

Workforce Ability Test 3

Solution Booklet

Instructions

This Ability test comprises **50 questions**, and you will have **50 minutes** in which to correctly answer as many as you can. Calculators are not permitted for this test, and it is recommended you have some rough paper to work on.

The test comprises of three sections:

1. Verbal Section (20 Questions)
2. Abstract Section (10 Questions)
3. Numerical Section (20 Questions)

You will have to work quickly and accurately to perform well in this test. If you don't know the answer to a question, leave it and come back to it if you have time.

You may click Back and Next during the test to review or skip questions.

You can submit your test at any time. If the time limit is up before you click submit the test will automatically be submitted with the answers you have selected. It is recommended to keep working until the time limit is up.

Try to find a time and place where you will not be interrupted during the test.

When you are ready, begin the test.

For ambitious employees, a good relationship with their immediate boss is crucial. A bad relationship can lead to missed opportunities for promotion, and even damage professional reputations. A boss who possesses a thorough understanding of the company's future direction and ultimate goals is the person best equipped to help an employee achieve success.

Communication is key. It is important to understand a boss's personal goals and priorities within the company, as well as their individual management approach. Clarifying instructions, anticipating needs, requesting feedback, and accepting criticism gracefully all help to build a solid working relationship.

On the other hand, artificial flattery or excessive deference are tactics unlikely to impress if promotion is the goal – a good employee should demonstrate the potential to be an equally effective boss.

Q1 Employees must reject criticism to build a good working relationship with their boss.

True False Cannot say

False – the passage explicitly states the opposite, that “accepting criticism gracefully [helps to] build a solid working relationship.”

Q2 A bad relationship with a boss can lead to missed opportunities, but does not risk an employee's reputation.

True False Cannot say

False – the passage states, “A bad relationship [with an employer] can...damage professional reputations.” The statement is therefore incorrect.

Q3 Flattering the boss can be an effective approach for an employee seeking promotion.

True

False

Cannot say

Cannot say - the passage states “artificial flattery [is] unlikely to impress if promotion is the goal”, but makes no comment about the effect of sincere flattery. So that tells us about artificial flattery and that it is unlikely to impress. Regarding flattery in general, the passage does not state that flattery can or cannot be an effective approach for seeking promotion, so we cannot say if this is true or false.

Well-regulated, ethical practices should always be an area of primary concern for any business. In an environment where multinational conglomerates predominate, owners of small businesses may feel anonymous enough to become flexible about their code of ethics. However, the increasingly inescapable attention of the media allows an unprecedented number of individuals to access news and information with greater speed than ever before – unethical practices can become a matter of public knowledge overnight, with devastating consequences. Codes of ethical practice should apply not only to clients, but to employees, who are just as able to draw inappropriate behaviour on the part of their employers to the public's attention. In today's society, businesses of any size must be able to demonstrate transparency and accountability in their dealings with employees, clients, and the public alike.

Q4 Unethical practices are only a problem if the public becomes aware of them.

True

False

Cannot say

Cannot say – the passage states that “the increasingly inescapable attention of the media” means that “unethical practices can become a matter of public knowledge overnight, with devastating consequences.” It does not however make any explicit reference to the consequences of unethical practices which do not come to the public attention.

Q5 Employees of a company should be subject to ethical codes of practice.

True

False

Cannot say

True – The passage states that, “Codes of ethical practice should apply not only to clients, but to employees”.

Q6 More people than ever before have access to information about companies' ethical practices.

True

False

Cannot say

True – the passage states that the media “allows an unprecedented number of individuals to access news and information” and explicitly confirms that this includes information about companies' ethical practices by adding “unethical practices can become a matter of public knowledge overnight”.

Successful and cost-effective advertising is an important issue to consider when starting up a business. A comprehensive business plan should include details of advertising strategies, a helpful starting point for which is an analysis of the advertising currently being used by competitors in the same line of business.

The rise of the internet has provided a variety of new opportunities for advertising, of which an innovative business should take full advantage. A well-designed website should ideally combine a professional appearance with user-friendly functionality, and be widely promoted to draw as much traffic as possible. This not only increases the visibility of a company, but assures potential clients that the company has a forward-thinking, enterprising outlook, and is willing to embrace as well as exploit the latest technological developments.

Q7 An analysis of competitors' advertisements is helpful in laying out advertising strategies for a new business

True

False

Cannot say

True – the passage states, “a helpful starting point for [planning advertising strategies] is an analysis of the advertising currently being used by competitors”. The statement is therefore correct.

Q8 A professional and user-friendly website will attract a lot of traffic.

True

False

Cannot say

Cannot say – the passage states that “A well-designed website” should

Q9 Clients prefer a company that is forward-thinking and enterprising.

True

False

Cannot say

Cannot say – the passage states that a website “assures potential clients that the company has a forward-thinking, enterprising outlook”, but does not explicitly state that a client would or would not prefer such a company.

Work-related stress is one of the biggest causes of sick leave in the UK. If you've noticed you always seem to be rushing about, or miss meal breaks, take work home or don't have enough time for relaxation, seeing your family or for exercise, then you may well find yourself under stress, especially at work. There is often no single cause of work-related stress, but it can be caused by poor working conditions, long hours, relationship problems with colleagues, or lack of job security. Stress is often the result of a combination of these factors that builds up over time. Work-related stress can result in both physical problems such as headaches, muscular tension, back or neck pain, tiredness, digestive problems and sweating; or emotional problems, such as a lower sex drive, feelings of inadequacy, irritability and lack of concentration. According to recent surveys, one in six of the UK working population said their job is very stressful, and thirty percent of men said that the demands of their job interfere with their private lives.

Q10 Stress at work is often caused by relationship problems with your partner.

True

False

Cannot say

Cannot say - This may well be true, but is not stated in the passage so we have to answer Cannot Say. The passage refers only to relationship problems with colleagues and does not say if relationship problems with a partner do or don't cause stress.

Q11 Work-related stress can result in tiredness and a lack of concentration.

True

False

Cannot say

True -The fifth sentence lists tiredness as one of the physical problems caused by stress, and lack of concentration is listed under emotional problems.

Q12 One in six working men say their job is very stressful.

True

False

Cannot say

Cannot say - One in six “of the UK working population” said their job is very stressful in the study referred to in the passage. The passage does not tell us the ratio for men only, which may be higher, equal, or lower.

Many people are aware that high cholesterol contributes to heart disease, but they will be surprised to learn that cholesterol performs essential functions in the human body. A lipid made in the liver and found in animal cell membranes, cholesterol is used to repair tissues and digest fat, as well as in the manufacture of hormones, bile salts, and Vitamin D. However, problems arise when an excess of cholesterol builds up on blood vessel walls, thus impeding blood flow. A person's blood cholesterol count is comprised of two different types of cholesterol: low-density lipoprotein (LDL), sometimes called "bad" cholesterol, and high-density lipoprotein (HDL), known as "good" cholesterol. Whereas HDL carries cholesterol away from the arteries to the liver, LDL carries cholesterol from the liver to the arteries where it accumulates. Although certain foods deriving from animals, such as meat, shellfish, cheese and eggs, are high in dietary cholesterol, it is actually the consumption of the saturated fats found in red meat, full-fat dairy products, cakes and biscuits that raises levels of "bad" cholesterol. Conversely, eating polyunsaturated fats and soluble fibre can lower LDL.

Q13 Full-fat dairy products have no effect on a person's levels of LDL.

True

False

Cannot say

False – the sixth sentence says that it is the eating saturated fats found in "full-fat dairy products, cakes and biscuits that raises the levels of "bad" cholesterol"– i.e. LDL.

Q14 Not everyone is aware of the true effect of cholesterol on one's health.

True

False

Cannot say

True – the first sentence states that many people would be "surprised to learn that cholesterol performs essential functions in the human body".

Q15 To maximise blood flow in the arteries, HDL levels should be minimised.

True

False

Cannot say

False – the reverse is true according to sentences four and five.

The next 5 Questions deal with Critical Reasoning:

Q16 The ice on the front windshield of the car had formed when moisture condensed during the night. The ice melted quickly after the car was warmed up the next morning because the defrosting vent, which blows on the front windshield, was turned on full force.

Which of the following, if true, most seriously jeopardizes the validity of the explanation for the speed with which the ice melted?

- A. The side windows had no ice condensation on them
- B. Even though no attempt was made to defrost the back window, the ice there melted at the same rate as did the ice on the front windshield.
- C. The speed at which ice on a window melts increases as the temperature of the air blown on the window increases
- D. The warm air from the defrosting vent for the front windshield cools rapidly as it dissipates throughout the rest of the car.
- E. The defrosting vent operates efficiently even when the heater, which blows warm air toward the feet or faces of the driver and passengers, is on.

B is the best answer

The speed with which the ice on the windshield melted is attributed to the air blowing full force from the defrosting vent onto the front windshield. This explanation of B is undermined if, as B states, no attempt was made to defrost the back window and the ice on the back window melted as quickly as did the ice on the windshield. Therefore, B is the best answer. In the absence of other information, the lack of ice condensation on the side windows that is mentioned in A is irrelevant to the validity of the explanation. C might support the explanation, since the air from the defrosting vent was warm. Neither of D and E gives a reason to doubt that air from the vent caused the ice's melting, and thus neither jeopardizes the explanation's validity.

Q17 A conservation group in the United States is trying to change the long-standing image of bats as frightening creatures. The group contends that bats are feared and persecuted solely because they are shy animals that are active only at night.

Which of the following, if true, would cast the most serious doubt on the accuracy of the group's contention?

- A. Bats are steadily losing natural roosting places such as caves and hollow trees and are thus turning to more developed areas for roosting.
- B. Bats are the chief consumers of nocturnal insects and thus can help make their hunting territory more pleasant for humans.
- C. Bats are regarded as frightening creatures not only in the United States but also in Europe, Africa, and South America.
- D. Raccoons and owls are shy and active only at night; yet they are not generally feared and persecuted.
- E. People know more about the behavior of other greatly feared animal species, such as lions, alligators, and snakes, than they do about the behavior of bats.

D is the best answer.

The group's contention suggests that animals that are shy and active at night are feared and persecuted for that reason. D establishes that raccoons and owls are shy and active at night, but that they are neither feared nor persecuted. Therefore, D is the best answer. Although an increasing prevalence of bats might explain the importance of addressing people's fear of bats, A does not address the original causes of that fear. B and E, while relevant to the rationality of people's fear of bats, do not affect the assessment of the accuracy of the group's contention. That bats are feared outside the United States, as C states, does not conflict with the group's explanation for fear of bats in the United States.

Q18 Opponents of laws that require automobile drivers and passengers to wear seat belts argue that in a free society people have the right to take risks as long as the people do not harm other as a result of taking the risks. As a result, they conclude that it should be each person's decision whether or not to wear a seat belt.

Which of the following, if true, most seriously weakens the conclusion drawn above?

- A. Many new cars are built with seat belts that automatically fasten when someone sits in the front seat.
- B. Automobile insurance rates for all automobile owners are higher because of the need to pay for the increased injuries or deaths of people not wearing seat belts.
- C. Passengers in airplanes are required to wear seat belts during takeoffs and landings.
- D. The rate of automobile fatalities in states that do not have mandatory seat belt laws is greater than the rate of fatalities in states that do have such laws.
- E. In automobile accidents, a greater number of passengers who do not wear seat belts are injured than are passengers who do wear seat belts.

B is the best answer

The principle that people are entitled to risk injury provided they do not thereby harm others fails to justify the individual's right to decide not to wear seat belts if it can be shown, as B shows, that that decision does harm others. Therefore, B is the best answer. A suggests that the law may be irrelevant in some cases, but it does not address the issue of the law's legitimacy. C cites a requirement analogous to the one at issue, but its existence alone does not bear on the legitimacy of the one at issue. The argument implicitly concedes that individuals take risks by not wearing seat belts; therefore, D and E, which simply confirm this concession, do not weaken the conclusion.

Q19 The cost of producing radios in Country Q is ten percent less than the cost of producing radios in Country Y. even after transportation fees and tariff charges are added, it is still cheaper for a company to import radios from Country Q to Country Y than to produce radios in Country Y.

The statements above, if true, best support which of the following assertions?

- A. labor costs in Country Q are ten percent below those in Country Y.
- B. importing radios from Country Q to Country Y will eliminate ten percent of the manufacturing jobs in Country Y.
- C. the tariff on a radio imported from Country Q to Country Y is less than ten percent of the cost of manufacturing the radio in Country Y.
- D. the fee for transporting a radio from Country Q to Country Y is more than ten percent of the cost of manufacturing the radio in Country Q.
- E. it takes ten percent less time to manufacture a radios in Country Q than it does in Country Y

C is the best answer.

If the tariff on importing radios from Country Q to Country Y were as high as ten percent or more of the cost of producing radios in Y, then, contrary to what the passage says, the cost of importing radios from Q to Y would be equal to or more than the cost of producing radios in Y. thus, the tariff cannot be that high, and C is the best answer. A and E give possible partial explanations for the cost difference, but neither is supported by the passage because the cost advantage in Q might be attributable to other factors. B and D are both consistent with the information in the passage, but the passage provides no evidence to support them.

Q20 During the Second World War, about 375,000 civilians died in the United States and about 408,000 members of the United States armed forces died overseas. On the basis the those figures, it can be concluded that it was not much more dangerous to be overseas in the armed forces during the Second World War than it was to stay at home as a civilian.

Which of the following would reveal most clearly the absurdity of the conclusion drawn above?

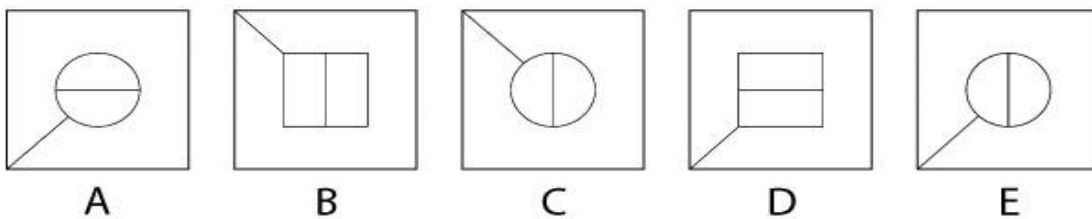
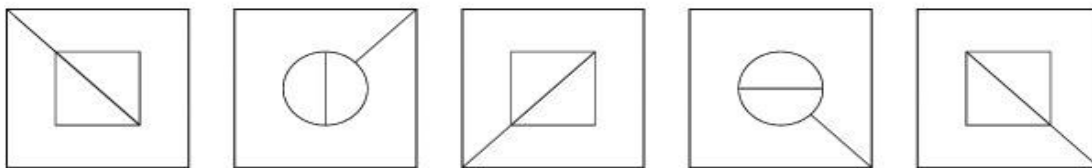
- A. Counting deaths among members of the armed forces who served in the United State in addition to deaths among members of the armed forces serving overseas
- B. Expressing the difference between the numbers of deaths among civilians and members of the armed forces as a percentage of the total number of deaths
- C. Separating deaths caused by accidents during service in the armed forces from deaths caused by combat injuries
- D. Comparing death rates per thousand members of each group rather than comparing total numbers of deaths
- E. Comparing deaths caused by accidents in the United States to deaths caused by combat in the armed forces

D is the best answer

Concluding from the similar numbers of deaths in two groups that the relative danger of death was similar for both groups is absurd if, as here, one group was far smaller. D exposes this absurdity by pointing out the need to compare death rates of the two groups, which would reveal the higher death rate for the smaller group. Therefore, D is the best answer. Since the conclusion acknowledges the difference between the number of civilian and armed forces deaths, expressing this difference as a percentage, as suggested by B, is beside the point. A is inappropriate because it simply adds a third group to the two being compared. Because cause of death is not at issue, C and E are irrelevant.

In each question you will be presented with a logical sequence of five figures. You will need to determine which of the possible answers best matches the next figure in the sequence, or which replaces the question mark.

Q21



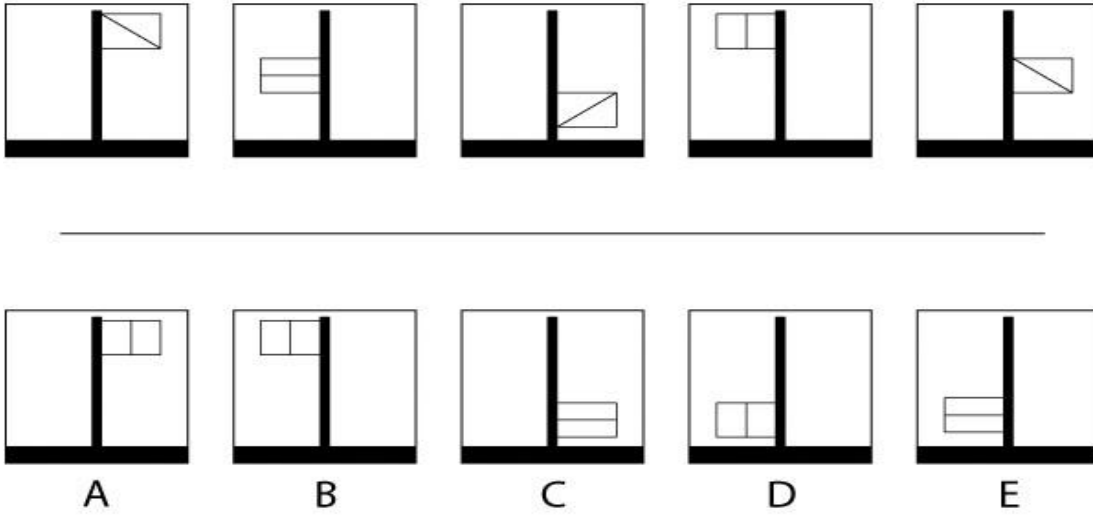
The Right Answer is E

Rule 1: The shape alternates between a circle and square.

Rule 2: The line outside of the shape moves clockwise one place to the next corner, then two places, then three places and so on.

Rule 3: The line inside the shape rotates 45° clockwise each time.

Q22



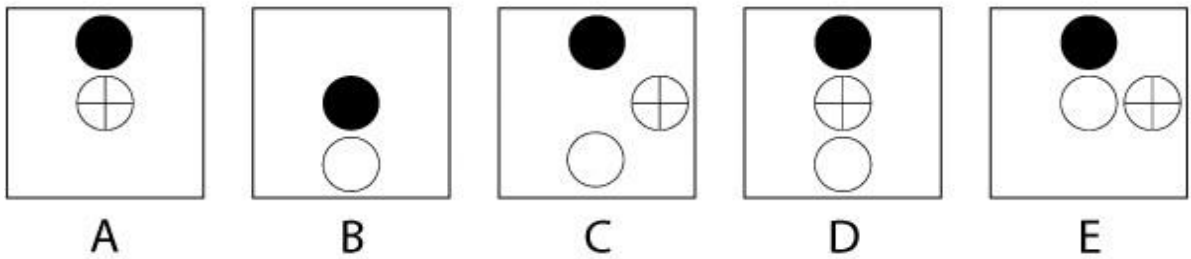
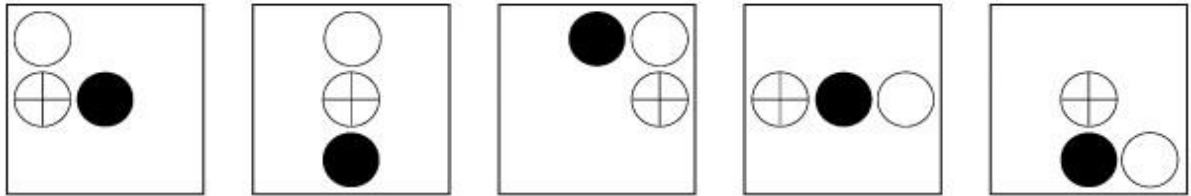
The Right Option is E

Rule 1: The flag moves down one place each time, and then begins again from the top.

Rule 2: The flag alternates between pointing left and right.

Rule 3: The line in the flag rotates 45° counterclockwise each time.

Q23



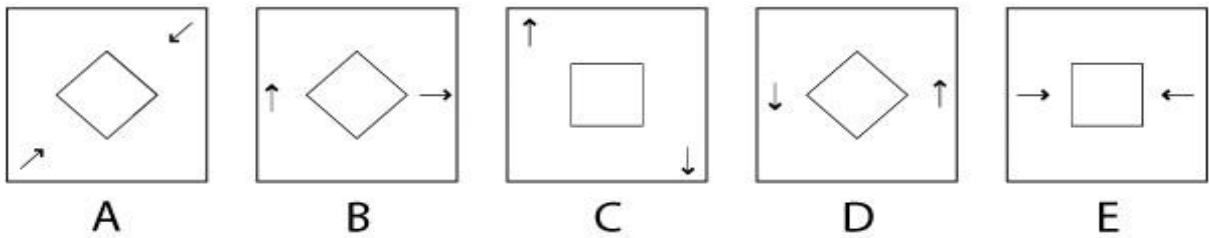
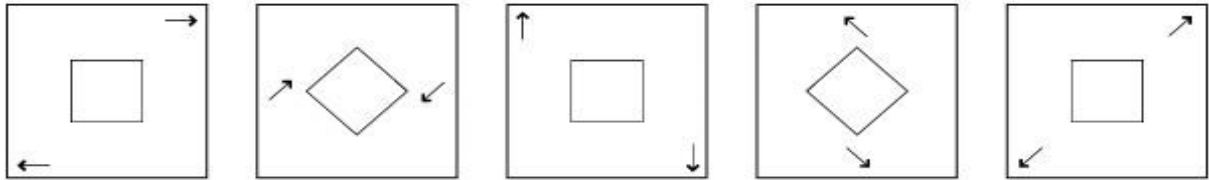
The Right Option is C

Rule 1: The shaded circle moves down one place each time, and then begins again from the top.

Rule 2: The crossed circle moves one place to the right each time and then begins again from the left.

Rule 3: The blank circle moves one place clockwise each time.

Q24



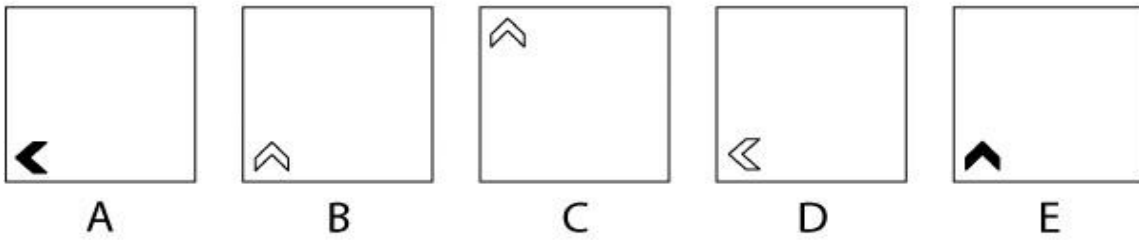
The Right Option is D

Rule 1: The square rotates 45° each time.

Rule 2: Both arrows move one place clockwise around the box each time.

Rule 3: The arrows always point in opposite directions.

Q25



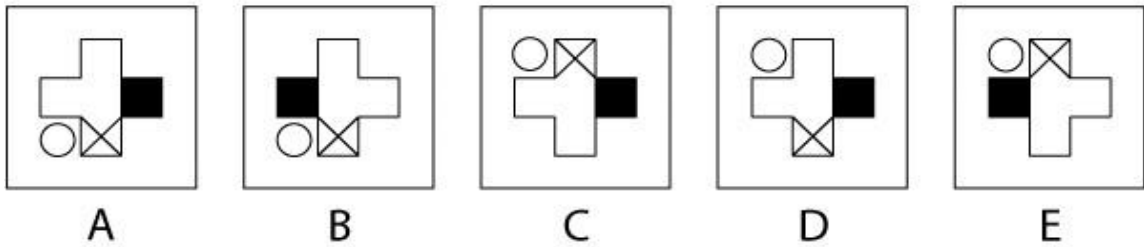
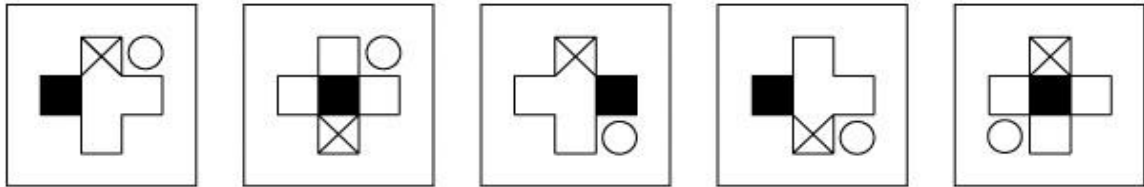
The Right Answer is B

Rule 1: The shape rotates 90° counterclockwise each time.

Rule 2: The shape alternates between shaded and unshaded.

Rule 3: The shape moves from top left, to middle right, to bottom left and then repeats.

Q26



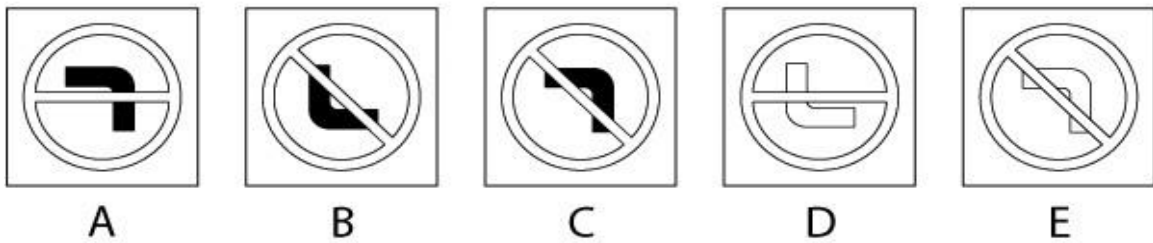
The Right Answer is A

Rule 1: The shaded block moves one place to the right each time and then begins again from the left.

Rule 2: The cross alternates between the top and bottom of the shape.

Rule 3: The circle moves one place clockwise every two boxes.

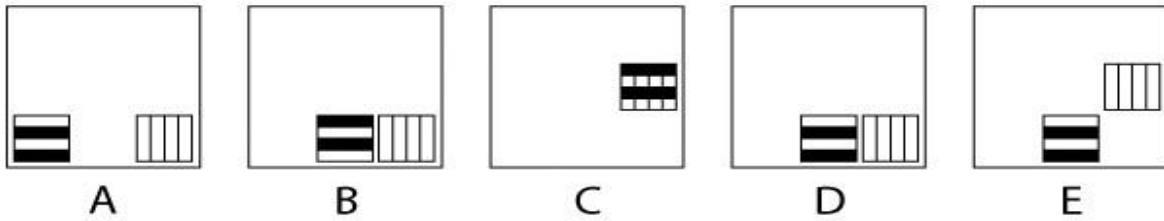
Q27



The Right Answer is C

- Rule 1: The outer circle rotates 45° counterclockwise each time.
 - Rule 2: The shape inside the circle rotates 90° counterclockwise each time.
 - Rule 3: The shape inside the circle alternates between shaded and unshaded.
-

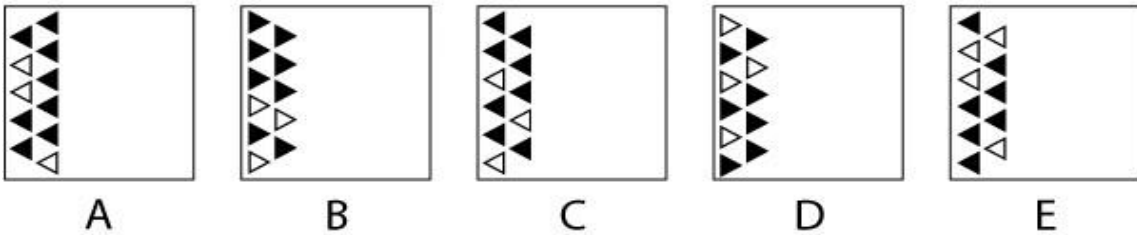
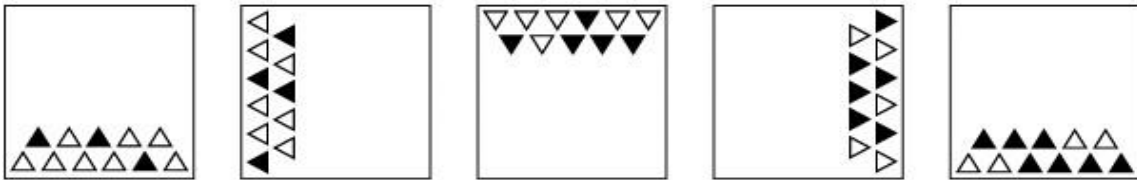
Q28



The Right Answer is D

- Rule 1: The horizontally barred square moves one place clockwise around the box each time.
 - Rule 2: The bars on the horizontally barred square alternate between shaded and unshaded.
 - Rule 3: The vertically barred square moves up one place each time, then begins again from the bottom.
-

Q29



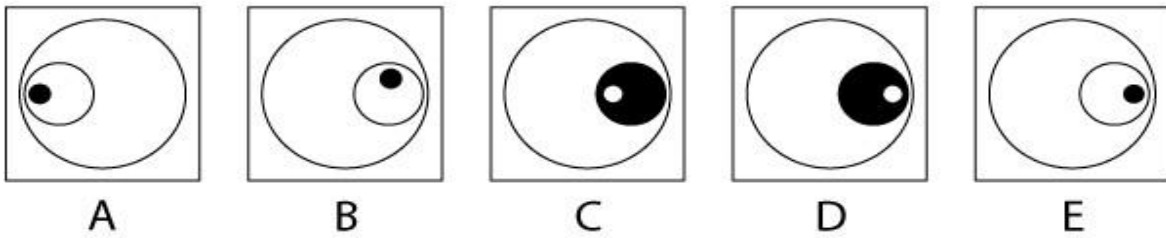
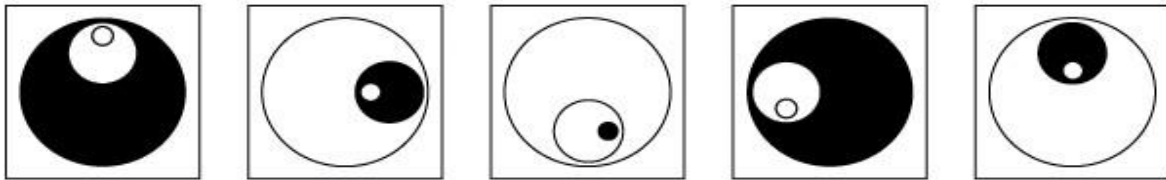
The Right Answer is C

Rule 1: The rows of triangles move clockwise to the next edge of the box each time. The row of six triangles is always closest to the edge.

Rule 2: The triangles alternate between pointing to the centre of the box, and pointing away from the box.

Rule 3: The total number of shaded triangles increases by one each time.

Q30



The Right Answer is E

Rule 1: The small circle rotates counterclockwise one place, then two places, then three places and so on.

Rule 2: The middle circle moves one place clockwise around the large circle.

Rule 3: The shading alternates between the large, middle and small circle, in that order, and then repeats.

Federal Inland Revenue Service (FIR) charges tax rate of 5% on the annual profit of all business in Nigeria. If you missed V.A.T for a year and you are caught you would pay a V.A.T of 7% for the missed year(s) and the present year. Using the table below answer the questions that follow.

| Business Organisation | Annual Income 2012 (₦) | Annual Expense 2012(₦) |
|-----------------------|------------------------|------------------------|
| Kings Business Centre | 500,000 | 45,000 |
| Shakespeare e-Centre | 780,000 | 70,000 |
| Wisdom Cyber Cafe | 550,000 | 50,000 |

Q31 How much V.A.T must Wisdom Cyber Café pay to FIRS for the year 2012(In Naira)?

- A. 22,000 B. 23,000 C. 24,000 D. 25,000 E. 26,000

$$\begin{aligned} \text{Annual Profit} &= \text{Annual Income} - \text{Annual Expense} \\ &= 550,000 - 50,000 \\ &= 500,000 \end{aligned}$$

$$\begin{aligned} \text{V.A.T on Annual Profit} &= 5\% \text{ of } 500,000 \\ &= 25,000 \end{aligned}$$

Q32 Shakespeare e-centre avoided V.A.T for 2012 but was caught and penalized. How much V.A.T would she pay for 2013, If the Income and Expenses remained the same for both years (in Naira)?

- A. 95,200 B. 95,400 C. 95,600 D. 96,700 E. 99,400
-

$$\begin{aligned}\text{Annual Profit} &= \text{Annual Expense} - \text{Annual Income} \\ &= 780,000 - 70,000 \\ &= 710,000\end{aligned}$$

$$\begin{aligned}\text{Since V.A.T was avoided the V.A.T percentage} &= 7\% \text{ of } 710,000 \\ &= 49,000\end{aligned}$$

$$\begin{aligned}\text{For both year it will be} &= 49,700 + 49,700 \\ &= 99,400 \text{ (E)}\end{aligned}$$

Q33 The Annual Expenses for Kings Computer reduced by 10% for the year 2013 but the income remained the same. How much V.A.T would King Computer pay 2013(in Naira)?

- A. 22,975 B. 23,500 C. 27,750 D. 28,450 E. 28,750

$$\begin{aligned}\text{Annual Expense reduced by 10\%} &= 0.90 \times 45,000 \\ &= 40,500\end{aligned}$$

$$\begin{aligned}\text{Annual Profit} &= \text{Annual Income} - \text{Annual Expense} \\ &= 500,000 - 40,500 \\ &= 459,500\end{aligned}$$

$$\begin{aligned}\text{V.A.T} &= 5\% \text{ of } 459,000 \\ &= 22,975 \text{ (A)}\end{aligned}$$

Q34 Kings Computer mistakenly paid a V.A.T of ₦32,000 for 2012. How much does this value deviate from the accurate V.A.T amount to be paid?

- A. 8,620 B. 9,000 C. 9,250 D. 10,150 E. 10,250

$$\begin{aligned} \text{Annual Profit} &= \text{Annual Income} - \text{Annual Expense} \\ &= 500,000 - 45,000 \\ &= 455,000 \end{aligned}$$

$$\begin{aligned} \text{V.A.T} &= 5\% \text{ of } 455,000 \\ &= 22,750 \end{aligned}$$

$$\begin{aligned} \text{Deviation} &= 32,000 - 22,750 \\ &= 9,250(C) \end{aligned}$$

Q35 The Annual Income and Experts increases by 10% and 5% respectively for 2 years. What is the V.A.T to be paid for 2014 (In Naira)?

- A. 30,493.75 B. 33,534.87 C. 35,675.66 D. 38,778.77 E. 39, 927.45

$$\begin{aligned} \text{Income increase by 10\% in 2013} &= 1.10 \times 550,000 = 605,000 \\ \text{Income increase by 10\% in 2014} &= 1.10 \times 605,000 = 665,500 \\ \text{Expense increase by 5\% in 2013} &= 1.05 \times 50,000 = 52,500 \\ \text{Expense increase by 5\% in 2014} &= 1.05 \times 50,000 = 55,125 \end{aligned}$$

$$\begin{aligned} \text{Profit} &= \text{Annual Income (2014)} - \text{Annual Expense (2014)} \\ &= 665,500 - 55,125 \\ &= 609,875 \end{aligned}$$

$$\begin{aligned} \text{V.A.T in 2014} &= 5\% \text{ of } 609,875 \\ &= 30,493.75 \end{aligned}$$

| Product code | Non-European stores selling product | Current month's sales (\$) | Price per product unit (\$) |
|--------------|-------------------------------------|----------------------------|-----------------------------|
| DE45* | 14 | 35,000 | 175 |
| PU20* | 9 | 20,000 | 200 |
| AE25 | 6 | 13,000 | 130 |
| PU10** | 5 | 24,000 | 150 |
| FD24** | 7 | 9,000 | 180 |

* Promotional offer = 3 for the price of 2

** Promotional offer = 4 for the price of 3

| Product code | European stores selling product | Current month's sales (€) | Price per product unit (€) |
|--------------|---------------------------------|---------------------------|----------------------------|
| DE45 | 26 | 21,000 | 150 |
| PU20 | 19 | 30,000 | 160 |
| AE25 | 11 | 24,500 | 200 |
| PU10 | 9 | 18,700 | 110 |
| FD24 | 13 | 14,700 | 90 |

Q36 Which of the products shown had the lowest value of sales per non-European store and which had the highest value of sales per European store?

- A. PU10 (non-European); AE25 (European)
- B. FD24 (non-European); DE45 (European)
- C. FD24 (non-European); AE25 (European)
- D. AE25 (non-European); PU10 (European)
- E. AE25 (non-European); FD24 (European)

Step 1 – Calculate each product's average sales per European store

$$DE45 = 21,000/26 = 808$$

$$PU20 = 30,000/19 = 1,579$$

$$AE25 = 24,500/11 = 2,227$$

$$PU10 = 18,700/9 = 2,078$$

$$FD24 = 14,700/13 = 1,131$$

Step 2 – Calculate each product’s average sales per non-European store

$$DE45 = 35,000/14 = 2,500$$

$$PU20 = 20,000/9 = 2,222$$

$$AE25 = 13,000/6 = 2,167$$

$$PU10 = 24,000/5 = 4,800$$

$$FD24 = 9,000/7 = 1,286$$

Thus the correct answer is (C) FD24 (non-European); AE25 (European)

Q37 What is the discrepancy (in \$) between the AE25 price per product unit in non-European stores compared to European stores. Use an exchange rate of 0.80 to the \$.

- A. \$30
- B. \$120
- C. \$130
- D. \$200
- E. \$230

The information that you need is shown in both tables. Note from the possible answers it doesn't matter which is the greater, we just need the difference.

F.

Tip: If you struggle with the term “ X to the \$” and you sometimes multiply when you should divide by the conversion, think of an extreme example. So think of a two currencies that have very

different strengths, for example Zimbabwean Dollar to the British Pound. It doesn't matter what the values are but you know there are lots of ZWDs to the BGP and you also know that the same product will cost a lot more ZWDs than GBP. Hopefully that will help you decide if currency A should be a higher number than currency B, or vice versa.

Step 1 – Read from the table the AE25 price per product unit (non-European stores)
= \$130

H.

Step 2 – Calculate the AE25 price per product unit (European stores) =
 $200 / 0.80 = \$250$

I.

Step 3 – Calculate the difference between the two $\$250 - \$130 = \$120$

J.

Thus the correct answer is (B) \$120

Q38 This month's combined target for non-European and European sales of AE25 is 40,000. Using an exchange rate of 0.75 to the \$, what is the difference between the sales values shown and this target?

- A. 575
- B. 750
- C. 5,100
- D. 5,750
- E. 7500

The information that you need is shown in both tables

Step 1 – Calculate AE25's non-European sales in Euros

$$\$13,000 \times 0.75 = 9,750$$

Step 2 – Calculate AE25’s combined European and non-European sales

$$9,750 + 24,500 = 34,250$$

Step 3 – Calculate the discrepancy against target sales $40,000 - 34,250 = 5,750$

Thus the correct answer is (D) 5,750

Q39 Combining European and non-European sales, which products generated the highest number of product units sold? Use the non-promotional sales prices shown.

- A. DE45
- B. PU20
- C. AE25
- D. PU10
- E. FD24

The information that you need is shown in both tables.

Step 1 – Calculate the number of sales per product (non-European stores)

| | Product unit sales |
|------|--------------------|
| DE45 | $35,000/175 = 200$ |
| PU20 | $20,000/200 = 100$ |
| AE25 | $13,000/130 = 100$ |
| PU10 | $24,000/150 = 160$ |
| FD24 | $9,000/180 = 50$ |

Step 2 – Calculate the number of sales per product (European stores)

| | | |
|------|-----|----------------------|
| DE45 | 145 | $21,000/150 = 140$ |
| PU20 | 185 | $30,000/160 = 187.5$ |
| AE25 | 240 | $24,500/200 = 122.5$ |
| PU10 | 110 | $18,700/110 = 170$ |

Q40 Given that a customer uses the promotional offers shown, put the 5 products sold in non-European stores into order of increasing promotional price per unit (starting with the cheapest).

- A. AE25, PU10, DE45, FD24, PU20
- B. PU10, DE45, PU20, AE25, FD24
- C. PU10, DE45, AE25, PU20, FD24
- D. DE45, PU10, PU20, AE25, FD24
- E. PU10, DE45, PU20, FD24, AE25

The information that we need is shown in the first table (non-European stores)

Step 1 – Calculate the price of 2 promotional offers DE45 promotional price per unit = $2/3 \times \$175 = \116.67 PU20 promotional price per unit = $2/3 \times \$200 = \133.33

Step 2 – Calculate the price of 3 promotional offers PU10 promotional price per unit = $3/4 \times \$150 = \112.50 FD24 promotional price per unit = $3/4 \times \$180 = \135.00

Step 3 – Put these promotional prices into order alongside the fifth product (AE25) priced at \$130 and not on promotion

Thus the correct answer is (C) PU10, DE45, AE25, PU20, FD24

| Number of Employees | | | | | |
|---|-------|-------|-------|-------|-------|
| Parent Company's 5 subsidiary companies | 2005 | 2006 | 2007 | 2008 | 2009 |
| Subsidiary 1 | 1,538 | 1,584 | 1,573 | 1,585 | 1,614 |
| Subsidiary 2 | 1,107 | 1,084 | 1,060 | 1,068 | 962 |
| Subsidiary 3 | 1,340 | 1,384 | 1,393 | 1,398 | 1,412 |
| Subsidiary 4 | 1,505 | 1,495 | 1,528 | 1,548 | 1,583 |
| Subsidiary 5 | 1,010 | 980 | 946 | 997 | 1,029 |
| Parent company: Employees working part-time (%) | 12.0 | 8.1 | 8.0 | 5.4 | 5.0 |

Note: the entire workforce of the parent company comprises only the employees of its five subsidiary companies

Q41 Between which three years was there an average of 1,553 employees for one of the Subsidiary Companies?

- A. 2005-2007 Subsidiary 1
- B. 2006-2008 Subsidiary 1
- C. 2007-2009 Subsidiary 4
- D. 2007-2009 Subsidiary 1
- E. None of these

Step 1 – Looking at the employee totals there are only two Subsidiary Companies that could have an average of 1,553 employees across three years: Subsidiary Companies 1 and 4. The answer options include Subsidiary Companies 1 and 4, as well as (E) None of these.

Step 2 - Calculate the average number of employees for answer options (A) – (D)

2005-2007 Subsidiary 1 = 1,565
 2006-2008 Subsidiary 1 = 1,581
 2007-2009 Subsidiary 4 = 1,553
 2007-2009 Subsidiary 1 = 1,591

Q42. In 2008 subsidiary company 4 comprised 2 regions with double the number of employees in one region compared to the other. If the ratio of male:female employees in the smaller region was 1:1.15, what was this region's number of male employees?

- A. 240
- B. 828
- C. 414
- D. 394
- E. 360

Step 1 – Calculate the number of employees in the smaller region
 $1,548/3 = 516$ employees

Step 2 – Apply the 1:1.15 Male:Female ratio $516/2.15 = 240$ male employees
 Thus the correct answer is (A) 240

Q43. 1 in 15 of the parent company's part-time employees were managers in 2005 and 1 in 13 part-time employees were managers in 2007. What was the difference in the number of part-time managers in 2005 compared to 2007?

- A. 14 less
- B. 12 more
- C. 12 less
- D. 13 more
- E. Cannot Say

| | 2005 | 2007 |
|---|---------------------------|--------------------------|
| | 1,538 | 1,573 |
| | 1,107 | 1,060 |
| | 1,340 | 1,393 |
| | 1,505 | 1,528 |
| | 1,010 | 946 |
| Step 1 Total employees for each year = | 6,500 | 6,500 |
| Step 2 Part-time employees = | $6,500 \times 12\% = 780$ | $6,500 \times 8\% = 520$ |
| Step 3 Managers = | $780 / 15 = 52$ | $520 / 13 = 40$ |

Step 4 *Difference = 52 – 40 = 12*

Thus the correct answer is (B) 12 more

Q44. What % of the Parent Company's total employees worked for Subsidiary 5 in 2006 (to the nearest whole %)?

- A. 12%
- B. 10%
- C. 18%
- D. 15%
- E. 9%

Step 1 - *Calculate the total number of employees across all 5 Subsidiaries i.e. the Parent Company's number of employees = 6,527*

Step 2 – *Calculate the % of Subsidiary 5 employees $980/6527 = 15.01\%$*

Thus the correct answer is (D) 15%

Q45. In 2009 what was the absolute difference between the Parent Company's full-time employees and part-time employees (if Number of employees = Full-time employees + part-time employees)?

- A. 6,270
- B. 90
- C. 4,733
- D. 6,600
- E. 5,940

Step 1 – Calculate the total employees in 2009 $1,614 + 962 + 1,412$
 $+ 1,583 + 1,029 = 6,600$

Step 2 – Calculate the number of full-time employees

Number of employees = Full-time employees + part-time employees $6,600 =$
 $100\% = x\% + 5\%$

Full-time employees = 95%

Step 3 – Calculate the difference in the % of part-time employees to full-time
employees $95\% - 5\% = 90\%$

Step 4 – Calculate the difference

$6,600 \times 90\% = 5,940$

Thus the correct answer is (E) 5,940

| | 2009 (£million) | 2008 (£million) | 2007 (£million) |
|---|--------------------|--------------------|--------------------|
| Assets at end of financial year | | | |
| Liquid Assets | 10,214 | 11,300 | 10,735 |
| Loans Made | 24,600 | 23,130 | 21,974 |
| Derivatives | 512 | 540 | 513 |
| Fixed Assets | 614 | 570 | 542 |
| Total Assets | 35,940 | 35,540 | 33,763 |
| Liabilities at end of financial year | | | |
| Reserve Liabilities | 111.6 | 124.0 | 132 |
| Borrowings | 1,389.6 | 1,544.0 | 1,650 |
| Share Liabilities | 1,958.0 | 1,628.0 | 1,780 |
| Other Liabilities | 41.8 | 35.0 | 38 |
| Total Liabilities | 3,501.0 | 3,331.0 | 3,600 |

Q46. What was the approximate fraction of Fixed Assets to Loans Made at the end of the financial year 2009?

- A. 1/40
- B. 1/45
- C. 1/20
- D. 1/60
- E. 1/48

Step 1 - The fraction is $614/24,600 = 1/40$.

Tip - You should be able to recognise that your calculator answer of 0.02496 is approximately ten times smaller than 0.25 and thus from the available answers select 1/40.

Thus the correct answer is (A) 1/40

Q47. Which asset or assets have changed in value by more than 12% from 2007 to 2009?

- A. Liquid Assets, Loans Made
- B. Loans made, Fixed assets
- C. Loans Made
- D. Fixed Assets
- E. Can't tell from data

Step 1 - Calculate the % change in asset values, as shown below. Work out the figures for only the options given, to save time.

| <i>Assets at end of financial year</i> | <i>2009 (£million)</i> | <i>2007 (£million)</i> | <i>Difference</i> | <i>% change</i> |
|--|----------------------------|----------------------------|-------------------|-----------------|
| <i>Liquid Assets</i> | <i>10214</i> | <i>10735</i> | <i>521</i> | <i>- 4.85</i> |
| <i>Loans Made</i> | <i>24600</i> | <i>21973.5</i> | <i>2626.5</i> | <i>11.95</i> |
| <i>Fixed Assets</i> | <i>614</i> | <i>541.5</i> | <i>72.5</i> | <i>13.39</i> |

Thus the correct answer is (D) Fixed Assets

Q48. In 2010, Loans made are projected to decrease by an eighth and both Derivatives and Fixed Assets are projected to increase by 5%. What will be the impact on the 2010 Total Assets value (in £million)?

- A. 3,075.70 increase
- B. 3,018.70 decrease
- C. 3,000.00 decrease
- D. 3,095.70 decrease
- E. Can't tell from data

Step 1 - Calculate the changes in 2009 figures for Loans Made; and both Derivatives and Fixed Assets

Loans made; $24,600 / 8 = - 3,075$

Derivatives; $512 \times 5\% = + 25.6$

Fixed Assets; $614 \times 5\% = + 30.7$

Step 2 - Calculate the overall impact

3075 (Loans Made) + 25.6 (Derivatives) + 30.7 (Fixed Assets) = $- 3,018.7$

Thus the correct answer is (B) 3,018.70 decrease

Q49. Which liability or liabilities have experienced a 10% change in value between 2008 and 2009?

- A. Reserve Liabilities
- B. Borrowings, Reserve Liabilities
- C. Borrowings
- D. Other Liabilities, Borrowings
- E. Other liabilities, Share liabilities

Step 1 - Calculate the % change in value between 2008-2009, as follows;

| | 2009 | 2008 | % change |
|----------------------------|--------|------|----------|
| <i>Reserve Liabilities</i> | 111.6 | 124 | -10% |
| <i>Borrowings</i> | 1389.6 | 1544 | -10% |
| <i>Share Liabilities</i> | 1958 | 1628 | 20% |
| <i>Other Liabilities</i> | 41.8 | 35 | 19% |

Thus the correct answer is (B) Borrowings, Reserve Liabilities

Q50. What is the ratio of Reserve Liabilities (2008); Reserve Liabilities (2007)?

- A. 132:124
- B. 13:12

-
- C. 12:13
 - D. 31:33
 - E. 31:32

Step 1 - Put the figures into a ratio:
 $124:132 = 31:33$

Thus the correct answer is (D) 31:33