## Practice Test 1 - Answer Key

## Section 1 - Reading Comprehension

## 1. B

We can infer from this passage that sickness from an infectious disease can be easily transmitted from one person to another.

From the passage, "Infectious pathologies are also called communicable diseases or transmissible diseases, due to their potential of transmission from one person or species to another by a replicating agent (as opposed to a toxin)."
2. A

Two other names for infectious pathologies are communicable diseases and transmissible diseases.

From the passage, "Infectious pathologies are also called communicable diseases or transmissible diseases, due to their potential of transmission from one person or species to another by a replicating agent (as opposed to a toxin)."

## 3. C

Infectivity describes the ability of an organism to enter, survive and multiply in the host. This is taken directly from the passage, and is a definition type question.
Definition type questions can be answered quickly and easily by scanning the passage for the word you are asked to define.
"Infectivity" is an unusual word, so it is quick and easy to scan the passage looking for this word.

## 4. B

We know an infection is not synonymous with an infectious disease because an infection may not cause important clinical symptoms or impair host function.
5. C

We can infer from the passage that, a virus is too small to be seen with the naked eye. Clearly, if they are too small to be seen with a microscope, then they are too small to be seen with the naked eye.
6. D

Viruses infect all types of organisms. This is taken directly from the passage, "Viruses infect all types of organisms, from animals and plants to bacteria and single-celled organisms."

## 7. C

The passage does not say exactly how many parts prions and viroids consist of. It does say, "Unlike prions and viroids, viruses consist of two or three parts ..." so we can infer they consist
of either less than two or more than three parts.
8. B

A common virus spread by coughing and sneezing is Influenza.

## 9. C

The cumulus stage of a thunderstorm is the beginning of the thunderstorm.
This is taken directly from the passage, "The first stage of a thunderstorm is the cumulus, or developing stage."

## 10. D

The passage lists four ways that air is heated. One of the ways is, heat created by water vapor condensing into liquid.

## 11. A

The sequence of events can be taken from these sentences:
As the moisture carried by the [1] air currents rises, it rapidly cools into liquid drops of water, which appear as cumulus clouds. As the water vapor condenses into liquid, it [2] releases heat, which warms the air. This in turn causes the air to become less dense than the surrounding dry air and [3] rise further.

## 12. C

The purpose of this text is to explain when meteorologists consider a thunderstorm severe. The main idea is the first sentence, "The United States National Weather Service classifies thunderstorms as severe when they reach a predetermined level." After the first sentence, the passage explains and elaborates on this idea. Everything is this passage is related to this idea, and there are no other major ideas in this passage that are central to the whole passage.

## 13. A

From this passage, we can infer that different areas and countries have different criteria for determining a severe storm.
From the passage we can see that most of the US has a criteria of, winds over 50 knots ( 58 mph or $93 \mathrm{~km} / \mathrm{h})$, and hail $3 / 4$ inch $(2 \mathrm{~cm})$. For the Central US, hail must be 1 inch $(2.5 \mathrm{~cm})$ in diameter. In Canada, winds must be $90 \mathrm{~km} / \mathrm{h}$ or greater, hail 2 centimeters in diameter or greater, and rainfall more than 50 millimeters in 1 hour, or 75 millimeters in 3 hours.
Option D is incorrect because the Canadian system is the same for hail, 2 centimeters in diameter.

## 14. C

With hail above the minimum size of 2.5 cm . diameter, the Central Region of the United States National Weather Service would issue a severe thunderstorm warning.

## 15. D

Clouds in space are made of different materials attracted by gravity. Clouds on Earth are made of water droplets or ice crystals.
Choice $D$ is the best answer. Notice also that Choice $D$ is the most specific.

## 16. C

The main idea is the first sentence of the passage; a cloud is a visible mass of droplets or frozen crystals floating in the atmosphere above the surface of the Earth or other planetary body.
The main idea is very often the first sentence of the paragraph.
17. C

Nephology, which is the study of cloud physics.

## 18. C

This question asks about the process, and gives options that can be confirmed or eliminated easily.
From the passage, "Dense, deep clouds reflect most light, so they appear white, at least from the top. Cloud droplets scatter light very efficiently, so the further into a cloud light travels, the weaker it gets. This accounts for the gray or dark appearance at the base of large clouds."

We can eliminate choice A, since water droplets inside the cloud do not reflect light is false.
We can eliminate choice B, since, water droplets outside the cloud reflect light, it appears dark, is false.
Choice C is correct.

## 19. A

The correct order of ingredients is brown sugar, baking soda and chocolate chips.

## 20. B

Sturdy: strong, solid in structure or person. In context, Stir in chocolate chips by hand with a sturdy wooden spoon.

## 21. A

Disperse: to scatter in different directions or break up. In context, Stir until the chocolate chips and nuts are evenly dispersed.

## 22. B

You can stop stirring the nuts when they are evenly distributed. From the passage, "Stir until the chocolate chips and nuts are evenly dispersed."

## 24. B

From the passage, the ants provide some degree of protection

## 25. C

The association is mutual so both benefit.

## 26. A

Navy SEALS are the maritime component of the United States Special Operations Command (USSOCOM).
27. C

Working underwater separates SEALs from other military units. This is taken directly from the passage.
28. D

SEALs also belong to the Navy and the Coast Guard.
29. A

The CIA also participated. From the passage, the raid was conducted by a "team of 40 CIA-led Navy SEALS."

## 30. C

From the passage, "The Navy SEALs were part of the Naval Special Warfare Development Group, previously called "Team 6". "

## 31. B

This question is taken directly from the passage.
32. A

The Egyptians believed gods loved gardens.
33. B

Cypresses and palms were the most popular trees in Assyrian Gardens.

## 34. B

Vegetable gardens came before ornamental gardens.
The earliest forms of gardens emerged from the people's need to grow herbs and vegetables. It was only later that rich individuals created gardens for the purely decorative purpose.

## 35. A

The ancient Roman gardens are known by their statues and sculptures ...
36. D

After the fall of Rome, gardening was only for medicinal purposes, AND gardening declined in the Middle Ages, so we can infer gardening declined after the fall of Rome.
37. C

From the passage, "After the fall of Rome gardening was only done with the purpose of growing medicinal herbs and decorating church altars," so Choice C.
38. B

From the passage, "Mosaics and glazed tiles used to decorate elaborate fountains are specific to Islamic gardens."
39. B

From the passage, "Often called "rainforests of the sea", coral reefs form some of the most diverse ecosystems on Earth."

## 40. A

Read the passage carefully - "The polyps are like tiny sea anemones, to which they are closely related."

## 41. C

This question is designed to confuse by giving variation of the same information. Read the passage carefully for the correct answer.
42. D

This question is designed to confuse by giving variation of the same information. Read the passage carefully for the correct answer.
43. B

Designed to confuse by offering variations of the same information. Read the passage carefully for the correct time sequence.
44. A

From the passage, "As communities established themselves on the shelves, the reefs grew upwards, pacing the rising sea levels. Reefs that rose too slowly became drowned reefs, covered by so much water that there was insufficient light." Here, "pacing" is the key word, so Choice A, "at the same rate... "
From this we can infer that coral reefs grew at the same rate (pacing) as the rising water level.
45. A

Reefs that grew too slowly died from a lack of light. From the passage, "Reefs that rose too slowly became drowned reefs, covered by so much water there was insufficient light."

## Section II - Math Answer Key

## 1. A

$1 / 3 \times 3 / 4=3 / 12=1 / 4$
2. D
$75 / 1500=15 / 300=3 / 60=1 / 20$
3. D
$3.14+2.73=5.87$ and $5.87+23.7=29.57$
4. B

Spent $15 \%-100 \%-15 \%=85 \%$
5. C
$0.27+0.33=0.60$ and $0.60=60 / 100=3 / 5$
6. D
$3.13+7.87=11$ and $11 \times 5=55$
7. B
$2 / 4 \times 3 / 4=6 / 16$, and lowest terms $=3 / 8$
8. D
$2 / 3-2 / 5=10-6 / 15=4 / 15$
9. C
$2 / 7+2 / 3=6+14 / 21(21$ is the common denominator $)=20 / 21$
10. B
$2 / 3 \times 60=40$ and $1.5 \times 75=15,40+15=55$
11. C
$8 / 40=X / 100=8$ * $100 / 40 X=800 / 40=X=20$
12. D
$9 / 36=X / 100=9$ * $100 / 36 X=900 / 36=25$
13. C
$3 / 10 * 90=3 * 90 / 10=27$
14. B
$4 / 100 * 36=.4 * 36 / 100=.144$
15. A
$5 \mathrm{mg} / 10 / \mathrm{mg} \mathrm{X} 1 \mathrm{tab} / 1=.5$ tablets
16. B

Step 1: Set up the formula to calculate the dose to be given in mg as per weight of the child:-
Dose ordered X Weight in $\mathrm{Kg}=$ Dose to be given
Step 2: $20 \mathrm{mg} \mathrm{X} 12 \mathrm{~kg}=240 \mathrm{mg}$
$240 \mathrm{mg} / 80 \mathrm{mg} \mathrm{X} 1 \mathrm{tab} / 1=240 / 80=3$ tablets
17. A

Set up the formula to calculate the dose to be given in mg as per weight of the child:- Dose ordered X Weight in $\mathrm{Kg}=$ Dose to be given
Step 2: $20 \mathrm{mg} \times 20 \mathrm{~kg}=400 \mathrm{mg}$ (Convert 44 lb to $\mathrm{Kg}, 1 \mathrm{lb}=0.4536 \mathrm{~kg}$, hence $44 \mathrm{lb}=19.95 \mathrm{~kg}$ approx. 20 kg )
$400 \mathrm{mg} / 80 \mathrm{mg} \mathrm{X} 1 \mathrm{tab} / 1=400 / 80=5$ tablets
18. B

3000 units $/ 5000$ units $X 1 \mathrm{ml} / 1=3000 / 5000=0.6 \mathrm{ml}$
19. C
$60 \mathrm{mg} / 80 \mathrm{mg} \mathrm{X} 1 \mathrm{ml} / 1=60 / 80=0.75 \mathrm{ml}$
20. A

Dose ordered X Weight in $\mathrm{Kg}=$ Dose to be given
$16 \mathrm{mg} \times 15 \mathrm{~kg}=240 \mathrm{mg}$
$240 \mathrm{mg} / 80 \mathrm{mg}$ X $1 \mathrm{tab} / 1=240 / 80=3$ tablets
21. C
(Convert $1 \mathrm{~g}=1000 \mathrm{mg}$ )
$1000 \mathrm{mg} / 1000 \mathrm{mg} \mathrm{X} 1 \mathrm{tsp} / 1=1000 / 1000=\mathrm{tsp}$
22. D

10 units/200 units X $1 \mathrm{ml} / 1=10 / 200=0.05 \mathrm{ml}$
23. B
$(4)(3)^{3}=(4)(27)=108$
24. A
$1000 \mathrm{~g}=1 \mathrm{~kg} ., 0.007=1000 \times 0.007=7 \mathrm{~g}$.
25. C

4 quarts $=1$ gallon, 16 quarts $=16 / 4=4$ gallons
26. C

1 teaspoon $=4.93$ milliliters (U.S.), $2 \mathrm{tp}=4.93 \times 2=9.86 \mathrm{ml}$.
27. D

1,000 meters $=1$ kilometer, $200 \mathrm{~m}=200 / 1,000=0.2 \mathrm{~km}$.
28. B

12 inches $=1 \mathrm{ft}$., 72 inches $=72 / 12=6$ feet
29. C

1 yard $=3$ feet, 3 yards $=3$ feet $x 3=9$ feet

## 30. B

$0.45 \mathrm{~kg}=1$ pound, $1 \mathrm{~kg} .=1 / 0.45$ and $45 \mathrm{~kg}=1 / 0.45 \times 45=100$ pounds 31. C
$1 \mathrm{~g}=1,000 \mathrm{mg} .0 .63 \mathrm{~g}=0.63 \times 1,000=630 \mathrm{mg}$.
32. D

To solve for $x, 5 x-7 x+3=-$
$5 x-7 x=-1-3$
$-2 x=-4$
$x=-4 /-2$
$x=2$
33. C

To solve for $x$, first simplify the equation $5 x+2 x+14=$ $14 x-7$
$7 x+14=4 x-7$
$7 x-14 x+14=-7$
$7 x-14 x=-7-14$
$-7 x=-21 x=-21 /-7$

$$
x=3
$$

34. A

$$
5 z+5=3 z+6+11
$$

$$
5 z-3 z+5=6+11
$$

$$
5 z-3 z=6+11-5
$$

$$
2 z=17-5
$$

$$
2 z=12
$$

$$
z=12 / 2 z=
$$

$$
5 z+5=3 z+6+11
$$

$$
5 z-3 z+5=6+11
$$

$$
5 z-3 z=6+11-5
$$

$$
2 z=17-5
$$

$$
2 z=12
$$

$$
z=12 / 2 z=
$$

$$
6
$$

36. D

Price increased by $\$ 5(\$ 25-\$ 20)$. The percent increase is $5 / 20 \times 100=5 \times 5=25 \%$
37. C

Price decreased by $\$ 5$ (\$25-\$20). The percent increase $=5 / 25 \times 100=5 \times 4=20 \%$
38. D
$30 / 100 \times 150=3 \times 15=45$ (increase in number of correct answers). So the number of correct answers in second test $=150+45=195$
39. B

Let total number of players $=X$
Let the number of players with long hair=Y and the number of players with short hair=Z
Then $X=4+Z$
$Y=12 \%$ of $X$
$Z=X-4$
$12.5 \%$ of $X=4$
Converting from decimal to fraction gives $12.5 \%=125 / 10 \times 1 / 100=125 / 1000$, therefore $12.5 \%$ of $=125 / 1000 \mathrm{X}=4$
Solve for $X$ by multiplying both sides by 1000/125, $X=4 \times 1000 / 125=32$
$Z=x-4$
$Z=32-4$
z or number of short haired players = 28

2 glasses are broken for 43 customers so 1 glass breaks for every $43 / 2$ customers served, therefore 10 glasses implies $43 / 2 \times 10=215$

## 41. D

As the lawn is square, the length of one side will be $=\sqrt{ } 62500=250$ meters. Therefore, the perimeters will be: $250 \times 4=1000$ meters
The total cost will be $1000 \times 5.5=\$ 5500$

## 42. D

The price of all the single items is same and there are 13 total items. So the total cost will be $13 \times 1.3=\$ 16.9$. After 3.5 percent tax this amount will become $16.9 \times 1.035=\$ 17.5$.

## 43. C

Area of the square $=12 \times 12=144 \mathrm{~cm}^{2}$
Let $x$ be the width, then $2 x$ be the length of rectangle, so its area will be $2 x^{2}$ and perimeter will be $2(2 x+x)=6 x$
According to the condition
$2 x^{2}=144$
$X=8.48 \mathrm{~cm}$
The perimeter will be
Perimeter $=6 \times 8.48$
$=50.88$
$=51 \mathrm{~cm}$.

## 44. B

There are 50 balls in the basket now. Let $x$ be the number of yellow balls to be added to make $65 \%$. So the equation becomes
$X+15 / X+50=65 / 100$
$X=50$
45. D

Let $x$ be number of rows, and number of trees in a row. So equation becomes
$X^{2}=65536$
X = 256
46. B

First calculate the number of stores to distribute 5 kg portions: $550-(20 \times 15)-(10 \times 12)=$ 130. Then $130 / 5=26$ shops. His distribution is then: $15 \times 6.4=\$ 96,12 \times 3.4=\$ 40.8,26 \times 1.8$ $\times 26=\$ 46.8$, Total $=\$ 183.6$. Then subtract the distribution costs: Total number of stores $=15$ $+12+26=53,53 \times 3=\$ 159$ distribution costs. Then calculate profit: $\$ 183.6-159=\$ 24.60$ 47. D

Each tree will require a 10-meter diametric space around its stem. So 65 trees can be planted along 650 -meter side. Similarly, 65 along the other side. However, along the 780 meter side, the first tree will be after 10 meters at both edges, so 76 trees can be planted long that side.

As one tree requires 10 -meter diametric space, or, a 10-meter space on all four sides will be left. Therefore, the dimensions left are $630 \times 760=478,800 \mathrm{~m}^{2}$.
49. B
$\mathrm{X} / 2-250=3 \mathrm{X} / 7$
$\mathrm{X}=\$ 3500$
50. A

The probability that the $1^{\text {st }}$ ball drawn is red $=4 / 11$
The probability that the $2^{\text {nd }}$ ball drawn is green $=5 / 10$
The combined probability will then be $4 / 11 \mathrm{X} 5 / 10=20 / 110=2 / 11$

## Section III English Answer Key

## 1. A

The third conditional is used for talking about an unreal situation (a situation that did not happen) in the past. For example, "If I had studied harder, [if clause] I would have passed the exam" [main clause]. This has the same meaning as, "I failed the exam, because I didn't study hard enough."
2. D

The third conditional is used for talking about an unreal situation (a situation that did not happen) in the past. For example, "If I had studied harder, [if clause] I would have passed the exam" [main clause]. This has the same meaning as, "I failed the exam, because I didn't study hard enough."
3. B

In double negative sentences, one of the negatives is replaced with "any."
4. C

In double negative sentences, one of the negatives is replaced with "any."
5. D

The present perfect tense cannot be used with specific time expressions such as yesterday, one year ago, last week, when I was a child, at that moment, that day, one day, etc. The present perfect tense is used with unspecific expressions such as ever, never, once, many times, several times, before, so far, already, yet, etc.

## 6. C

The present perfect tense cannot be used with specific time expressions such as yesterday, one year ago, last week, when I was a child, at that moment, that day, one day, etc. The present perfect tense is used with unspecific expressions such as ever, never, once, many times, several times, before, so far, already, yet, etc.

