GENERAL SCIENCE, Paper – I

(Physical Sciences) (English Version)

Parts A and B

Time: 2 Hours 45 Min.

Instructions :

- 1. The Question paper contains Part-A and also Part-B.
- 2. 15 Min. is allotted for reading the question paper.
- 3. Answer the questions under Part-A on a separate answer booklet.
- 4. Write the answers to the questions under Part-B on the question paper itself and attach it to the answer booklet of Part-A.
- 5. Answer all the questions.

PART-A	Max. Marks : 30

Section - I

Max. Marks : 30 4 x 1 = 4 Marks

Note :

- 1. Answer all the questions.
- 2. Each question carries One mark.
- **1.** If cooker handles were made with **PET** material, What happened ?
- 2. Make a list of material needed to observe Static electricity in your class room.
- 3. The audible frequency range of human beings is 20 20000 Vibrations/second. The frequency of sound produced by a living being is 10 Vibrations/second. Can you hear the sound ?
- **4.** Petrol and Diesel are valuable and important fuels. Write any two methods to save such energy resources.

Section - II

 $5 \ge 2 = 10$ Marks

Note :

- 1. Answer all the questions.
- 2. Each question carries Two marks.
- 5. How can sound produced ? Give two examples.
- **6.** Why the alternative fuels (Solar energy, Wind energy) are more useful than petroleum fuels (Petrol, Diesel) ? Write your opinion.
- 7. We should not spray water on Oil fires. Why?
- **8.** Vasundhara projected a ball in to air. It reached the ground. Answer the following questions.
 - (i) Which forces act on the ball when it was in air ?
 - (ii) Which forces act on it when it reached the ground ?

9. Name four articles that were made with Melamine or Bakelite and useful in our daily life.

Section - III $4 \times 4 = 16$ Marks

musical instruments.

Note :

- 1. Answer all the questions.
- 2. Each question carries Four marks.
- 3. Internal choice is given in questions.

10. Mention the names of any four musical instruments and how they produce sound.

(OR)

Explain the following.

- (i) Relation between shrillness and frequency.
- (ii) Relation between Length of scale and frequency.
- (iii) Amplitude
- (iv) Frequency
- 11. A wooden block is kept on an inclined plane. Draw FBD of Wooden block.

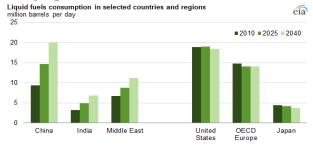
(OR)

Draw the neat diagrams of any two

12. Write an activity to observe the electric conductivity of metals.

How can you prove that Oxygen is essential need for burning ? Explain the procedure to be followed.

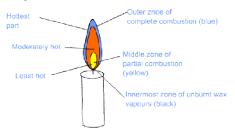
13. Observe the given graph.



Answer the following questions.

- (i) Which country will consume more fuel in 2040?
- (ii) Which country used less amount of fuel in 2010?
- (iii) Write a note about the fuel consumption in India?
- (iv) What happened if the fuel consumption is going in this ratio?

Observe the diagram given below.



Answer the following questions.

- (i) Which is outer zone in the candle flame ?
- (ii) In which zone oxygen is available in less quantity ?
- (iii) How many colour zones are there in candle flame ?
- (iv) Compare the temperatures of Outer zone and Inner zone ?





GENERAL SCIENCE, Paper – I

(Physical Sciences)

(English Version)

Time: 2 Hours 45 Min.Parts A and BMaximum Marks : 40PART-BMaximum Marks : 10

This Question paper contains 4 printed pages.

Instructions :

- 1. Answer all the questions.
- 2. Each question carries ¹/₂ Mark.
- 3. Marks will not be awarded in case of any overwriting and rewriting or erased answers.
- 4. Write the answers to the questions under Part-B on the question paper itself and attach it to the answer booklet of Part-A.
- 5. Write the 'CAPITAL LETER' showing the correct answer for the following questions in the brackets provided against them.

		Sectio	on - IV	20 x ½	= 10 M	Iarks
14.	Unit	s of Pressure	S	\backslash	[]
	(A)	Newton 4	(B)	Newton/meter		
	(C)	Newton-meter ²	(D) *	^k Newton/meter ²		
15.	The	substances used to reduce	fri	iction between machine	parts	
	are c	alled	BELL weeply cor	n	[]
	(A)	Powders	(B)	Lubricants		
	(C)	Spikes	(D)	Springs		
16.	Deci	bel is the unit for	••••		[]
	(A)	Amplitude of sound	(B)	Frequency of sound		
	(C)	Shrillness of sound	(D)	Intensity of Sound		
17.	Mate	erials :				
	i)	Iron ii) Glass iii)	Vacu	um iv) Air		
	Which of the above allow the sound to travel through them ?				[]
	(A)	(i) only	(B)	(i) and (ii) only		
	(C)	(i), (ii) and (iv)	(D)	(i), (ii), (iii) and (iv)		
18.	This	is not a part in Voice box			[]
	(A)	Tongue	(B)	Vocal cord		
	(C)	Trachea	(D)	Cochlea		
19.	Vibr	ating component in Flute			[]
	(A)	String	(B)	Stretched Membrane		
	(C)	Air	(D)	String and Air		

20.	The first Rayon factory in India was established in			[]	
	(A)	Karnataka	(B)	Telangana		
	(C)	Andhra Pradesh	(D)	Kerala		
21.	Ident	tify the wrong statement.			[]
	(A)	Gold and Platinum are less read	ctive n	netals		
	(B)	Mercury is a liquid metal				
	(C)	Sulphur present in Hair and Na	ails			
	(D)	Phosphorous can be preserved	in Ker	rosene		
22.	The	main component in Coal			[]
	(A)	Carbon	(B)	Oxygen		
	(C)	Water vapour	(D)	Sulphur		
23.	CNG stands for				[]
	(A)	Compressed Natural Gas				
	(B)	Compressed Nitrogen Gas				
	(C)	Complete Natural Gas				
	(D)	Collected Natural Gas				
24.	Mate	ch the following :	No. of Contract of			
		Set – I	HYS	Set – II		
	i)	Rapid Combustion	C) C	(a) Spirit		
	ii)	Spontaneous Combustion	*	(b) Phosphorous		
	iii)	Slow Combustion		(c) Wood		
	Choo	ose the correct answer :	ETL		[]
	(A)	(i)-a, (ii)-b, (iii)-c	weebiy.coll	ш		
	(B)	(i)-c, (ii)-b, (iii)-a				
	(C)	(i)-b, (ii)-c, (iii)-a				
	(D)	(i)-b, (ii)-a, (iii)-c				
25.	The a	amount of heat energy released v	when 1	Kg of fuel burnt	[]
	(A)	Ignition Point	(B)	Ignition Temperature		
	(C)	Power of Fuel	(D)	Calorific Value		
26.		The number of vibrations of scale		• •		
	Q : 1	The number of vibrations of scale	e havin	g 5 cm length in air.	[]
	(A)	$\mathbf{P} = \mathbf{Q}$	~ /	$\mathbf{P} > \mathbf{Q}$		
	(C)	P < Q	(D)	$P \le Q$		
27.	Blac	k gold : Coal : : Liquid G	old	:	[]
	(A)	Kerosene				
	(B)	Petrol				
	(C)	Diesel				_
	(D)	Petroleum		NAGA MURTHY- 9441786635 Contact at : <u>nagamurthysir@</u> Visit at : ignitephysics.weeb		<u>n</u>

28. 29.	We k (A) (B) (C) (D)	prepared a toy telephone in your mow from that Sound travels through air Sound travels through liquids Sound travels through solids Sound travels through gases naterial needed to prove that "A Candle, Glass tumbler Candle, Match box	activit <u>y</u> ir is es	у.	[]
	(C) Candle, Match box(D) Test tube, Potassium permanganate, Test tube holder,					
		Insense stick, Match box, Spiri				
30.	-					
	The	relation between Normal force an	nd Fric		[]
	(A)	Nαf	(B)	N $\alpha \frac{1}{f}$		
	(C)	Either A or B	(D)	None of these		
31.	Acry	lic is artificial wool made from o	coal, w	ater, air, oil and lime sto	one.	
	silk i	icial wool is also called fake fur. s made from cellulose. ch is artificial fiber ? Only Acrylic Only Rayon both Acrylic and Rayon None of the above	ETTER		al []
32.	. ,	net attracts iron nails.				
54.	•	is an example for			ſ	1
	(A) (C)	Contact force Gravitation force	(B) (D)	Field force Tension force	L	L
33.	. ,	l wrappers used for packing Foo	. ,		[1
	(A) (C)	Aluminium Lead	(B) (D)	Silver Copper	L	L

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