## **INDIAN NAVY ENTRANCE TEST (INET) - XX/20XX**

## (FOR NON-UPSC DIRECT ENTRY OFFICERS ENTRY)

Time: 120 Minutes Max Marks: 400

### **INSTRUCTIONS TO THE CANDIDATES**

- 1. This Question Paper has **Four** sections, each comprising 25 questions. Answer all questions.
- 2. Choose the most appropriate answer and select the options (A, B, C or D). Selecting more than one options not permitted.
- 3. Each question carries **Four** marks. For every wrong answer **One** mark will be deducted.
- 4. Candidates are required to obtain **over all 50%** marks in the examination and have to score minimum **40%** marks in each **section**.
- 5. Rough work to be done only on loose sheet provided at the centre.
- 6. Do not write/ copy questions on the loose sheet provided for the rough work.
- 7. Return all loose sheets at the end of the examination.

## SECTION 'A' GENERAL ENGLISH

### Read the following passage and answer the following questions.

The debate on whether Australia will have a nation-wide carbon trading scheme ended last week with the government committed to a national **emissions** scheme from 2012. However, the decision-making as to how we power the economy in a carbon constrained world is only just beginning.

Fossil fuels like coal and oil have **underpinned** our economic growth and standard of living for decades. The current resources boom is there because other countries want our fossil fuels, and for all these reasons it is profitable to keep mining them. Ironically, the income may help develop the technologies to replace them, but it is a matter of which and when. Almost certainly, in the race to reduce emissions, new technologies such as solar, wind and geothermal (heat from rocks) power will compete against gas, clean coal and perhaps nuclear energy to win the hearts and minds of the business world. In the end, business will favour whatever is a cheap, **abundant** and reliable solution. You can imagine the lobbying that will ensue from the different interest groups, to attract business capital and government support so that their technology wins out. There may be many collapsed ventures and lost fortunes along the way.

- 1. Fossil fuels will be in demand for some time yet because:
  - (A) We have no other options.
  - (B) They are plentiful and cheap in Australia.
  - (C) Our wealth and lifestyle are at present dependent on them.
  - (D) A and B together.
- 2. In the writer's view 'there may be many collapsed ventures' along the way because:
  - (A) Cheaper fossil fuels will continue to be used for a long time.
  - (B) Business will favour existing sources, rather than undergoing expensive change.
  - (C) Carbon emission rules will cripple new energy sources.
  - (D) Not all the options will be adopted, so the cheaper and more efficient will survive.
- Choose the word which is most nearly the SAME in meaning as the word printed in bold as used in the passage.
- 4. Emissions
- (A) efficient (B) discharge (C) extraction (D) input 5. Underpinned reduce (A) strengthen (B) (C) project (D) upgrade 6. Choose the synonym for the given word: Element (A) Prime (B) Component (C) Particle (D) Persons Astatic 7. Choose the antonym for the given word: **Directionless** Dynamic (B) Unstable (C) Stable (D)
- 8. Choose the correct sentence from the following:
  - (A) Martha missing her dog who died of a skin infection at a very young age.
  - (B) Martha miss her dog who died of a skin infection at a very young age.
  - (C) Martha misses her dog who died of a skin infection at a very young age.
  - Martha missed her dog who died of a skin infection at a very young age.

### Choose the correct alternative to substitute the given words:

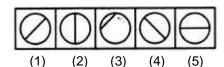
- 9. "To get upper hand"
  - (A) to have no effect (B) to get the better position
  - (C) to be in a difficult situation (D) to cover an unpleasant thing by a pleasant one
- 10 "To destroy"
  - (A) to dig the grave (B) to end in smoke/fiasco (C) to feather one's own nest (D) to flog a dead horse
- 11. Choose the correctly punctuated sentence:
  - (A) He said, "Why didn't you send your application to me?"
  - (B) He said; "Why didn't you send your application to me?"
  - (C) He said that "Why didn't you send your application to me?"
  - (D) He said: "Why didn't you send your application to me"

12.	One w	ord substitutio	n:					
	A fixed orbit in space in relation to earth							
	(A)	Geo centric	(B)	Geological	(C)	Geo stationary	(D)	Geo synchronous
Char	. ,	n Direct to Indir	. ,	-	( )	,	( )	,
13.		s,"I am not feelir						
	(A)			eling well today				
	ÌΒ)			feeling well today	/			
	(C)	He says he is r	not feelir	ng well today				
	(D)	He says that he	e was n	ot feeling well too	day			
14.	He will	say to me, "You	are not	kind to me."				
	(A)	He will tell me	l am not	kind to him.				
	(B)	He was to tell r	ne that	am not kind to h	nim.			
	(C)			n not kind to him.				
	(D)			am not kind to h	im.			
	_	n Active to Pas						
15.		e price rise affec						
	(A)			en affected by th				
	(B)			g affected by the			) (	
	(C)			ng affected by the		se?		
16	(D)			cted by the price	rise?			
16.		aven't they allow Why you haver			(D)	Why haven't vo	u boon	allowed to go?
	(A) (C)	Why were you			(B) (D)	Why haven't yo Why you were		
Fill i	` '	anks with appro			(D)	willy you were	ilot allov	ved to go:
17.				a leather po	ıch .			
	(A)	inside	(B)	at	(C)	out	(D)	below
18.	, ,		` ,	all alcoholic	1	out	(D)	BCIOW
10.	(A)	in	(B)	at		from	(D)	by
10	` '		. ,		(C)		(D)	by
19.	-	_		igations oversea		_ sense to find a	-	iericea galae?
	(A)	is it not making			(B)	doesn't it make		
	(C)	does is make			(D)	is it making		
20.	Kyle _		th) at the	e university since	-			
	(A)	taught			(B)	has been teach	ing	
	(C)	was teaching			(D)	teach		
21.	We	(not/w	ork) too	lay.				
	(A)	had been not w	vorking		(B)	not works		
		have not been	working		(D)	not worked		
22.	. ,	cake taste	_than r		( )			
	(A)	better	(B)	best	(C)	more better	(D)	bestest
22		sh fell down whil			_ a bus.	more better	(D)	bestest
23.				-		for	(D)	to
0.4	(A)	on	(B)	after	(C)	for	(D)	to
24.		e workers in the	actory	have decided to	o stop w	orking until their	deman	d for a pay-rise has beer
	met.							
	(A)	the whole	(B)	some	(C)	most	(D)	all
25.	Choos	e the sentence	with co	rrect usage of p	oronoun	:		
	(A)			d by me was sucl			ł.	
	(B)			d by me was sucl				
	(C)			by myself was s				
	(D)	The treatment	received	d by myself was s	such, as	I never expected	I	
				X	XXXX			

# SECTION 'B' REASONING AND NUMERICAL ABILITY

#### Choose the correct answer:-

1. Choose the figure which is different from the rest.



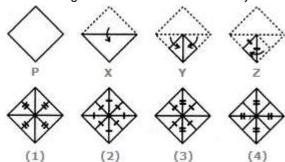
(A) 1

(B)

(C)

(D) 4

2. Choose a figure which would most closely resemble the unfolded form of Figure (Z).



(A)

(B)

2

(C)

(D)

4

Complete the given series by finding the missing term(s):

- 3. 1, 6, 15,?, 45, 66, 91
  - (A) 25
  - (B) 26
  - (C) 27
  - (D) 28
- 4. a\_ba\_b\_b\_a\_b
  - (A) abaab
  - (B) abbab
  - (C) aabba
  - (D) bbabb
- 5. In a family, the father took 1/4 of the cake and he had 3 times as much as each of the other members had. The total number of the family members is
  - (A) 3
  - (B) 7
  - (C) 10
  - (D) 12
- 6. How many such pairs of letters are there in the word **INSTRUCTION** which have as many letters between them in the word as in the English alphabets?
  - (A) ´
  - (B) 2
  - (C) 3
  - (D) 4

7. Find out the association: Mountain: Hill:: Tree:?										
	(A)	Ground								
	(B)	Leaf								
	(C)	Forest								
	(D)	Shrub								
8.	The sum of seven numbers is 235. The average of the first three is 23 and that of the last three is 42. The									
	fourth	number is								
	(A)	40	(B)	126	(C)	69	1)	D)	195	
9.	In a ce	ertain code lang	guage, <b>PON</b>	ID is written as	RSTL,	then what v	will be the	e code	of <b>HEAR</b> ?	
	(A)	GHIJ								
	(B)	GHIZ								
	(C)	JIGZ								
	(D)	JCLZ								
10.	What i	s the value of 0	).242424	.?						
	(A)	23/99								
	(B)	8/33								
	(C)	7/33								
	(D)	47/198					X			
11.	If p+r =	= 2q and 1/q +	1/s = 2/r, th	en						
	(A)	p:s = r:q								
	(B)	$p^2:r^2 = q:s$								
	(C)	p:q = r:s								
	(D)	$p^2 = 2r + s$								
12.	If the a	average of two	numbers is	xy. If one num	nber is x,	the other r	number is	6		
	(A)	y/2								
	(B)	У								
	(C)	2xy-x								
	(D)	x(y-1)								
13.	-		-	s. Manish is 2	0% more	e efficient t	han Sanje	eev. H	ow long wou	ld Manish take
		he same work?	)	T						
	(A)	124/3 days								
	(B)	10 days		•						
	(C)	25 days								
	(D)	125/3 days								
14.					nd reach	es 15 min	late. If he	e trave	ls at 4 km/h,	he reaches 15
		arlier. The dista	nce he has	to travel is						
	(A)	4.5 km								
	(B)	6 km								
	(C)	7.2 km								
4-	(D)	12 km	. (	et e de leur			. 10. 4 DAG	IN III OTI	ATION	
15.		word cannot b		•		•				
40	(A)	RATION	` '	MINISTER	(C)	TRADITI	`	D)	STATION	
16.		ım of digit of th				-	_			S
47	(A)	2	` '	3	(C)	6	,	<b>)</b>	9	
17.	•				sells thre	ee video ca	assettes f	or `27	4.50 after allo	owing discount
		ain rate. The ra	ate of disco	unt allowed is						
	(A)	7%								
	(B)	7.5%								
	(C)	8%								
	(D)	8 5%								

							ADUUL	,
18.	,	of 260) x ? =1289	96					
	(A)	140						
	(B)	150						
	(C)	160						
	(D)	120						
19.		_	c, HCF (a,b) =	1 and HCF (a	,c)=1, then which	ch one of the follo	owing correct?	
	(A)	HCF(a,bc)=1						
	(B)	HCF(a,bc)=a						
	(C)	HCF(a,bc)=b						
20	(D)	none of these			ationa HOE/a bi	)		
20.			integral solution	ons of the equa	ations HCF(a,b	)=5 and a+b=65?		
	(A)	Less than 65						
	(B)	Infinitely many Exactly one						
	(C) (D)	none of these						
21.							1)22221 -	
-1.			-	_	interest becom	ies 2100 in 2 ye	ars and `2250 in 5 y	ears
	The pr	incipal and rate	of interest are					
	(A)	`2000; 2.5%						
	(B)	`2000; 2%						
	(C)	`1000; 2.5%			, · (O)			
	(D)	`1500; 3%						
22.	In how	many years a s	um will be dou	uble at 5% sim	ple interest?			
	(A)	12						
	(B)	17			)			
	(C)	16		-11				
	(D)	20						
23.		ea of a rhombus	with side 13 c	cm and one dia	agonal 10 cm w	ill be		
	(A)	140 cm <sup>2</sup>						
	(B)	130 cm <sup>2</sup>						
	(C)	120 cm <sup>2</sup>						
	(D)	110 cm <sup>2</sup>						
24.			_	s 'x' and its pei	rimeter is 'y', th	en which one of t	he following is corre	Ct?
	(A)	$y^4 = 432 \times (x^2)$						
		$y^4 = 216 \times (x^2)$ $y^2 = 432 \times (x^2)$						
	(C) (D)	$y = 432 \times (x)$ none of these						
25.			imum circular	nlates are cu	it off from a so	guare naner che	et of area 784 cm <sup>2</sup>	The
۷٥.		ference of each		plates are co	it on nom a st	quale paper sile	et of alea 704 cm	. 1110
		11 cm	plate is					
	(A) (B)	22 cm						
	(C)	33 cm						
	(D)	44 cm						
	\-/	<del></del>		xxxx	X			

## SECTION 'C' GENERAL SCIENCE AND MATHEMATICAL APTITUDE

#### Choose the correct answer:-

- 1. Glycerol which decompose at its boiling point can be purified by
  - (A) steam distillation
  - (B) simple distillation
  - (C) distillation under reduce pressure
  - (D) fractional distillation
- 2. When a earth satellite dissipates energy, it moves to a
  - (A) lower orbit and its kinetic energy increases
  - (B) higher orbit and its kinetic energy decreases
  - (C) lower orbit and its kinetic energy decreases
  - (D) higher orbits but its kinetic energy increases
- 3. Electromotive force represents
  - (A) force
  - (B) energy
  - (C) energy per unit charge
  - (D) current
- 4. Which one of the following is correct for resultant of balanced forces
  - (A) it is zero
  - (B) it is a non-zero
  - (C) it varies continuously
  - (D) none of these
- 5. It's difficult to walk on ice because of
  - (A) more inertia
  - (B) more friction
  - (C) absence of friction
  - (D) absence of inertia
- 6. A particle is moving freely. Then, its
  - (A) kinetic energy is always greater than zero
  - (B) potential energy is greater than zero and kinetic energy is less than zero
  - (C) potential energy is less than zero and kinetic energy is greater than zero
  - (D) potential energy is zero and kinetic energy is less than zero
- 7. An incident ray strikes a plane mirror at an angle of 15° with the mirror. The angle between the incident ray and reflected ray is
  - (A) 15°
  - (B) 30°
  - (C) 150°
  - (D) none of these
- 8. If soft iron is used as a core in a solenoid, then it is called
  - (A) electromagnet
  - (B) bar magnet
  - (C) ferromagnet
  - (D) iron magnet
- 9. Arrange the following elements in the increasing order of their metallic property
  - (A) Na,Li,Rb,k,Cs
  - (B) Cs,Rb,K,Na,Li
  - (C) Li,Na,K,Rb,Cs
  - (D) Li,Na,K,Cs,Rb

**AB000** Frequency (n) of oscillation and time period (T) are related as (A) nT =1  $nT^{2} = 1$ (B)  $n^2T = 1$ (C)  $n^2T^2 = 1$ (D) Atomic size is in the order of 10<sup>-8</sup> cm (A) 10<sup>-10</sup> cm (B) 10<sup>-13</sup> cm (C) 10<sup>-6</sup> cm (D) 12. An acid is a substance which (A) donates a proton (B) accepts an electron pair (C) gives H<sup>+</sup> in water (D) all of these 13. Plasma membrane is (A) selectively permeable (B) flexible (C) lipoprotein membrane (D) all of these 14. A nibble is equal to \_\_\_\_\_ bits. (A) 16 (B) 32 (C) 04 (D) Three sets of English, Mathematics and Science books containing 336, 240 and 96 books respectively have to be stacked in such a way that all the books are stored subject wise and the height of each stack is the same. Total number of stacks will be (A) 14 21 (B) (C) 22 (D) 16. What is the greatest number of 3 digits which when divided by 6, 9 and 12 leaves a remainder 3 in each case. (A) 903 (B) 939 (C) 975 996 If the difference between the reciprocal of a positive proper fraction and the fraction itself be 9/20 ,then the 17. fraction is 5/4 (A) (B) 4/5 3/5 (C) (D) 3/10 What is the sum of squares of the roots of the equation  $x^2+2x-143=0$ 18.

(A)

(B)

(C)

(D)

170

180

190

290

If one of the roots of the equation  $x^2$ + ax-b=0 is 1, then what is the value of (a-b)? (A) (B) 1 (C) 2 -2 (D) **Direction:** Consider a triangle ABC in which cos A + cos B + cos C =  $\sqrt{3} \sin \frac{\pi}{2}$ What is the value of  $\sin \frac{A}{2} \sin \frac{B}{2} \sin \frac{C}{2}$ (A) 1/2 1/4 (B) 1/8 (C) (D) 1/16 **Direction**: Consider a triangle ABC in which cos A + cos B + cos C =  $\sqrt{3} \sin \frac{\pi}{3}$ What is the value of  $\cos{(\frac{A+B}{2})}\cos{(\frac{B+C}{2})}\cos{(\frac{C+A}{2})}$ 1/4 (A) (B) 1/2 (C) 1/16 (D) none of these 22. From an aero plane above a straight road the angles of depressions of two positions at a distance 20 m apart from the road are observed to be 30 degree and 45 degree. The height of the plane above the ground is (A) 10√3 m 10(√3-1) m (B) (C)  $10(\sqrt{3} + 1) \text{ m}$ (D) 20m The geometric mean and harmonic mean of two non negative observations are 10 and 8 respectively. 23. Then, what is the arithmetic mean of the observation (A) (B) 9 (C) 12.5 (D) A coin is tossed three times. What is the probability of getting head and tail alternately 24. (A) 1/8 (B) 1/4 (C) 1/2 (D) 3/4 Total number of elements in the power set of A containing 15 elements is 25. -XXXXX-----

### <u>SECTION 'D'</u> GENERAL KNOWLEDGE

#### Choose the correct answer:-

- 1. The most famous Indo-Greek ruler to rule over India, noted for his justice and popularity with his subjects,
  - (A) Rudradaman
  - (B) Menander
  - (C) Eukratides
  - (D) Demetrios
- 2. The latitude is the angular distance of a point of the Earth's surface, North or South of the equator as measured from the
  - (A) centre of the earth
  - (B) tropic of Cancer or the Capricorn
  - (C) equator
  - (D) poles
- 3. The largest ecosystem of the Earth is
  - (A) Biosphere
  - (B) Hydrosphere
  - (C) Lithosphere
  - (D) Biome
- 4. What is the special constitution position of Jammu & Kashmir?
  - (A) Indian laws are not applicable
  - (B) it has its own constitution
  - (C) it is not one of the integral part of Indian Union
  - (D) it is above the constitution
- 5. Kalamkari painting refers to
  - (A) a hand painted cotton textile in South India
  - (B) a handmade drawing on bamboo handicrafts in North East India
  - (C) a block painting woolen cloth in western Himalayan region of India
  - (D) a hand painted decorative silk cloth in North Western India
- 6. The famous phrase 'Tattavamsi' is found in which of the following Upanishads?
  - (A) Chhandogya
  - (B) Mundaka
  - (C) Mandukya
  - (D) Isavasya
- 7. Gandhiji launched the struggle in Ahmedabad in1917-18 which involved the
  - (A) peasants
  - (B) industrial workers
  - (C) masses
  - (D) labourers
- 8. Which of the following states of India has made unique venture of putting daughters' nameplate on the front of the house?
  - (A) Punjab
  - (B) Haryana
  - (C) Uttar Pradesh
  - (D) Madhya Pradesh

		,000
9.	In India, agriculture income is calculated by:	
	(A) Output method	
	(B) Input method	
	(C) Expenditure method	
	(D) Commodity flow method	
10.	Who won the best actor award at 65 <sup>th</sup> National Film Awards:	
	(A) Yayraj	
	(B) Riddhi Sen	
	(C) Ranveer Kapoor	
	(D) Akshay Kumar	
11.	Which sportsman bagged the title of Sportsman of the year award in Laurens World Sports A	wards in
	2018?	
	(A) Roger Fedrer	
	(B) Rafael Nadal	
	(C) Cristiano Ronaldo	
	(D) JJ Watt	
12.	Which of the following sets of bill is presented to the Parliament along with the Union Budget?	
	(A) Direct Taxes Bill and Indirect Taxes Bill	
	(B) Contingency Bill and Appropriation Bill	
	(C) Finance Bill and Contingency Bill	
	(D) Finance Bill and Appropriation Bill	
13.	Who amongst the following is the author of the classical book 'Life Divine'?	
	(A) Ravi Shankar	
	(B) Swami Vivekananda	
	(C) Radha Krishna	
	(D) Aurobindo Ghosh	
14.	Who won the 2018 Pulitzer prize for fiction "Less"?	
	(A) Andrew Sean Greer	
	(B) Kiran Bedi	
	(C) Patrick French	
	(D) Jennifer Croft	
15.	Which is the India's biggest naval base build under project 'Sea Bird'?	
	(A) INS Kadamba (Karwar)	
	(B) National Defence Academy	
	(C) INS Utkarsh	
	(D) none of these	
16.	The Tessa treaty has became a bone of contention between India and	
	(A) China	
	(B) Pakistan	
	(C) Bangladesh	
	(D) Nepal	
17.	Where the largest Sea Port in the world is situated?	
	(A) Shangai	
	(B) Kolkata	
	(C) Tokyo	
	(D) none of these	

18.	Which	is the busiest river in the world?
	(A)	Nile
	(B)	Amazon
	(C)	Rhine
	(D)	none of these
19.	SDRs s	stands for:
	(A)	Significant Drawing Rights
	(B)	Special Drawing Rights
	(C)	Soft Drawing Rights
	(D)	Small Drawing Rights
20.	Which	of the following is not correct?
	(A)	NMA - National Monuments authority
	(B)	SIT - Special Investigation Team
	(C)	BSF - Border security Force
	(D)	ASI - Archaeological Survey of India
21.	First- H	lindu American to enter in the US House of Representative as senator is
	(A)	Tulsi Gabbard
	(B)	Sunita Williams
	(C)	Jyoti Sengupta
	(D)	Ami Bera
22.	Which	of the following is observed as Sports Day every year?
	(A)	22 <sup>nd</sup> April
	(B)	26 <sup>th</sup> July
	(C)	29 <sup>th</sup> August
	(D)	2 <sup>nd</sup> October
23.	What w	as the theme for the 70 <sup>th</sup> Republic Day parade?
	(A)	Life of Gandhi
	(B)	Heritage of India
	(C)	Unity in diversity
	(D)	none of these
24.	Which	word is chosen by the Oxford dictionary as the Hindi word of the Year?
	(A)	Nari Shakti
	(B)	Atulaya
	(C)	Ekta
	(D)	none of these
25.	Which:	state joined with British Council on educational collaboration?
	(a)	Arunachal Pradesh
	(b)	Himachal Pradesh
	(c)	Bihar
	(d)	Tamil Nadu
		XXXXX