# Sample

#### **READ THESE INSTRUCTIONS FIRST**

Write your ROLL NO., Name, Father's Name and Centre in the spaces provided on the right column only. DO **NOT** WRITE YOUR PARTICULARS ANYWHERE ELSE IN THIS BOOKLET.

Write in dark blue or black ink.

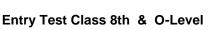
Answer all questions. [Total Time: 3 hours]

Write your answers in the spaces provided on this Question Booklet.

The number of marks is given in brackets [] at the end of each question or a part question.

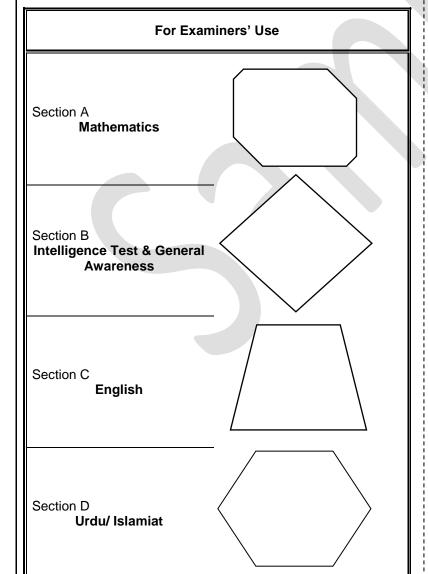
Do not write in any of shapes given below anywhere in this booklet. These are for Examiners' use.

# CADET COLLEGE HASANABDAL



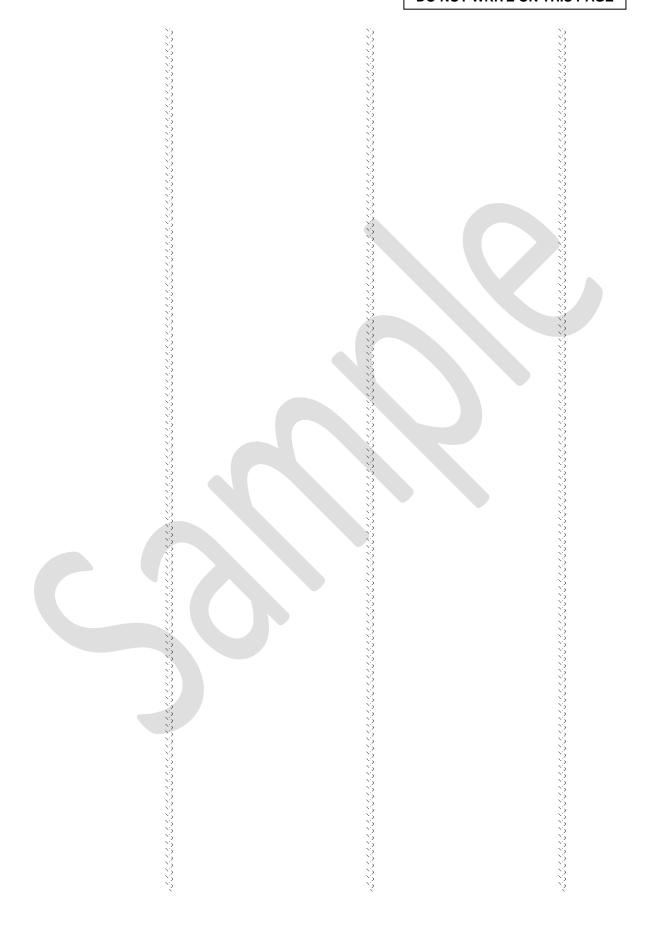


Roll No.	
∟ Invigilator's sigr	n:
Name:	
Father's Name:	
Centre:	



Use Last Page for Rough Work

DO NOT WRITE ON THIS PAGE



# Section A (Mathematics) Total marks [50]

**Q.No.1**. The formula  $F = \frac{9}{5} C + 32$  shows the relationship between the temperatures in degrees Fahrenheit (F) and Centigrade (C).

Find,

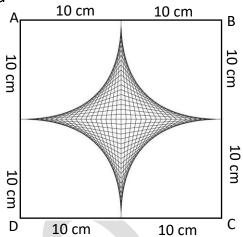
- (a). F When C = 40
- (b). C When F = 100
- (c). At what temperature both scales show same value

[10]



**Q.No.2**. Quadrants of radius 10 cm are cut from each corner of the square ABCD to leave the figure shaded in the diagram. Taking  $\pi$  to be 3.14, find

- (a). the total area of 4 quadrants
- (b). the area of the shaded region,
- (c). the perimeter of the shaded region. [10]



**Q.No.3**. a). The sum of three consecutive even numbers is 306. Find the numbers using algebraic equation.

[5]

b). Convert 50000 mm<sup>2</sup> to m<sup>2</sup>. Also, write the number of litres 50000 cm<sup>3</sup> make.

[5]

**Q.No.4**. A company sold 20% more houses in year 2011 than it did in 2010. If it sold 426 houses in 2011, calculate how many houses it sold in year 2010. If sale price of each house being PRs. 2000000 in both the years then find the more money the company earned in year 2011 than 2010.



**Q.No.5**. Construct a parallelogram PQRS if  $m\overline{PQ}=7.5cm$ ,  $m\angle Q=120^{\circ}$  and  $m\overline{QR}=5.5cm$ . Construct angle with the help of compass. Steps of construction are not required. [10]



# Section B [IQ Test & General Awareness]

### Circle the correct answer in each case.

1. What number replaces the question mark?

A. 9

B. 13

C. 7

D. 8















A. 15

B. 19

C. 21

D. 23

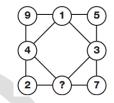
3. What number replaces the question mark?

A. 8

C. 7

B. 5

D. 6



4. What is the missing number in the pattern below?

A. 12

B. 13

C. 11

D. 14



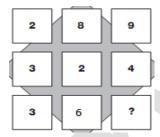






[20]

5. Find the missing digit;



1

D. 4

6. What is the missing letter in the series?

P, N, K, G, ?

A. B

B. D

C. E

D. C

- 7. Three wheels are connected with belts and wheel X rotates clockwise with a constant speed. How does wheel Y turn?
  - A. Clockwise with same speed as X
  - B. Anticlockwise slower than X
  - C. Clockwise faster than X
  - D. Anticlockwise slower than X



8. As 'apple' is to 'Leap' like 'Orange' is to 'Geor'. Then 'Memory' is to?

A. Ryme

B. Mery

C. Ryem

D. Meyr

9. If it is 5 O'clock on your clock then what is the angle between hour hand and minute hand?

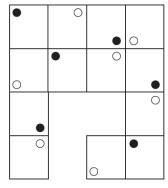
A. 180<sup>0</sup>

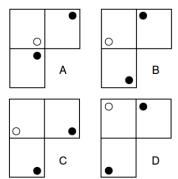
B. 120<sup>0</sup>

**c**. 150<sup>0</sup>

 $D. 90^{0}$ 

10. Which is the missing section?

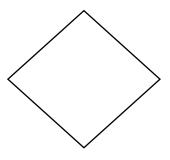




/CENIED A L	<b>AWARENESS</b>	O
(GENEKAL	AWAKENESS	Ouestionsi

Q. V	ery briefly (only 1 mark for each) answer the f	ollowing questions in given space in front.	[20]
1.	UPS in electricity stands for		
2.	How many Alphabets are in Standard English language.		
3.	ISPR is abbreviation for		
4.	Name the control pedal, which is not required in vehicles with Auto Transmission.		
5.	Who is junior in Air force ranks, a Squadron Leader or a Group Captain.		
6.	Has any Pakistani nationals ever reached the summit of Mount Everest.		
7.	In how many days Earth completes one revolution around the Sun.		
8.	Write name of any noble gas		
9.	A magnet can attract the objects made of iron, nickel and		
10.	How many seconds light will take to reach from Earth to Sun.		
11.	Name colours on the two ends of white light spectrum.		

12.	What falling object is said to have inspired Isaac Newton's law about gravity?	
13.	In which direction (North, South, East, West) generally rivers flow in Pakistan.	
14.	What (out of Earth, Moon, and Sun) cannot be in between other two, for an eclipse seen from earth.	
15.	Is Ice less dense than water?	
16.	CNIC is issued by NADRA, what CNIC stands for	
17.	Which vegetable causes tears in eyes when cut.	
18.	SIM (for cell phone) is an abbreviation of	
19.	When is Christmas Eve celebrated	
20.	In computers' data, "MB" stands for?	



Q.1. Write down fo	rm of verb of the n	Section C (English) Total mouns and use the form of verb in a meaningful sent  Sentences	<b>arks [50]</b> ence. [10]
(i) Beauty			
,			
(ii) Horror			
(iii) Approval			
(iv) Inspection			
(v) Care			
Q.2. Do as directe	d.		[5]
i). They say, "we sh	all plan a trip to no	rthern areas." (Change	narration)
ii). Rashid is senior	than me.		Correct it)
iii). Are these comp	outers sold by him?	(Change	the voice)
iv). I have seen <u>this</u>	image before.	(Which category of pronoun "this" be	elong to?)
v). Birds of a group	flock together.	(Correct the	e proverb)
Q.3. Provide the m	issing letters in the	e following words.	[5]
(i) QuarrI		(ii) Rebl (iii) Sca	arity
(iv) U	Jnconious	(v) Posseion	

## Q.4. Read the given passage and answer the questions.

[8]

Helicopters are very different from airplanes. First, when airplanes move upward, they must also move forward, but helicopters can move straight up without moving ahead. Second, helicopters can fly backward, which airplanes cannot do. Third, helicopters can use their rotors to hover in the air which is impossible for planes. Because helicopters can perform actions that airplanes cannot, they are used for different tasks. Since helicopters can take off without moving forward, they do not need a runway for takeoff. They are used in congested areas where there is no room for airplanes or in isolated areas which do not have airports. Because they can hover, they are used on firefighting missions to drop water on fires. Helicopters are used as air ambulances to airlift patients out of situations which are difficult to reach by conventional ambulances.

Questions 1. Why don't helicopters need runways?
Ans:
2. How are helicopters used as ambulances?
Ans:
3. Why are helicopters helpful in firefighting?  Ans:
Alls
4. What does the word 'hover' in the passage means?  Ans:
Ans:
5. Give antonym of the word 'congested'
Ans:

رائسان نے پانی نه بچایا تو اگلی نسلوں کا جینا محال ہو گا۔ ایے پی نیجے ،  الا پی نیجے ،  الا پی نیجے ،  Write a composition in the space provided below on any ONE of the following topics.  Iot failure, but low aim is crime  Write a story with the start "Anderson jumped out of the rocket. He was on the soil of the planet"  Topic:	Translate the	following sentences نہیں۔	دالات میں بہتری ممکن 	ہیں ہوں گے تو۔ 	سے مخلص نہ	1] ہم اگر اپنے وطن
اے پی لیجے ۔ کاش میر ہے پاس کمپیوٹر ہوتا ۔ Write a composition in the space provided below on <u>any ONE</u> of the following topics. lot failure, but low aim is crime (ii) What Would You Change in Your Country? Write a story with the start "Anderson jumped out of the rocket. He was on the soil of ther planet"			نا محال ہمو گا۔ 	 ی نسلوں کا جین	نه بچایا تو اگ <i>ا</i>	اگرانسان <u>ن</u> پانی ا
کاش میر ہے پاس کمپیوٹر ہوتا ۔ Write a composition in the space provided below on <u>any ONE</u> of the following topics. lot failure, but low aim is crime (ii) What Would You Change in Your Country? Write a story with the start "Anderson jumped out of the rocket. He was on the soil of ther planet"					بهیس۔	جيسا ديس ويسا
Write a composition in the space provided below on any ONE of the following topics. lot failure, but low aim is crime (ii) What Would You Change in Your Country? Write a story with the start "Anderson jumped out of the rocket. He was on the soil of ther planet"						چاۓ پی لیجے ۔
lot failure, but low aim is crime (ii) What Would You Change in Your Country? Write a story with the start "Anderson jumped out of the rocket. He was on the soil of ther planet"				-1	کمپیوٹر ہوتا	کاش میر مے پاس
	Write a story w	vith the start "Ande	(ii) What \	Vould You Ch	_	-
	Write a story w	vith the start "Ande "	(ii) What Nerson jumped out of	Vould You Ch	_	-
	Write a story w	vith the start "Ande "	(ii) What Nerson jumped out of	Vould You Ch	_	-
	Write a story w	vith the start "Ande "	(ii) What Nerson jumped out of	Vould You Ch	_	-
	Write a story w	vith the start "Ande "	(ii) What Nerson jumped out of	Vould You Ch	_	-
	Write a story w	vith the start "Ande "	(ii) What Nerson jumped out of	Vould You Ch	_	-
	Write a story w	vith the start "Ande "	(ii) What Nerson jumped out of	Vould You Ch	_	-
	Write a story w	vith the start "Ande "	(ii) What Nerson jumped out of	Vould You Ch	_	-
	Write a story w	vith the start "Ande "	(ii) What Nerson jumped out of	Vould You Ch	_	-

<u>-</u>
/
/

					(کل تمبر:10)	حصه اسلامیات (
1. Write	Translation of any One surah "Al-Feil" or "Al-Falaq".	[3]	مه لکهیں۔	کا صرف ترج	سورة الفلق	1: سورة الفيل يا
	is the number of Zakāt (Charity) in pillars of Islam? its two benefits.	[2]	دے لکھیئے۔	اس <u>ک</u> دو فائ	ن سا رکن <u>ہے</u> ۔	2: زكۈة اسلام كا كون
					<u> </u>	
3. Write lideal life.	briefly two aspects of the Holy Prophet's (pbuh) کر کریں. [2]	 مختصر ذ	 دو پهلوؤ <i>ن</i> کا ه	کو ئی سے د کے کو ئی سے د	اسوه حسنه ــَــــــــــــــــــــــــــــــــــ	3: حضور اکرمّ کے
4. What o	do Muslims learn from the battle of "Uhad".	[2]		ہتے ہیں؟	<i>د</i> <u>سے</u> کیا سیکھ	4: مسلمان غزوهٔ اُح
5. Write a	any one condition of Treaty of Hudaybiyyah	[1]		ط لکھیئے۔	کوئی ایک شرح	5: صلح حدیبیه کی
	=======================================	=====	======	=		

اور د وافعال مختص جگهوں پر لکھیں۔       [10]	سے تین اسم معرفہ، تین اسم نکرہ، دو حروف	پیرا گراف کوپڑ ھیں اوراس میں سے کوئی۔	سوال نمبر3: دیے گئے ؛
نے تھے اور کہتے تھے کہ دین <b>امی</b> ں صرف دوہی آدمی ایسے رہ	ته لیکن خدر برزی کرمغل تا ت	ئا منش جي کس نسل پي کس نا په س	ا تنای که "این
ے سے اور سے سے لیہ دنیا یں سرک دو ہی اوی ایسے رہ جہال دار اور دوسرے خود منتی منطقی ، نواب صاحب			
		یں ' وں وہ ہے۔ ہے۔ بڑاغ کہلاتے تھے اس لیے لو گوں نے منڈ	
			اسم معرفه
			اسمٍ نكره
			ح ز ف
			فعل
(12)		کسی ایک موضوع پر دی گئی جگه پرایک ج	سوال نمبر4:
(ج)۔ میں شکرادا کر تاہوں کہ ۔۔۔	فیشن کی غلامی	(ب)۔	(۱)_ترقی کی رفتار

عبارت میں آپ کے لیے کیا سبق موجود ہے؟ 
ں نمبر2: دیئے گئے اشعار میں سے کسی ایک کی تشر ت کریں۔ (8) باطل سے دبنے والے اے آسمال نہیں ہم سو با ر کر چکا ہے تو امتحال بھا را

حصه اردو کل نمبر:50

<u> </u>	الفاظ میں تحریر کریں۔ (20)	یے گئے سوالات کے جواب اپنے	سوال نمبر 1: درج زیل عبارت کوپڑھ کر آخر میں د
ں نے میر ی ایک نہ سنی اور اپنی آوارہ گردی			 "میں اکثراسلم سے کہتار ہتا کہ امتحان کے دن قریب
			میں مشغول رہا۔امتحان قریب آتے ہی اس کاجی حچو
	, ,		نے جباسے بلایاتواس کے چہرے پر حسرت برس ر
			1: عبارت سے پارنچ محاورے چن کراپنے جملوں میر
			- <del></del>
			2: اسلم كانتيجه كيانكلا؟
		,	3: اسلم کے چہرے پر حسرت کیوں بر س رہی تھی؟
			4: سب كو كيول شر مسار ہو ناپڑا؟
			5: اسلم کو کیانصیحت کی گئی تھی۔

