



JCEE Screening Test

This test includes multiple-choice questions that ask you to select only one answer choice from a list of five choices.

Use the fact that the answer is there. If your answer is not one of the five answer choices given, you should assume that your answer is incorrect and do the following: (i) Reread the question carefully – you may have missed an important detail or misinterpreted some information; (ii) Check your computations – you may have made a mistake; and (iii) Reevaluate your solution method – you may have a flaw in your reasoning.

Name: _____ Birthdate: _____ Date: _____
Grade: _____ School: _____

Answer Sheet Sample (أنموذج من ورقة الإجابة)

Question

- | | | | | | |
|----|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| 1 | <input type="radio"/> A | <input type="radio"/> B | <input type="radio"/> C | <input type="radio"/> D | <input type="radio"/> E |
| 2 | <input type="radio"/> A | <input type="radio"/> B | <input type="radio"/> C | <input type="radio"/> D | <input type="radio"/> E |
| 3 | <input type="radio"/> A | <input type="radio"/> B | <input type="radio"/> C | <input type="radio"/> D | <input type="radio"/> E |
| 4 | <input type="radio"/> A | <input type="radio"/> B | <input type="radio"/> C | <input type="radio"/> D | <input type="radio"/> E |
| 5 | <input type="radio"/> A | <input type="radio"/> B | <input type="radio"/> C | <input type="radio"/> D | <input type="radio"/> E |
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| 10 | <input type="radio"/> A | <input type="radio"/> B | <input type="radio"/> C | <input type="radio"/> D | <input type="radio"/> E |

Section 1

This section consists of three different types of questions. There are directions and a sample question for each type.

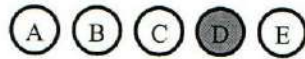
Type 1, Synonyms:

Each of the following questions consists of one word followed by five words or phrases. You are to select the one word or phrase whose meaning is closest to the word in capital letters.

Sample Question:

CHILLY:

- (A) lazy
- (B) nice
- (C) dry
- (D) cold
- (E) sunny



Type 2, Analogies:

The following questions ask you to find relationship between words. For each question, select the answer choice that best completes the meaning of the sentence.

Sample Question:

Sweet is to flavour as:

- (A) warm is to blanket
- (B) cacophony is to sound
- (C) pretty is to sight
- (D) robust is to effort
- (E) excited is to anticipation



Choice (C) is the best answer. Of all the answer choices, (C) states a relationship that is most like the relationship between sweet and flavour.

Section 1

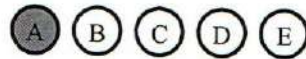
Type 3, Sentence Completions:

Each question contains one or two blanks, and you have to find the best answer choice to make the sentence make complete sense. Be sure to study the sentence carefully so that you notice all the clues built into the sentence.

Example:

The tutor's directions were ----- that the student could not offer the excuse that the directions were confusing.

- (A) explicit
- (B) fictional
- (C) heartfelt
- (D) mysterious



Choice (A) is the right answer.

Fractions, Decimals, and Percents

❖ The basketball team, at the Jubilee School, lost 18 games out of 27 played. Find the ratio of games won to games lost.

- (A) $\frac{1}{3}$
- (B) $\frac{1}{2}$
- (C) $\frac{3}{5}$
- (D) $\frac{2}{3}$
- (E) $\frac{3}{2}$

Exponents and Roots

❖ Simplify the variable expression: $(-2x^2y^5)^3$

(A) $-2x^5y^8$

(B) $-2x^6y^{15}$

(C) $-6x^6y^{15}$

(D) $-8x^6y^{15}$

(E) $8x^6y^{15}$

(A) (B) (C) (D) (E)

Factors and Multiples

❖ If x is a factor of 16 and y is a factor of 28, which is the least value that xy could be a factor of?

(A) 448

(B) 112

(C) 2

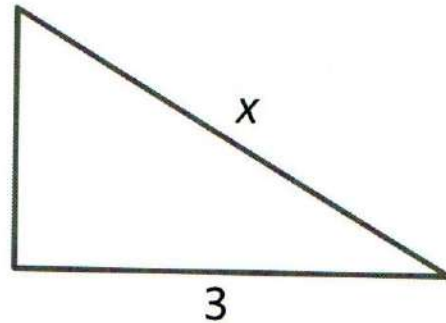
(D) 1

(E) 4

(A) (B) (C) (D) (E)

Solving for X :Find x

- (A) 3
 (B) 5
 (C) 6
 (D) 7



(E) It cannot be determined from the information given.

- (A) (B) (C) (D) (E)

In the addition of the three-digit numbers shown, the letters W , X , Y , and Z each represent a unique single digit, which of the following could be the sum of $W + X + Y + Z$?

$$\begin{array}{r} WXZ \\ + YXZ \\ \hline 952 \end{array}$$

- (A) 23
 (B) 20
 (C) 17
 (D) 14
 (E) 11

Section 2

Inequalities:

* Which of the following could be the value of Y if

$$\frac{1}{2} + Y < 0?$$

(A) $\frac{3}{4}$

(B) $\frac{1}{2}$

(C) $-\frac{3}{4}$

(D) $-\frac{1}{2}$

(E) $-\frac{1}{4}$



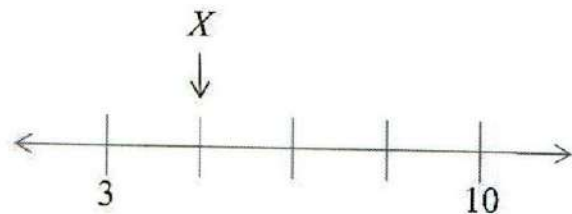
Triangles, Angles, and Lines:

- ❖ Triangle ABC is similar to triangle DEF . The length of \overline{BC} is 7 units, and the length of \overline{EF} is 9 units. If the length of \overline{AC} is 28 units, what is the length of \overline{DF} ?

- (A) 4 units
 (B) 15 units
 (C) 36 units
 (D) 60 units
 (E) 21 units



- ❖ A number line is shown below:



What number does point X represent on the number line

- (A) $4\frac{3}{4}$
 (B) $5\frac{1}{4}$
 (C) $6\frac{1}{2}$
 (D) 7
 (E) $3\frac{3}{4}$



Circles and Cylinders:

The diameter of the cylinder shown below is 3 times its height. The formula used to find the volume of a cylinder is $V = r^2 h \pi$, where r is the radius of the cylinder and h is the height of the cylinder.

If the height of the cylinder is 2cm, what is its volume, in cm^3 ?

- (A) 12π
- (B) 18π
- (C) 24π
- (D) 72π
- (E) 20π



Quadrilaterals:

1. A rectangular parking lot was enlarged by making the width 3 times as wide and making the length $\frac{5}{4}$ as long. If the area of the parking lot was M square meters before the expansion, what is the new area, in square meters, of the parking lot, in terms of M ?

(A) $\frac{5}{12}M$

(B) $\frac{12}{5}M$

(C) $\frac{15}{4}M$

(D) $\frac{15}{2}M$

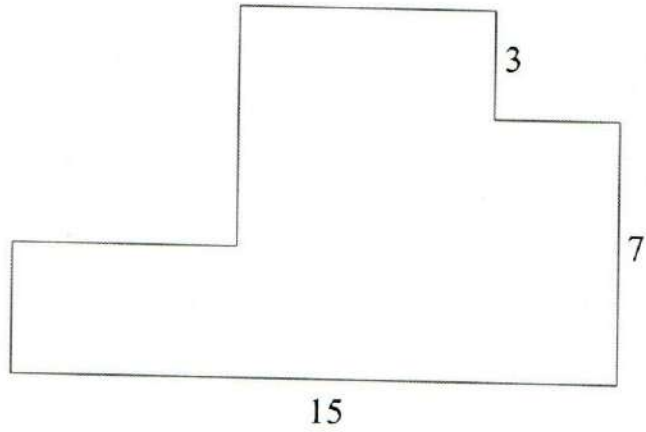
(E) $\frac{5}{4}M$



Section 4

Geometry and Visual Perception:

Determine the perimeter of the figure.



- (A) 25
- (B) 33
- (C) 41
- (D) 50
- (E) It cannot be determined from the information given.

(A) (B) (C) (D) (E)

Section 5

Reading and Understanding:

Read each passage carefully and then answer the questions about it. For each question, decide on the basis of the passage which one of the choices best answers the question.

The reading passages in this test are brief excerpts or adaptations of excerpts from published material. To make the text suitable for testing purposes, we may have, in some cases, altered the style, contents, or point of view of the original.

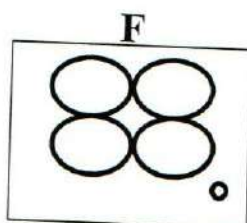
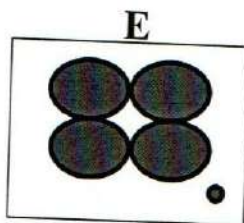
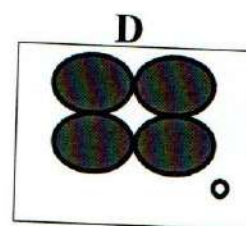
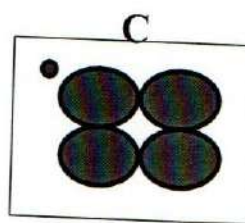
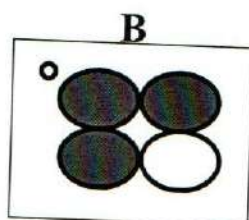
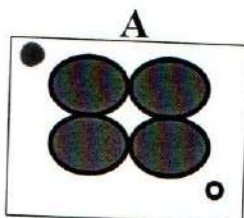
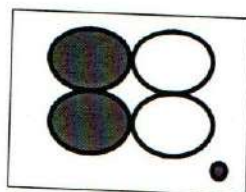
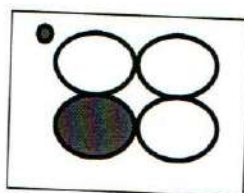
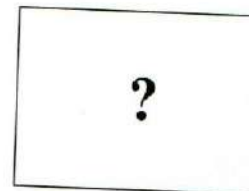
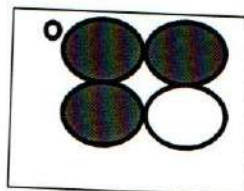
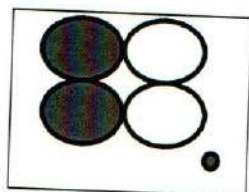
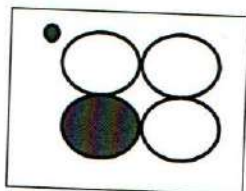
Acid rain describes any form of precipitation with high levels of nitric and sulfuric acids. It can also occur in the form of snow, fog, and tiny bits of dry material that settle to Earth. Most acid rain falls because of human activities. The biggest culprit is the burning of fossil fuels by coal-burning power plants, factories, and automobiles. Acid rain has many ecological effects, but none is greater than its impact on lakes, streams, wetlands, and other aquatic environments. Acid rain makes waters acidic and causes them to absorb the aluminum that makes its way from soil into lakes and streams. This combination makes waters toxic to crayfish, clams, fish, and other aquatic animals. Some species can tolerate acidic waters better than others. However, in an interconnected ecosystem, what impacts some species eventually impacts many more throughout the food chain—including non-aquatic species such as birds. Acid rain also damages forests, especially those at higher elevations. It robs the soil of essential nutrients and releases aluminum in the soil, which makes it hard for trees to take up water. Trees' leaves and needles are also harmed by acids. The only way to fight acid rain is by curbing the release of the pollutants that cause it. Individuals can also help prevent acid rain by conserving energy. The less electricity people use in their homes, the fewer chemicals power plants will emit. Vehicles are also major fossil fuel users, so drivers can reduce emissions by using public transportation, carpooling, biking, or simply walking wherever possible.

1. This passage was likely an excerpt from
 - (A) a scientific fiction
 - (B) a dictionary
 - (C) a political advertisement
 - (D) a Poem
 - (E) a newspaper article
2. According to the passage, acid rain
 - (A) has escalated in the last 20 years
 - (B) began well before the 19th century
 - (C) is caused by humans
 - (D) will have negligible long-term effect
 - (E) Is not an issue yet.

Section 6

Question (1):

The boxes run in a sequence from left to right. You must determine which box (from options A to F) goes in the missing part of the sequence.



- A
 B
 C
 D
 E
 F