

# CEM Sample Test Paper

## Read the following instructions carefully:

- Do not begin this paper until you are told to do so.
- The time allowed is given at the start of each section.
- There are three sections in this test paper, including questions on English, Verbal Reasoning, Numerical Reasoning and Non-Verbal Reasoning.
- Answers should be clearly marked **in pencil** on the answer sheet, in the space provided.
- Use a separate sheet of paper for workings out.
- If you make a mistake, rub it out and insert your new answer.
- If you are not sure of an answer, choose the one you think would be best, do not leave it blank.
- There are **60 questions** and you will have **30 minutes** to complete the test.

/60

Sample Paper

*Good Luck!*

## Comprehension

### Instructions

Carefully read through the following passage and then answer the questions that follow. Shade your answer on the coloured answer sheet by choosing one of the options A—D.

The period we normally think of as ‘ancient Egypt’ is the time after 3150 BCE, when Egypt was ruled by the pharaohs. Before this time, the area was populated by Stone Age settlers, and by 5000 BCE, they had become farmers, using the fertile land near the river Nile to grow wheat and barley, as well as keeping domesticated cattle. By 3500 BCE the area had become a prosperous place, with cities and a developed system of writing. Recent excavations have also uncovered beautifully made pottery and jewellery that is believed to date back to this time period.

The first Egyptian pharaoh is believed to be a man named Narmer, who united the lands of Egypt and proclaimed himself ruler in around 3150 BCE. It is very difficult for historians to be more specific about this date, because there is little surviving evidence. The Egyptian kings ruled Egypt for a staggering 3000 years, and although the country was attacked many times, often by Persian or Greek invaders, the Pharaohs clung onto power until 30 BCE, when the Pharaoh Ptolemy XV (pronounced Toll-a-mee) fell from power, and his kingdom became a province of Rome under the Emperor Augustus Caesar.

In Ancient Egypt, the king was not only the most important man, he was also a god. The queen of Egypt could also be seen as a goddess, but was usually given the title of ‘Great Royal Wife’. Women sometimes became rulers in their own right, but this was rare. The most famous Egyptian queen was undoubtedly Cleopatra, because Shakespeare later wrote a play about her, entitled *Anthony and Cleopatra*. She is believed to have been both a beautiful and intelligent woman who had affairs with the Roman dictator Julius Caesar as well as the Roman General Marc Antony, and famously killed herself using the poison of a venomous snake.

Even today, many tourists travel to Egypt every year to see the great pyramids, which have been named one of the seven wonders of the ancient world. The biggest pyramid, which stands 138m tall, was built for King Khufu in 2589 BCE. First and foremost, the pyramid was intended as a burial place for a pharaoh; the king would order the pyramid to be built during his lifetime, and then after his death, his body would be mummified and placed inside the tomb.

Egyptian pyramids have a square base and straight sloping sides, because they were designed to recreate the mound that had emerged from the watery earth at the beginning of time, according to Egyptian mythology. According to the story, the sun god was stood upon this mound of earth, and he then created the hundreds of other deities that the Egyptians worshipped at this time. Some of the pyramids contain inscriptions of spells, designed to help the dead king enter the afterlife. Egyptians believed that you could take possessions that were buried with you on into the afterlife, and of course, a king could only be buried with the best. Sadly, this meant that most of the pyramids were broken into during the middle ages by unknown grave-robbers, and the treasure stolen. The pyramid builders clearly expected this to happen, because many of the pyramids were built with lots of complex passageways and dead ends, so thieves would lose their way. However, only the pyramid of the young king Tutankhamun remained untouched, and when it was eventually opened by archaeologists in 1922, its contents included weapons, clothes, furniture, jewellery and musical instruments, much of which was made of gold.



Whilst the archaeologists, led by an Englishman named Howard Carter, worked to open the tomb, rumours circulated of an ancient curse known as the 'mummy's curse', that would bring bad luck, illness and even death to any who dared break into Tutankhamun's grave. On the dead king's sarcophagus, they even discovered the words 'Death will come on swift pinions to those who disturb the rest of the Pharaoh'. After the grave was opened, a number of archaeologists died mysteriously, the most famous of which is the wealthy backer of the whole mission, Lord Carnarvon. A few months after the tomb was opened, Carnarvon was taken ill and rushed to hospital in Cairo, where he died a few days later. His son reported that back in England, his favourite dog howled and suddenly dropped dead as well. Sceptics say that he died of an infected insect bite on his left cheek, but when Tutankhamun's body was uncovered it was reported that he had a wound on his cheek in the exact same place as the insect bite that led to Carnarvon's sudden death. Many local Egyptians at the time had believed in the curse of the mummy's tomb for years, even before it was opened, and refused even to go near it. However, sceptics have pointed out that of the many people who worked on this archaeological dig, only a handful died soon after the event, including Howard Carter himself, who lived to the ripe old age of 68. And in 1922, many medical discoveries had not yet been made, so it is not at all inconceivable that Carnarvon just died of a perfectly ordinary infection.

1 **When did the first pharaoh rule Egypt?**

- a) 3150 BCE
- b) 5000 BCE
- c) 3500 BCE
- d) 3000 BCE

2 **2. Why is it sometimes difficult to find precise dates about events in ancient Egypt?**

- a) Not enough research has been done
- b) There isn't very much surviving evidence
- c) Because the pharaohs ruled Egypt for around 3000 years
- d) Because Egyptians did not have a writing system at this time

3 **Which of the following countries or empires did not invade Ancient Egypt?**

- a) The Persian Empire
- b) Greece
- c) The Roman Empire
- d) England



4 Which of the following statements about Cleopatra is false?

- a) She killed herself using venom from a snake
- b) She had an affair with both Marc Antony and Julius Caesar
- c) She was the last ruler of Egypt
- d) She features in a Shakespearean play

5 Why were the pyramids built in their specific shape?

- a) To keep out grave robbers
- b) To commemorate the life of the dead king or queen
- c) So that anyone who opened the tomb would be cursed
- d) To represent the beginning of time according to Egyptian mythology

6 Which god did Egyptians believe to be the first god?

- a) They didn't believe there ever was just one god
- b) The sun god
- c) The earth god
- d) An all-powerful god

7 How did the dead kings make sure they were comfortable in the afterlife?

- a) They got buried with precious items, and sometimes spells were written
- b) They were buried alive
- c) Egyptian kings were also considered gods
- d) They made sure they ruled fairly



## Matching words

## Instructions

Select the word that has the **SAME** or **SIMILAR** meaning to the word on the left in bold. Shade your answer on the coloured answer sheet by choosing one of the options A—E. There is only one correct answer for each question.

## Example:

**chat**

A

B

C

D

E

joke

think

laugh

listen

talk

## Questions:

1

**strenuous**

A

B

C

D

E

constant

overbearing

timely

vigorous

animated

2

**unwilling**

A

B

C

D

E

inclined

reluctant

neutral

distant

firm

3

**catastrophe**

A

B

C

D

E

adventure

address

deluge

plague

disaster

4

**concerning**

A

B

C

D

E

trifling

bordering

about

among

lost

5

**fable**

A

B

C

D

E

fact

poem

essay

story

legendary

6

**intrepid**

A

B

C

D

E

challenge

fearless

shameless

epic

explorer

Go to the next page

## Opposite words

## Instructions

Select the word that has the **OPPOSITE** meaning to the word on the left in bold. Shade your answer on the the coloured answer sheet by choosing one of the options A-E. There is only one correct answer for each question.

## Example:

**fast**

A	<input checked="" type="checkbox"/>	C	D	E
rapid	slow	timely	punctual	hard

## Questions:

1

**recede**

A	B	C	D	E
wander	advance	depart	swerve	detour

2

**welcome**

A	B	C	D	E
reverse	revolt	stubborn	reject	averse

3

**superfluous**

A	B	C	D	E
inadequate	absent	need	essential	urgent

4

**unlucky**

A	B	C	D	E
happy	fortunate	lose	successful	advantage

5

**faultless**

A	B	C	D	E
mistake	incomplete	error	defective	exact

6

**disclose**

A	B	C	D	E
secret	hide	private	mystery	reserve



## Instructions

In each of the following sentences, there are one or two words missing. Please complete each sentence by selecting one word for each question from the options A–D. Shade your answer on the coloured answer sheet. Each word can only be used once.

Example:

A	<del>B</del>	C	D
radius	middle	top	circumference

The diameter is a straight line through the **Example** of a circle that joins two points on its edge.

The correct answer is B, middle.

## Questions

A	B	C	D
swimming pools	cinemas	theatres	arcades

1

The Romans liked to visit open-air **Question 1** to watch plays.

2

A	B	C	D
winter	spring	summer	autumn

The swallow flies south in the **Question 2.**

3

A	B	C	D
sarcophagus	toilets	river	after-life

The Egyptians built the Great Pyramids as tombs for the Pharaohs, to assist them into the **Question 3.**

4

A	B	C	D
thirsty	happy	entertained	hydrated

Joseph takes a water bottle to school every day in order to stay **Question 4.**

## Shuffled Sentences

## Instructions

The words in the following questions can be rearranged to make a sentence. Rearrange the words to make a sentence and then mark the word that does not fit into the sentence. Shade your answer on the coloured answer sheet by choosing one of the options A-I. There is only one correct answer for each question.

## Example:

A	B	C	D	E	F	G	H	+
drink	you	water	four	daily	pints	should	of	healthy

## Questions:

1	A	B	C	D	E	F	G	H	I
	owls	a	is	a	flock	collection	called	of	parliament

2	A	B	C	D	E	F	G	H	I
	need	flour	make	eggs	an	to	some	you	omelette

3	A	B	C	D	E	F	G	H	I
	children	bands	there	a	new	loom	craze	is	for

4	A	B	C	D	E	F	G	H	I
	electricity	ever	a	plug	hands	wet	never	with	touch

5	A	B	C	D	E	F	G	H	I
	the	third	from	sun	Earth	the	fourth	is	planet

6	A	B	C	D	E	F	G	H	I
	author's	most	her	sell	was	novel	first	popular	the





## Compound words

## Instructions

Select the word that, when added to the end of the word on the left, makes a new compound word. Shade your answer on the coloured answer sheet by choosing one of the options A—D. There is only one correct answer for each question.

## Example:

rat

A

B

C

~~D~~

on

till

ice

her

## Questions:

1

accept

A

B

C

D

ion

tin

able

shun

2

imp

A

B

C

D

pale

plant

prove

rove

3

four

A

B

C

D

cast

give

tune

teen

4

in

A

B

C

D

form

eat

err

inn

5

pat

A

B

C

D

turn

tern

tie

chant

6

pal

A

B

C

D

ice

face

ace

late



Numerical Reasoning — Part A

Instructions

In this section, shade your answer on the coloured answer sheet by marking the correct number.

**Example:**  
 121 students and 10 teachers are going on an end of term trip to Alton Towers. The school secretary has to arrange the transport. Mrs Ashman finds the best value would be to hire some mini buses. If each mini bus seats 22 people, how many mini buses will she need to hire?

**Answer:**  
 She will need to add up the total number of people going on the trip and divide that number by 22.

$131 \div 22 = 5.954$  Therefore Mrs Ashman would need to hire 6 mini buses  
 Mark your answer like this:

0	6
<del>[ 0 ]</del>	[ 0 ]
[ 1 ]	[ 1 ]
[ 2 ]	[ 2 ]
[ 3 ]	[ 3 ]
[ 4 ]	[ 4 ]
[ 5 ]	[ 5 ]
[ 6 ]	<del>[ 6 ]</del>
[ 7 ]	[ 7 ]
[ 8 ]	[ 8 ]
[ 9 ]	[ 9 ]

1

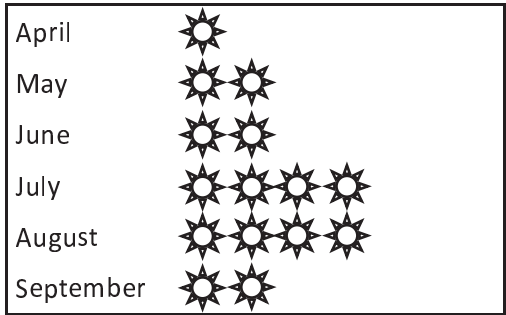
London	09:53	10:40	11.08
Reading	10:21	11:12	11:37
Swindon	10:48	11:37	12:09
Bristol	11:16	12.02	12.31

A train leaves London at 10:40 am and arrives at its final destination in Bristol at 12:02pm.


How many minutes has the journey taken?

2

The pictogram below shows the average number of hours of sunshine from April through to September.



Key:

 = 3 hours

How many average hours of sunshine were there in July and August altogether?



## Numerical Reasoning — Part B

## Instructions

In this section, shade your answer on the coloured answer sheet by choosing one of the options A—E.

1

What is the sum of 23, 43 and 81?

A	B	C	D	E
80109	142	157	147	139

2

If  $3600 \div 50$  is 72, what is  $3600 \div 25$ ?

A	B	C	D	E
36	70	144	140	150

3

What is the mode of the following numbers?      0, 1, 0, 7, 1, 0, 4, 3, 3, 5

A	B	C	D	E
0	3	5	2	5

4

Which number is exactly half-way between 26 and 122?

A	B	C	D	E
70	72	73	74	75

5

What percentage of the following numbers is exactly divisible by 3?  
321, 419, 525, 442, 607

A	B	C	D	E
40%	20%	25%	10%	75%



- 6 If you rearrange the following numbers in order of size, which one would be in the middle?

A	B	C	D	E
8618	8171	8116	8768	8710

- 7 What would be the next number in the following sequence? 41, 38, 35, 32, 29, ?

A	B	C	D	E
22	24	26	17	28

- 8 How many pennies are left over when £4.12 is divided by 4?

A	B	C	D	E
1	2	0	3	4

- 9 What is two-thirds of 78 centilitres?

A	B	C	D	E
52 cl	14 cl	56 cl	40 cl	50 cl

- 10 What is the range of the following numbers? 108, 98, 2, - 11, 0, 16, 48, 48

A	B	C	D	E
119	36	48	108	0

- 11 How many minutes are there between midday and midnight?

A	B	C	D	E
7200	720	72000	600	360



## Non-verbal Skills Part B

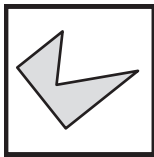
## Instructions

Find the two figures or shapes that are exactly the same. Shade your answer on the coloured answer sheet by choosing one of the options A—F.

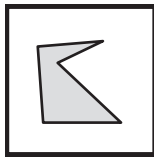
## Example:

Boxes A and D contain exactly the same shapes.

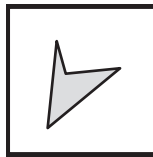
Eg



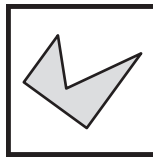
A



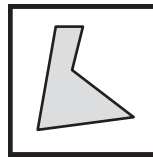
B



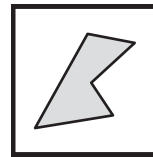
C



D



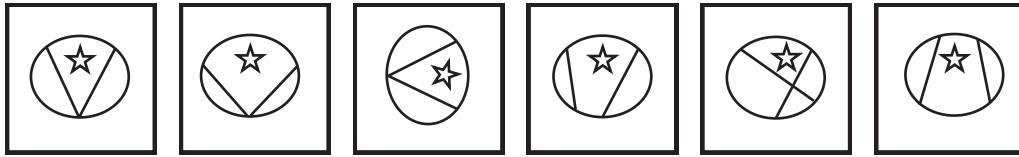
E



F

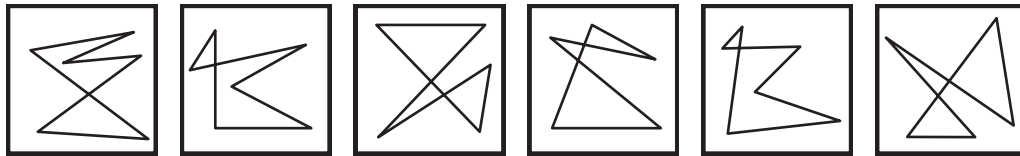


1



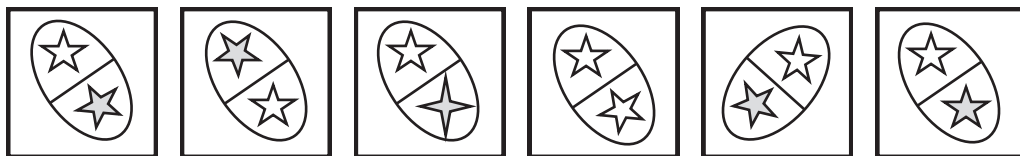
A B C D E F

2



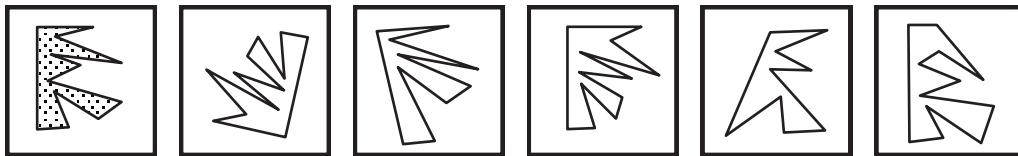
A B C D E F

3



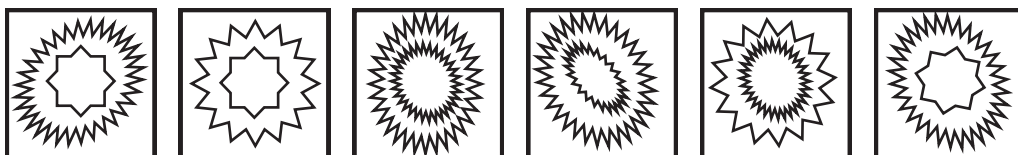
A B C D E F

4



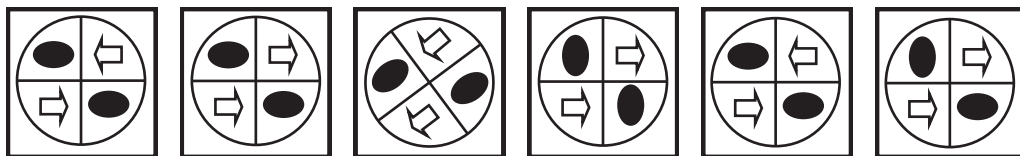
A B C D E F

5



A B C D E F

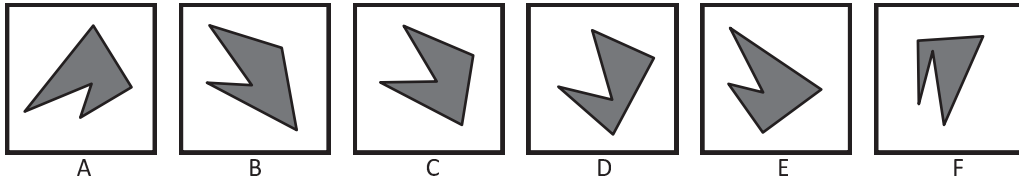
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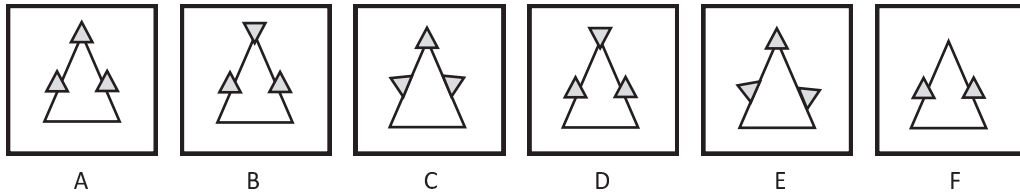
A B C D E F



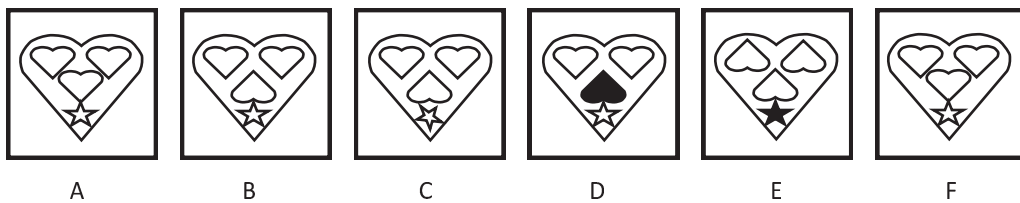
7



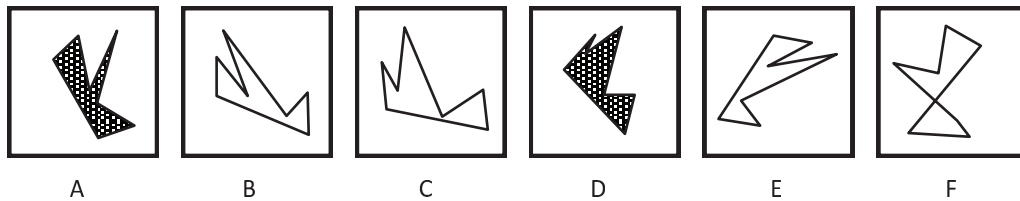
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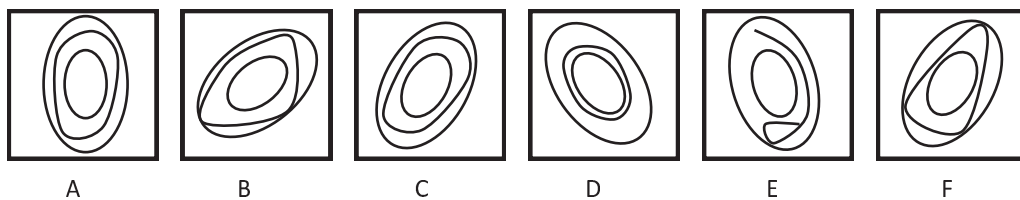
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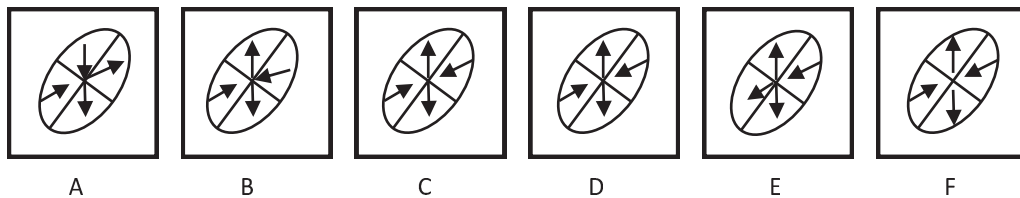
10



11



12



Pupil No:  
Name:  
Date of Birth:  
Current School:

# Sample

**Instructions:**

1. Check that you are marking the answer for the correct question.
2. Mark one answer only for each question in your test booklet.
3. Mark boxes like this:
4. Use an HB pencil and rub out any errors thoroughly.

Please sign your name here:

**Comprehension.**

- 1 [A] [B] [C] [D]
- 2 [A] [B] [C] [D]
- 3 [A] [B] [C] [D]
- 4 [A] [B] [C] [D]
- 5 [A] [B] [C] [D]
- 6 [A] [B] [C] [D]
- 7 [A] [B] [C] [D]

**Shuffled Sentences.**

- 1 [A] [B] [C] [D] [E] [F] [G] [H] [I]
- 2 [A] [B] [C] [D] [E] [F] [G] [H] [I]
- 3 [A] [B] [C] [D] [E] [F] [G] [H] [I]
- 4 [A] [B] [C] [D] [E] [F] [G] [H] [I]
- 5 [A] [B] [C] [D] [E] [F] [G] [H] [I]
- 6 [A] [B] [C] [D] [E] [F] [G] [H] [I]

**Matching Words.**

- 1 [A] [B] [C] [D] [E]
- 2 [A] [B] [C] [D] [E]
- 3 [A] [B] [C] [D] [E]
- 4 [A] [B] [C] [D] [E]
- 5 [A] [B] [C] [D] [E]
- 6 [A] [B] [C] [D] [E]

**Compound Words.**

- 1 [A] [B] [C] [D]
- 2 [A] [B] [C] [D]
- 3 [A] [B] [C] [D]
- 4 [A] [B] [C] [D]
- 5 [A] [B] [C] [D]
- 6 [A] [B] [C] [D]

**Numerical Reasoning B**

- 1 [A] [B] [C] [D] [E]
- 2 [A] [B] [C] [D] [E]
- 3 [A] [B] [C] [D] [E]
- 4 [A] [B] [C] [D] [E]
- 5 [A] [B] [C] [D] [E]
- 6 [A] [B] [C] [D] [E]
- 7 [A] [B] [C] [D] [E]
- 8 [A] [B] [C] [D] [E]
- 9 [A] [B] [C] [D] [E]
- 10 [A] [B] [C] [D] [E]
- 11 [A] [B] [C] [D] [E]

**Opposite Words.**

- 1 [A] [B] [C] [D] [E]
- 2 [A] [B] [C] [D] [E]
- 3 [A] [B] [C] [D] [E]
- 4 [A] [B] [C] [D] [E]
- 5 [A] [B] [C] [D] [E]
- 6 [A] [B] [C] [D] [E]

**Numerical Reasoning A**

1	[0] [0]	2	[0] [0]
	[1] [1]		[1] [1]
	[2] [2]		[2] [2]
	[3] [3]		[3] [3]
	[4] [4]		[4] [4]
	[5] [5]		[5] [5]
	[6] [6]		[6] [6]
	[7] [7]		[7] [7]
	[8] [8]		[8] [8]
	[9] [9]		[9] [9]

**Cloze.**

- 1 [A] [B] [C] [D]
- 2 [A] [B] [C] [D]
- 3 [A] [B] [C] [D]
- 4 [A] [B] [C] [D]

**Non-verbal reasoning.**

- 1 [A] [B] [C] [D] [E] [F]
- 2 [A] [B] [C] [D] [E] [F]
- 3 [A] [B] [C] [D] [E] [F]
- 4 [A] [B] [C] [D] [E] [F]
- 5 [A] [B] [C] [D] [E] [F]
- 6 [A] [B] [C] [D] [E] [F]
- 7 [A] [B] [C] [D] [E] [F]
- 8 [A] [B] [C] [D] [E] [F]
- 9 [A] [B] [C] [D] [E] [F]
- 10 [A] [B] [C] [D] [E] [F]
- 11 [A] [B] [C] [D] [E] [F]
- 12 [A] [B] [C] [D] [E] [F]



## Answers Sample CEM Paper

### Comprehension

1. A
2. B
3. D
4. C
5. D
6. B
7. A

### Shuffled Sentences

1. E
2. B
3. A
4. A
5. G
6. D

### Numerical Part B

1. D
2. C
3. A
4. D
5. A
6. A
7. C
8. C
9. A
10. A
11. B

### NVR

1. A and C
2. C and F
3. A and E
4. B and D
5. A and F
6. A and E
7. A and E
8. B and D
9. A and F
10. B and E
11. A and C
12. C and D

### Matching Words

1. D
2. B
3. E
4. C
5. D
6. B

### Compound Words

1. C
2. D
3. D
4. A
5. B
6. C

### Opposite Words

1. B
2. D
3. D
4. B
5. D
6. B

### Numerical A

1. 82
2. 24

### Missing Words

1. C
2. A
3. D
4. D