**Directions for questions 1 to 5:** Read the Passage below and answer the question.

The sun is the most abundant source of energy in die solar system. Every day, 173,000 tera-watts¹ of energy-100,000 times more energy than humans use-strike the earth in the form of sunlight. Sunlight consists of visible light; ultra violet light, which is responsible for the production of Vitamin D in our skin; and infrared radiation, which heats the air, water, and ground, and constitutes nearly 50 percent of the total solar radiation reaching the earth. Without the sun, life on Earth would not exist. One would think that all that free, available energy would have been *harnessed* long ago, but only in recent decades have people taken a serious interest in the sun as a source of *alternative renewable* energy.

So far, the world has relied on wood, oil, coal, and natural gas to produce energy for heating, lighting, transportation, and manufacturing. Since the 1950s, the world consumption has been increasing relentlessly. In the year 2000, 80 percent of commercial energy was generated from the combustion of fossil fuels, and every day, 50 million barrels of oil are refined and converted to gasoline and other fuels, hi addition to the rapid depletion of fossil fuels, die consequences of high consumption rates are pollution and global warming.

Increasing **concentrations** of carbon dioxide ( $\rm CO_2$ ) in the atmosphere have been causing global temperatures to rise, with the greatest increase occurring in the last decade. In the 1990s, global  $\rm CO_2$  emissions rose by 1.3 percent per year. Between 2000 and 2006, annual  $\rm CO_2$  emissions increased to 3.3 percent, and since then they have been accelerating. To meet the 50-60 percent increase in energy demand by 2030, as predicted by the International Energy Agency, and to prevent the disastrous effects of global warming, people have been looking to the sun.

The most practical form of solar energy is passive solar energy, which occurs when natural light floods in through windows or is absorbed by stone or concrete walls. In 1956, the world's first commercial solar building was constructed in Albuquerque, New Mexico, by engineers Frank Bridgers and Don Paxton. Considered ahead of its time, architect Francis Stanley's design provided for large sloping south-facing windows to capture infrared radiation, following the same principles used by the ancient Romans to heat their bathhouses. Passive solar energy is now being incorporated into environmentally friendly building designs, which include double- or triple-glazed windows and insulated walls and ceilings to trap heat, Trombe walls painted black to maximize the absorption of infrared radiation, and mirrors or fiber optics to enhance natural lighting.

1. Match the words with their meanings:

List - I

(A) constitutes
(B) abundant
(C) absorb
(D) depletion
(I) List - II

(I) take in

(II) exhaustion

(III) to form

(IV) plenty

Choose the correct answer from the options given below:

- (1) (A)-(IV), (B)-(I), (C)-(II), (D)-(III)
- (2) (A)-(III), (B)-(I), (C)-(IV), (D)-(II)
- (3) (A)-(III), (B)-(IV), (C)-(I), (D)-(II)
- (4) (A)-(I), (B)-(II), (C)-(III), (D)-(IV)
- 2. Eighty percent of commercial energy comes from -
  - (1) solar energy (2) fossil fuel
  - (3) hydro electricity (4) carbon dioxide
- 3. The world's first commercial solar building was built in -
  - (1) Germany(2) France(3) New Mexico(4) Japan
- **4.** Ultra violet light is responsible for the production of in our skin.
  - (1) Vitamin A(2) Vitamin B(3) Vitamin C(4) Vitamin D
- **5.** Find out the word from the passage which is an antonym of 'decreasing'.
  - (1) relied(2) absorbed(3) accelerating(4) diminishing

**Directions for questions 6 to 10:** Read the Poem below and answer the question.

## A Bird Came Down

A Bird, came down the Walk -He did not know I saw He bit an Angle Worm in halves And ate the fellow, raw,

And then, he drank a Dew From a convenient Grass -And then hopped sidewise to the Wall To let Beetle pass -

He glanced with rapid eyes,

That hurried all abroad -

They looked like frightened Beads, I thought,

He stirred his Velvet Head -

Like one in danger, Cautious, I offered him a Crumb, And he unrolled his feathers, And rowed him softer Home -

Than Oars divide the Ocean,
Too silver for a seam,
Or Butterflies, off Banks of Noon,
Leap, splashless as they swim.

- 6. What is the poem about -
  - (1) a fight between the poet and the bird
  - (2) a bird eating an insect
  - (3) an ordinary ocurrence in nature, of a bird searching for food and eating
  - (4) a bird teaching how to catch a prey
- 7. Choose the correct option

And ate the fellow, raw.

Who is the "fellow" here?

- (1) The Angle worm
- (2) The beetle
- (3) The Dew
- (4) The crumb
- 8. How does the poet describe the eyes of tire bird -
  - (1) watery like dew
  - (2) like grass
  - (3) like frightened beads
  - (4) like butterflies
- 9. Choose the figure of speech in the line.

'They looked like frightened beads'.

- (1) Metaphor
- (2) Personification
- (3) Hyperbole
- (4) Simile
- **10.** "Cautious" is used in reference to which character in the poem
  - (1) the poet
- (2) the bird
- (3) the beetle
- (4) the worm

**Directions for questions 11 to 15:** Read the Passage below and answer the question.

The ITR extends 17 km along the seacoast where number of tracking instruments have been deployed along the flight path of the test vehicles. Some of the significant test facilities at the ITR are a mobile and fixed electro-optical tracking system, mobile S-band tracking radar, fixed C-band tracking radar, fixed and mobile telemetry system, range computer, photo processing system, meteorological system and range safety systems. An expert system has been developed or aiding safety decisions during launch. The ITR is slowly but surely growing into a world-class range.

It was a hot and humid midnight sometime in July 1995. We were going through the results of the fourth consecutive successful flight of Prithvi. People's faces were lit up with success. There was a mood of celebration. More than thirty of us, representing 1,200 hard-working team members, were pondering over the question - what next? Lt. Gen. Ramesh Khosla, Director General Artillery, suggested that the Army needed a flight test on a land range with the accuracy of impact at the final destination within 150 meters. This is called Circular Error Probability (CEP) in technical terms.

We started test-firing our missiles from the Sriharikota Range of ISRO but needed our own missile test range. The Interim Test Range (ITR) was established in 1989 as a dedicated range for launching missiles, rockets and flight test vehicles. A number of missiles of different class including the multi-role Trishul, multi-target capable Akash, the anti-tank Nag missile, the surface-to-surface missile Prithvi, and the long-range technology demonstrator Agni have been test-fired from the ITR. BrahMos, the Indo-Russian joint venture set up to develop supersonic cruise missiles, has also been tested at this range. The ITR has also supported a number of other missions such as testing of the multi-barrel rocket launcher Pinaka and the pilotless aircraft Lakshya.

- **11.** According to the passage, the Interim Test Range (ITR) was established in the year?
  - (1) 1983
- (2) 1989
- (3) 1986
- (4) 1980
- **12.** According to the passage, which of the following is NOT included in the test facilities at the ITR?
  - (1) Infiltration Prevention and tracking system
  - (2) Electro-optical tracking system
  - (3) C-band tracking radar
  - (4) Mobile S-band tracking radar
- **13.** According to the passage, what is the full form of CEP?
  - (1) Circular Electronic Pole
  - (2) Commercial Entry Pass
  - (3) Common Election Program
  - (4) Circular Error Probability
- **14.** According to the passage, ITR has supported which of the following missions?
  - (A) Gandiv
  - (B) Pinaka
  - (C) Sudarshan
  - (D) Lakshya
  - (E) BrahMos

Choose the correct answer from the options given below:

- (1) (A) and (C) Only
- (2) (B) and (C) Only
- (3) (B), (D) and (E) Only (4) (D) and (A) Only

15.	According to the passage, which of the following missiles was not test-fired from the ITR?			(1) (A) (3) (A) and (B)		(B) (C)	
		(2) Akash	23	'Isn't it' can be used as			
	(3) Nag	(4) Trishul	20.	these questions?	a qu	cotton tag for willon of	
16.	The antonym of the word	d 'antagonism' is		(A) It's raining heavily, _		?	
	(1) Cordiality	(2) Animosity		(B) She can swim well,		?	
	(3) Hostility	(4) Enemity		(C) It is a bright sunny of	lay, ַ	?	
17.	Choose the best alternative to complete the given			(D) This is my pencil, _		?	
	sentence from the options given below.			(E) There is a sweet sho	op in	that street,?	
	They are having trouble the contract.			Choose the correct ans	wer	from the options given	
	(1) nailing in	• ,		below:			
	(3) nailing for	- · ·		(1) (A), (B) and (C) Only	/		
18.	•	rt of the sentence. Spot the		(2) (A) and (C) Only			
	error.			(3) (B), (C) and (E) Only			
	(A) As soon as			(4) (A), (C) and (E) Only			
	(B) I shall reach Mumbai (C) I shall send you		24.	Identify the word that should be removed from the sentence to make it grammatically correct.			
	(D) the file			Have you ever tried to		•	
	(E) you have asked for			the tube?	gore	a too tripaste back into	
	. , ,	wer from the options given		(1) ever	(2)	а	
	below			(3) back	(4)	into	
	(1) (A) Only	(2) (B) Only	25.	Rearrange the phrases	in se	quence to get a proper	
	(3) (C) Only	(4) (D) and (E) Only		sentence			
19.	Choose the correct option.			(A) essential part			
	Give the meaning of the word - Nota Bene			(B) form an			
	(1) pen name			(C) the sculptures and p		ings	
	(2) way of living			(D) of the overall aura of			
	(3) member of poor class			(E) the temple architect		<b>.</b>	
	(4) take note			Choose the correct ans below:	wer	from the options given	
20.	Fill in the blank with the correct Modal out of the			(1) (A), (B), (C), (D), (E)	(2)	(C), (A), (B), (E), (D)	
	given options.  Urvashi's sister certainly disapproved the			(3) (C), (B), (A), (D), (E)		. , . , . , . , . ,	
	tone of her sister took to address the house-help.		26.	Out of the four alterna			
	(1) could have	(2) will have		suggests the same sent			
	(3) would have	(4) would be		He said, "How can a Ze	bra t	alk ?"	
21.	. Change the following sentence into indirect speech			(1) He wondered how a			
	She said, "My brother ha	<del>-</del>		(2) He questioned a Zet		· ·	
	(1) She said her brother			(3) He wondered how a			
	(2) Her brother went out			(4) He was amazed how	v a Z	ebra can talk.	
	(3) She said that her bro	<b>J</b>					
	(4) Her brother went to r						
22.	Which part of the sentence shows an improper usage of the articles 'a', 'an' or 'the'?						
	A few books / that the st						
	(A)	(B)					
	\ /	\ /					

in a pathetic condition.

(C)

27.	Match the preposition with the sentences to complete the blank. Match List - I with List - II.		31.	Fill in the blanks wit with List - II	th correc	ct article. Match Lis	st - I
	List - I			List - I			
	(A) He fell the bio	ycle.		(A) Sanskrit is	diffic	ult language	
	(B) For a woman	sixty, she looks young.		(B) Joshuna got	bes	st gift	
	<ul><li>(C) Curd is made milk.</li><li>(D) Put the books the table.</li></ul>			(C) gold is a	preciou	ıs metal	
				(D) You will take only	′	hour to reach my p	lace
	List - II			List - II			
	(I) of			(I) no article			
	<ul><li>(II) on</li><li>(III) off</li><li>(IV) from</li><li>Choose the correct answer from the options given below</li></ul>			(II) an			
				(III) a			
				(IV)the			
				Choose the correct answer from the options given below			
	(1) (A)-(I), (B)-(IV),(C)-(	III), (D)-(II)		(1) (A)-(III), (B)-(IV),	(C)-(I), (	D)-(II)	
	(2) (A)-(III), (B)-(I),(C)-(I	V), (D)-(II)		(2) (A)-(IV), (B)-(III),	(C)-(I), (I	D)-(II)	
	(3) (A)-(III), (B)-(II),(C)-(I), (D)-(IV)			(3) (A)-(II), (B)-(IV), (C)-(I), (D)-(III)			
	(4) (A)-(I), (B)-(III),(C)-(I	I), (D)-(IV)		(4) (A)-(II), (B)-(I), (C	;)-(III), (C	))-(IV)	
28.	This ointment would help the cuts on your		32.	Fill in the blank with			nu is
	Fill in the blanks with the	e correct set of homophones:		(1) should	(2)	need not	
	(1) heel, heal	(2) heat heel		(3) used to	(4)	ought to	
	(3) peel, heel	(4) heal, knee	33.	Rearrange the jumb	led sent	ences into a paragra	aph.
29.	. Identify the part of the sentence that has an error			(A) try to solve the o	question	s one by one.	
	from the options given below. (A) Even after			(B) underline the se in your own wo		and write the ansv	vers
	(B) taking tuitions			(C) to solve a passa	ge read	the questions first.	
	(C) my dau ghter			(D) read the passage	e slowly	and carefully.	
	(D) is not at the home			(E) identify the key	words a	nd phrases.	
	(E) in Maths			Choose the correct	answer	from the options gi	iven
	Choose the correct answer from the options given			below:			
	below:			(1) (A), (E), (C), (B),			
	(1) (A) Only	(2) (B) Only		(2) (C), (A), (E), (D)			
	(3) (C) and (E) Only (4) (D) Only			(3) (C), (D), (A), (E)			
30.	Out of four alternatives, choose the one that best			(4) (B), (C), (D), (A)			
	expresses the meaning of the Latin phrase, 'Bona fide'.		34.	Match List - I with L	ist - II		
	(1) Carried out with res	nonsihility		List -I (Word)		List - II (Antonym	n)
	(2) Carried out in good	•		(A) outflow	(I)	unpleasant	
	(3) Carried out with feelings			(B) pleasant	(II)	opening	
	(4) Something that is familiar			(C) closing	` ,	uncluttered	
	(4) Something that is familiar			(D) cluttered	(IV)	inflow	
				Choose the correct below	answer	from the options gi	iven
				(1) (A)-(II), (B)-(III), (	C)-(IV),	(D)-(I)	
				(2) (A)-(IV), (B)-(I), (C	C)-(II), (E	D)-(III)	
				(3) (A)-(III), (B)-(II), (C)-(I), (D)-(IV)			
				(4) (A)-(I), (B)-(IV), (C)-(III), (D)-(II)			

- 35. Rearrange the jumbled words to make a meaningful sentence.(A) called proton(B) two fundamental particles
  - (B) two fundamental particles
  - (C) the nucleus of an atom
  - (D) and neutron
  - (E) is made up of

Choose the correct answer from the options given below:

- (1) (A), (E), (B), (D), (C) (2) (C), (E), (B), (A), (D)
- (3) (C), (A), (E), (D), (B) (4) (B), (E), (C), (A), (D)
- **36.** Out of the four alternatives, choose the one that best expresses the given sentence the in passive Voice. 'Mohan will have won the match'.
  - (1) The match will have been won by Mohan
  - (2) The match would have been won by Mohan.
  - (3) The match was won by Mohan.
  - (4) The match will be won by Mohan.
- **37.** Match the idioms in List I with the meanings in List II

## List - I

- (A) To give a person a cold shoulder
- (B) To rip up old scores
- (C) To plough the sands
- (D) To draw a line

## List - II

- (I) Doing that seems impossible
- (II) To fix a limit
- (III) To show no interest
- (IV)To reopen a quarrel

Choose the correct answer from the options given below:

- (1) (A)-(III),(B)-(IV), (C)-(I), (D)-(II)
- (2) (A)-(III),(B)-(II), (C)-(I), (D)-(IV)
- (3) (A)-(IV),(B)-(III),(C)-(II),(D)-(I)
- (4) (A)-(IV),(B)-(II), (C)-(I), (D)-(III)
- **38.** Out of the four alternatives, choose the correct meaning of the given word STUBBORN
  - (1) One who is not flexible in behaviour.
  - (2) One who cannot be corrected.
  - (3) One who deserves respect.
  - (4) One who tries to sound more learned than others.
- 39. Fill in the blank with the suitable preposition

She refused \_\_\_\_\_ answer me.
(1) for (2) with

- (0)
- (3) to

(4) by

**40.** The teacher told the students to <u>invent</u> a story to go with the picture in their notebooks, and then <u>continue</u> with their exercises. She said they could all <u>omit</u> exercise 5.

Replace the underlined words in the above paragraph with suitable phrasal verbs (in correct sequence):

- (1) make up, carry on, understand.
- (2) carry on, make up, leave out.
- (3) identify to, finish up, understand.
- (4) make up, carry on, leave out.
- **41.** Change the following sentence into an Exclamatory Sentence.

Such a girl and my friend.

Choose the correct answer from the options given below:

- (1) It is shocking that such a girl is my friend.
- (2) It is shocking to have such a friend.
- (3) It was shocking to have a friend.
- (4) Shocking that such a girl is my friend.
- **42.** Choose the adverbs from the following:
  - (A) hard
  - (B) hardly
  - (C) beauty
  - (D) beautiful
  - (E) quickly

Choose the correct answer from the options given below:

- (1) (A) and (D) Only
- (2) (B) and (E) Only
- (3) (A), (C) and (D) Only
- (4) (A), (B), (C) and (D) Only
- **43.** Out of the four alternatives, choose the one that best expresses the meaning of the given words cereal, serial
  - (1) cereal breakfast food, serial sequential
  - (2) cereal sequential, serial breakfast food
  - (3) cereal breakfast food, serial grains
  - (4) cereal sequential, serial TV show
- 44. Match the words List I with the idioms List II.

## List - I (A) pretence (B) annoy (C) prosperous (D) confused (II) List - II (I) palmy days (II) a stalking horse (III) lost in the clouds (IV) rub one the wrong way

Choose the correct answer from the options given below:

- (1) (A)-(III), (B)-(I), (C)-(IV), (D)-(II)
- (2) (A)-(IV), (B)-(III), (C)-(II), (D)-(I)
- (3) (A)-(I), (B)-(II), (C)-(III), (D)-(IV)
- (4) (A)-(II), (B)-(IV), (C)-(I), (D)-(III)

Choose tine correct answer from die options given below:

- **45.** In letter writing 'date' is NOT written in the following format
  - (A) 10 Jan 2023
  - (B) Jan 10, 2023
  - (C) 2023/1/10
  - (D) X/I/XXIII

Choose the correct answer from the options given below:

- (1) (A) Only
- (2) (C) and (D) Only
- (3) (B) Only
- (4) (C) Only
- **46.** A sentence has been given in Active Voice. Out of the four alternatives suggested, select the one which best expresses the same in Passive Voice.

'The police is unduly harassing me'.

- (1) I am unduly harassed by the police.
- (2) I have being unduly harassed by the police.
- (3) I am being unduly harassed by the police.
- (4) I have been harassed.

- **47.** How would you address the recipient of an informal letter?
  - (1) My dear
- (2) Dear Mr/Mrs
- (3) Dear Sir/Madam
- (4) Hello Sir/Madam
- **48.** From the given four alternatives, choose the option that serves as an Adjective Clause in the given sentence.

'Mary had a little lamb whose fleece was as white as snow'.

- (1) 'a little
- (2) little lamb
- (3) as white as snow
- (4) whose fleece was as white as snow
- 49. Fill in the blank with correct adverb.

Rohit met with an accident

- (1) since
- (2) yesterday
- (3) late
- (4) daily
- **50.** Change the following sentence into an Exclamatory Sentence. He is a very polite boy.

Choose the correct answer from the options given below:

- (1) He was quite a polite boy.
- (2) No boy was as polite.
- (3) He is not a polite boy.
- (4) What a polite boy he is.