces be F1, and F2.

F1 = m1 a1 = 3 x 2 = 6N

F2 = m2 a2 = 1 x 9 = 9N

F1 : F2 = 6:9 = 2:3

Thus ratio of forces is 2: 3

18. Correct Answer: Option B

Explanation

Power = Force x distancetime

= m(v−u)t×v

800(25−0)20×25

= 2.5 x 104

Watts

19. Correct Answer: Option D

20. Correct Answer: Option A

Mathematics

21. Correct Answer: Option A

Explanation

Let the three items be M, Y and P.

n{M ∩ Y} only = 4-3 = 1

n{M ∩ P) only = 5-3 = 2

n{ Y ∩ P} only = 2

n{M} only = 12-(1+3+2) = 6

n{Y} only = 10-(1+2+3) = 4

n{P} only = 14-(2+3+2) = 7

n{M∩P∩Y} = 3

Number of women in the group = 6+4+7+(1+2+2+3) as above =25 women

22.Correct Answer: Option B

Explanation

Cost price (cp) = (100/5) x N1.20 =N24.00

Selling price (sp) = 100-20 = 80

(80/4) x N1.50 = N30.00

Gain = SP-CP = N30.00-N24.00 = N6.00

Gain% = (gain/CP) x 100 = 25%

23. Correct Answer: Option C

Explanation

Number of oranges = X; Costing N5X.

Number of mangoes = 2X; Costing N8X.

∴65≤5X+8X≤130

5≤X≤10

24. Correct Answer: Option C

Explanation

Let the common ratio be r so that the first term is 2r.

Sum, s = a1−r

ie. 8 = 2r1−r

8(1-r) = 2r,

8 - 8r = 2r

8 = 2r + 8r

8 = 10r

r = 45

.

where common ratio (r) = secondterm(n2)firstterm(a)

,

r = n22r

r = 45

and a = 2r or 85

45

\* 85 = n2

3225

= n2

The sum of the first two terms = a + n2

= 85

+ 3225

= 40+3225

= 7225

25. **Correct Answer: Option B**

Explanation

bisector theorem:

|MN||MO|

= |PO||NP|

taking the bisected angle:x and y = |ON|=12

: x+y= 12

x = 12 - y

|PO| = 12 - y

64= 12−yy

6y = 4 (12-y)

6y = 48 - 4y

= 4.8

Recall that x+y= 12

12 - 4.8 =7.2

26. Correct Answer: Option C

Explanation

Let ϕ

be the angle between the two lines.

tan ϕ

= m1−m21+m1m2

where m1

= slope of line 1; m2

= slope of line 2.

Line 1: 2x + y = 3 ⟹

y = 3 - 2x.

Line 2: 3x - 2y = 5 ⟹

-2y = 5 - 3x.

y = 32

x - 52

.

m1

= -2, m2 = 32

.

tan ϕ

= −2−321+(−2×32)

= −72−2

∴

Tan ϕ = 74.

27. Correct Answer: Option C

28. Correct Answer: Option C

Explanation

t2 sin (3t - 5) = 2t sin ( 3t - 5) + t2 x 3 cos (3t - 5) = 2t sin (3t - 5) + 3t2 cos (3t - 5).

Detailed answer below was provided by Ifechuks, a female prospective student of Okopoly

**29. Correct Answer: Option B**

**30.Correct Answer: Option C**

**Explanation**

**P = {1,2,u,v,w,x}**

**Q = {2,3,u,v,w,5,6,y}**

**R = {2,3,4,v,x,y}**

**P - Q = {1,x}**

**(P - Q) ∩ R = {1,x} ∩ {2,3,4,v,x,y} = {x}**

**NB: The set P−Q consists of elements that are in P but not in Q.**

**FURTHER MATHEMATICS**

**31.** **Correct Answer: Option B**

**Explanation**

**Tn=a+(n−1)d**

**d=T2−T1=T3−T2=−1.5−(−4)=2.5**

**T21=−4+(21−1)×2.5=−4+(20×2.5)**

**= −4+50=46**

**32.** **Correct Answer: Option C**

**Explanation**

**In a circular seating arrangement, we fix the position of one person and then rotate the others, so we have**

**(6−1)!=5!=5×4×3×2=120**

**33.** **Correct Answer: Option D**

**Explanation**

**2x+3y=6⟹3y=6−2x**

**y=63−2x3**

**Parallel lines have the same gradient**

**∴**

**Gradient of the line = −23**

**Line passes through (-1,2)**

**Equation: y−2x−(−1)=y−2x+1=−23**

**3y−6=−2x−2⟹3y+2x=−2+6=4**

**34.** **Correct Answer: Option D**

**Explanation**

**On the y-intercept, x=0. At this point, y = 5(0) - 2y = -6; y = 3, so the y- intercept has coordinates (0,3).**

**The equation of the circle is given as (x−a)2+(y−b)2=r2**

**, where (a,b) is the centre and r is the radius.**

**The radius of the circle through the y- intercept = (4−0)2+(5−3)2−−−−−−−−−−−−−−−√=20−−√**

**The equation of the circle is (x−4)2+(y−5)2=20**

**; expanding, we have**

**x2+y2+8x−10y+21=0**

**35.** **Correct Answer: Option C**

**Explanation**

**No of boys in the class = 7; Girls = 20-7 = 13**

**No of selection = 13C3×7C2=13!(13−3)!3!×7!(7−2)!2!**

**= 286×21=6006**

**HISTORY**

**36.** **Correct Answer: Option A**

**37.** **Correct Answer: Option B**

**38.** **Correct Answer: Option C**

**39.** **Correct Answer: Option A**

**40.** **Correct Answer: Option A**

**GOVERNMENT**

**41.Correct Answer: Option C**

**Explanation**

**Power differs from influence in that it is coercive while influence is persuasive.**

**Influence can be defined as the ability to create an impact on the beliefs and actions of an individual. Influence evokes respect. Those under the influence keep working in the desired manner even in the absence of the influential person.**

**power is the ability of a person or a group of persons to enforce his or their decisions on other people by use of sanctions, punishment, or penalties against disobedience. On the other hand, through persuasion and conviction, an individual could be made to accept and obey the views of other persons.**

**42.Correct Answer: Option C**

**Explanation**

**Standing committees are permanent organizations within the House of Representatives and the Senate that perform adhoc functions. Proposed bills are sent to standing committees, which debate their purpose and consequences and recommend whether or not those bills should be sent to the floor of each house of Congress for a full debate and vote.**

**An Ad hoc means when necessary or needed.**

**43.** **Correct Answer: Option B**

**Explanation**

**Where the constitution is supreme, unconstitutional acts of the executive and the the legislature can be checked by the courts through judicial review.**

**Judicial Review is judicial power to declare any actions of the executive and the legislature unconstitutional, null and void.**

**44.Correct Answer: Option D**

**Explanation**

**Adherence to majority rule is true of a parliamentary system of government.**

**This is so due to the fact that the party having a majority in the legislature controls both the executive and the legislature from where the Prime Minister and ministers of his cabinet are chosen. The stability of this system also depends upon the ruling party controlling a reasonable majority in the parliament.**

**45.** **Correct Answer: Option A**

**Explanation**

**Public opinion is a view that is held by the majority. As far as public opinion is concerned, the view must be held and expressed by the majority of the society.**

**According to G. A. I. Ofoegbu (1999), public opinion is the believes, values and attitudes which are commonly held and expressed by majority of the people on a given issue.**

**ECONOMICS**

**46.Correct Answer: Option C**

**Explanation**

**A budget deficit occurs when the government spends more than it receives.**

**47.Correct Answer: Option C**

**Explanation**

**In economics, an inferior good is a good whose demand decreases when consumer income rises (or demand increases when consumer income decreases)**

**48.** **Correct Answer: Option B**

**49.** **Correct Answer: Option D**

**50.** **Correct Answer: Option D**

**COMMERCE**

**51.** **Correct Answer: Option B**

**52.** **Correct Answer: Option A**

**53.Correct Answer: Option B**

**Explanation**

**A sole enterprise means a one-man business and such businesses mostly excel in the retail line.**

**54.** **Correct Answer: Option A**

**55.** **Correct Answer: Option D**

**CIVIC EDUCATION**

**56.Correct Answer: Option D**

**Explanation**

**Importance of Values ​​in Society:**

**Help to progress;Individual values ​​help individuals to move toward perfection or as close as they can be to it. It is important that people constantly move forward in their lives. In this way it is possible that productivity is feasible and that achievements can be realized.**

**Expand the identity of a society and culture; Values ​​have many social functions. Those values ​​that derive from common experience unite families, tribes, societies and nations.When values ​​are implemented, societal standards can be maintained. Values ​​are the fabric that creates culture; If people lie, cheat and steal, the culture of society will not be healthy.**

**Change human behavior;The behavior of people can be changed through a system of values. Thanks to this, it is possible for people to change their behavior for the better. Values ​​are an effective way of correcting and reforming negative behaviors in individuals and in a society.**

**Facilitate socialization; Values ​​are transferred and transmitted to children during their primary and secondary socialization. It is quite complicated to make an adult learn new values, that is why they are instilled in children.**

**57.Correct Answer: Option B**

**Explanation**

**Honesty can be defined as the act of being truthful to yourself,others and being straightforward in whatever we do.Honesty refers to a facet of moral character and connotes positive and virtuous attributes such as integrity, truthfulness, and straightforwardness, including straightforwardness of conduct.**

**A more complete definition of honesty shows that an honest person doesn't do things that are morally wrong. If something you do is breaking the law or if you have to hide what you are doing because you'll get in trouble, you are probably not beinghonest. So honesty is about speaking and acting truthfully.**

**58.Correct Answer: Option D**

**Explanation**

**Discipline;The practice of training people to obey rules or a code of behaviour, using punishment to correct disobedience.**

**59.Correct Answer: Option A**

**Explanation**

**center for human rights and development -was founded in 1999 to promote human rights and curtail human right abuse.**

**60.Correct Answer: Option B**

**Explanation**

**The Universal Declaration of Human Rights (UDHR) is a historic document that was adopted by the United Nations General Assembly at its third session on 10 December 1948 as Resolution 217 at the Palais de Chaillot in Paris, France.**

**PRINCIPAL OF ACCOUNTING**

**61.** **Correct Answer: Option C**

**62.Correct Answer: Option B**

**Explanation**

**The question says 'an electronic shop bought generators'. Meaning it is for resale and not for office or personal use.**

**This means cash account will be credited because money has gone out of the business for the purchase of generators. Since the question didn't say the goods were paid for by cheque, we are crediting the cash column, if it was paid by cheque, the bank column would be credited instead.**

**On the other hand, the purchase account (stock) will be debited because goods have come into the company as a result of the purchase.**

**Always remember this simple accounting entry; debit all receivables (purchases account receiving), credit all payment (cash account paying out).**

**63.** **Correct Answer: Option D**

**64.** **Correct Answer: Option A**

**65.** **Correct Answer: Option D**

**ISLAMIC STUDIES**

**66.** **Correct Answer: Option A**

**67.** **Correct Answer: Option C**

**68.** **Correct Answer: Option B**

**69.** **Correct Answer: Option C**

**70.** **Correct Answer: Option B**

**CHRISTAIN RELIGION KNOWLEDGE**

**71.Correct Answer: Option D**

**Explanation**

**Abraham is known as the father of the faithful because of the depth of his faith.**

**In the book of Genesis, he obeys the commands of God and is ready to follow God's order to sacrifice Isaac, a test of his faith.**

**72.Correct Answer: Option C**

**Explanation**

**Moses led the children of Israel through the Red Sea. This event is a significant part of the Exodus narrative (Exodus 14), where God miraculously parts the Red Sea and allows the Israelites to escape from the pursuing Egyptian army.**

73. Correct Answer: Option D

Explanation

The house of Israel was divided into two kingdoms. This division took place after the death of Solomon and during the reign of his son, Rehoboam, and it happened as the people revolted against the heavy taxes levied by Solomon and Rehoboam.

Jeroboam was the most outstanding king after the split and was made the king of Jerusalem while Rehoboam was made king of Judah

Ref: Genesis, 1 Kings 2:10, 1 Kings 14:1-30

74. Correct Answer: Option C

75. Correct Answer: Option B

COMPUTER STUDIES

76. Correct Answer: Option A

77. Correct Answer: Option C

78. Correct Answer: Option A

79. Correct Answer: Option D

80. Correct Answer: Option C

LITRATURE IN ENGLISH

81. Correct Answer: Option A

82. Correct Answer: Option C

83. Correct Answer: Option B

84. Correct Answer: Option C

85. Correct Answer: Option D

ENGLISH LANGUAGE

86.Correct Answer: Option C

Explanation

The term "dark horse" is an idiomatic expression that refers to a little-known or less-favoured contender in a competition who unexpectedly achieves success. In the context of the sentence, describing the sub mariners as "the dark horse" suggests that they were not widely expected to win, but they surprised everyone by emerging victorious in the match against the uplanders team.

Therefore, option C, "won unexpectedly," accurately conveys the meaning of the underlined portion in the sentence.

87.Correct Answer: Option B

Explanation

The expression "small fry" in this context is used as a metaphor to refer to unimportant or insignificant people. So, the sentence is saying that only the unimportant or insignificant individuals get punished for such social misdemeanors.

Option B, "unimportant people," is the best fit because it conveys the idea that those who are not considered significant or influential in the situation are the ones facing punishment. The term "small fry" is often used to describe individuals of little importance or influence in a particular context.

88.Correct Answer: Option C

Explanation

A leader in a newspaper is a piece of writing which gives the editor's opinion on an important news item.

89.Correct Answer: Option C

Explanation

A bore is generally an uninteresting person; a boring person.

To talk or act in a way that makes someone lose interest:

90.Correct Answer: Option A

Explanation

It means, the reason why he didn't starve is because his father had arrived.

91. Correct Answer: Option D

92. Correct Answer: Option C

93.Correct Answer: Option C

94. Correct Answer: Option D

95. Correct Answer: Option D

BIOLOGY

96.Correct Answer: Option D

Explanation

Sexual reproduction in Spirogyra occurs by a process known as conjugation, in which cells of two filaments lying side by side are joined by outgrowths called conjugation tubes. This allows the contents of one cell to completely pass into and fuse with the contents of the other. The resulting fused cell (zygote) becomes surrounded by a thick wall and overwinters, while the vegetative filaments die.

97.Correct Answer: Option C

Explanation

Unlike the plant cell which possesses one or a few large vacuoles, the animal cell possesses vacuoles but they are smaller in size and plenty in quantity when compared to that of the plants.

98.Correct Answer: Option A

Explanation

The feather contains a vane, afterfeather, calamus, barb, rachis.

99. Correct Answer: Option A

Explanation

Wind-pollinated grains are non-sticky and light, to ensure they can be blown by the wind

100.Correct Answer: Option C

Explanation

Dust is not an excretory product from the human.