

UNLOCK THE HIDDEN SCIENTIST IN YOUR CHILD WITH KAMP

WHY SCIENTIFIC TEMPERAMENT IS IMPORTANT FOR YOUR CHILD?

Scientific temperament refers to an individual's attitude of logical and rational thinking. An individual is considered to have scientific temper if s/he employs a scientific method of decision-making in everyday life. The term was first coined by India's first Prime Minister, Jawaharlal Nehru, in his book 'The Discovery of India'.

"A Statement on Scientific Temper" prepared by a group of scholars and issued on behalf of the Nehru Centre, Bombay, in July 1981, mentions that "Scientific Temper involves the acceptance, amongst others, on the following premises:

- The method of science provides a viable method of acquiring knowledge;
- 2. The human problems can be understood and solved in terms of knowledge gained through the application of the method of science;
- 3. The fullest use of the method of science in everyday life and in every aspect of human endeavour from ethics to politics and economics is essential for ensuring human survival and progress; and
- 4. That one should accept knowledge gained through the application of the method of science as the closest approximation of truth at that time and question what is incompatible with such knowledge; and that one should from time to time re-examine the basic foundations of contemporary knowledge."

NATIONAL ASSESSMENT FOR SCIENTIFIC TEMPERAMENT AND APTITUDE (NASTA)

National Assessment for Scientific Temperament and Aptitude (NASTA) is designed and developed for the elementary to middle school students. It is an Attribute Based assessment as against only Subject Based Assessment.

NASTA ASSESSMENT PARAMETERS

PARAMETERS	CONTEXT
Observation and Precision	Students need to be able to develop the most basic skill in science done by using our five senses in surrounding environment. After making observations it is important to group objects according to a purpose. Measuring is important in collecting, comparing, and interpreting data.
Imagination, Creativity and Innovation	Students need to be able to think and work creatively in both digital and non-digital environments to develop unique and useful solutions.
Critical Thinking and Problem Solving	Students need the ability to think critically, which includes proficiency with comparing, contrasting, evaluating, synthesizing, and applying without instruction or supervision.
	Students need the ability to solve complex problems in real time.
	Students should be able to predict and interpret situation, events, findings based on multiple observations.
Prediction and Interpretation	An inference is a link between what is observed and what is already known.
	Whereas, prediction is an educated guess based on good observations and inferences about an observed event or prior knowledge.
	Students must possess the ability to collaborate seamlessly in both physical and virtual spaces, with real and virtual partners globally.
Communication and Collaboration	Students must be able to communicate not just with text or speech, but in multiple multimedia formats. They must be able to communicate visually through video and imagery as effectively as they do with text and speech.
Social Skills and Empathy	This includes adaptability, fiscal responsibility, personal accountability, environmental awareness, empathy, tolerance, and global awareness.

IMPORTANCE OF ASSESSMENT PARAMETERS

PARAMETERS	DEFINITION AND IMPORTANCE
Observation and Precision	Scientific observation is the central element of scientific method or process. One of the core skills of a science enthusiast is to make observation. Precision and accuracy are two important factors during the course of scientific measurements. Precision is how consistent results are when measurements are repeated.
Imagination, Creativity and Innovation	Imagination is about seeing the impossible, or unreal. Creativity is using imagination to unleash the potential of existing ideas in order to create and valuable ones. Innovation is taking existing, reliable systems and ideas and improving them. These skills serve as an important backbone while solving problems.
	Critical thinking and problem solving refer to the ability to use
Critical Thinking and Problem Solving	knowledge, facts, and data to effectively solve problems. Scientific scenarios require one to assess the environment, analyze a situation, design a solution, and ultimately win in a competitive scenario. Both critical thinking and creative thinking serve as important pillars for design thinking.
Prediction and Interpretation	A prediction, or forecast, is a statement about a future event. A prediction is often, but not always, based upon experience or knowledge. Interpretation on the other hand is the act of explaining, reframing, or otherwise showing your own understanding of something. Scientific skillsets require honing of both predictability and interpretability skills to extrapolate findings or provide plausible reasons for an observation.
Communication and Collaboration	Collaboration and communication are interpersonal skills that help people work well with one another. These skills involve being able to read the vast number of verbal and nonverbal cues that we all use to communicate our ideas and emotions. In today's working environment, it is important that we proactively share ideas and knowledge to solve the complex and challenging problems that we encounter.
Social Skills and Empathy	Empathy and social skills allow us to function cohesively. We are continuously working towards examining and improving our world. While doing so, we end up judging or critically evaluating others. Empathy and social skills help us to be open-minded and develop a balance between self-confidence and understanding different perspectives.

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KNOWLEDGE & AWARENESS MAPPING PLATFORM

OMR ANSWER SHEET - NASTA 2019

Use HB PENCIL / BALL POINT PEN (BLUE / BLACK) to write and darken the circles.

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KULDEEP INTERNATIONAL

PARTICIPANT'S NAME

AMIT

CLASS 5 SCHOOL CODE

10672 - Paper-1

Roll No. 19100001 1910015947

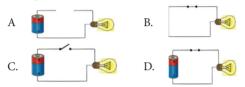


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SCIENCE

 In which of the following circuits will the electric bulb glow?

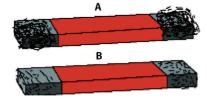


2. Look at the image given below:



Which of the following statements correctly describes it?

- A The current is flowing from the electric bulb to the electric cell
- B. It is a closed circuit
- C. The bare ends of the wire form the switch
- D. The bulb is connected to the negative terminal of the electric cell
- 3. Sameer places two similar magnets A and B over iron filings. The magnets attract the iron filings as



Which of the following statements is correct?

- A. Magnetic strength of B is more than that of magnet A
- B. Magnetic strength of A is more than that of magnet B
- C. Magnet A and Magnet B have equal magnetic strength
- D. None of these
- 4. The teacher gave a piece of unknown material to the student and asked the student to find its properties. The student places the magnet over it and finds that the other bar starts repelling the magnet.

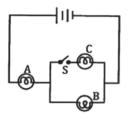
 What finding will the student communicates his classmates?
 - A. The material given by the teacher is a metal
 - B. The material given by the teacher is plastic
 - C. The material given by the teacher is rubber
 - D. The material given by the teacher is a magnet
- 5. A teacher gave different tools to students and asked them to measure their size. Reet got a foam bead. Which out of the following should she use to measure the diameter of a foam bead?
 - A. A measuring tape with centimetre division
 - B. A metre scale
 - C. A weighing scale
 - D. A scale with milimetre division
- 6. The rate of change of displacement with time is called?
 - A. Speed
- B. Velocity
- C. Both of these
- D. None of these
- 7. Which of the following plants can convert atmospheric nitrogen into soluble form that can be used by plants?
 - A. Bittergourd
 - B. Cereals
 - C. Legumes
 - D. Nuts

- 8. Which of the following does not belong to the group formed by others?
 - A. Carrots
- B. Pumpkin
- C. Radish
- D. Beets
- 9. Fungi and mushrooms are
 - A. Saprotrophs
- Moulds

- C. Host
- D. Parasite

В.

- 10. Lichens is a fine example of
 - A. Autotrophs
- Parasite
- C. Symbiosis
- D. Photosynthesis
- 11. Why do we see images of trees or buildings in water?
 - A. Light travels in straight line
 - B. Sun shines on trees and buildings
 - C. Reflection of light at water surface
 - D. None of the above
- 12. Image formed by a plane mirror is
 - A. Bigger than objet
 - B. Upside down
 - C. Appear nearer
 - D. Of same size and distance
- 13. A fuse wire is made of
 - A. Nichrome
- B. Tin-lead
- C. Manganin
- D. Constantan
- 14. On the basis of, following picture answer the question given below:



In the figure given below, A, B and C are identical bulbs. What changes occur in the brightness of bulbs A and B when the switch S is closed?

- A. Brightness of A increases but that of B decreases
- B. Brightness of A remains the same but that of B decreases
- C. Brightness of both A and B decreases
- D. Brightness of both A and B increases
- 15. Which is the best soil to grow plants?
 - A. Loamy Soil
- B. Sandy Soil
- C. Clayey Soil
- D. Rocks

- 16. When the object is moved slightly closer to a converging lens, the image may
 - A. Increase in size and move closer to the lens
 - Increase in size and move farther away from the lens.
 - C. Decrease in size and move closer to the lens
 - D. Decrease in size and move farther away from the lens.
- 17. When red colour marbles are kept in blue coloured vase made of glass then the colour of red coloured marbles will apprear
 - A. Black
- B. Blue

- C. Red
- D. White
- 18. Herbs and short plants make _____ layer of the forest
 - A. Understorey
- B. Canopy
- C. Floor
- D. None of these
- 19. The boy in the figure given below is able to see the candle burning on the other side of the straight tube. Which of the following statement justifies it?



- A. Light travels in a circular path.
- B. Light travels in a straight path.
- C. Light travels in a zigzag path
- D. Light travels in a parabolic path
- 20. Sam takes a convex lens and puts it in the path of Sun rays. He places a white sheet of paper and adjusts the distance between the lens and the paper till he gets a bright spot on the paper. He holds the lens and the paper in this position for a few minutes. What do you think will happen to the paper?
 - A. Nothing will happen to the paper
 - B. It will become red in color
 - C. It will start burning
 - D. None of these
- 21. What is the bird called in the given food chain?
 Grass → Grasshoppers → Birds → Snakes
 - A. Producer
- B. Parasite
- C. Decomposer
- D. Consumer

22. Vitamin E is important for

- A. protecting cells
- B. vital tissues protection
- C. protecting cells
- D both (1) and (2)

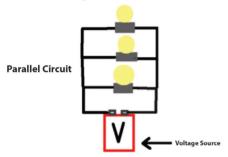
23. In reflection of light

- Angle of reflection is greater than the angle of incidence.
- B. Angle of reflection is equal to angle of incidence.
- Angle of reflection is smaller than the angle of incidence.
- D. No relation between Angle of reflection and the angle of incidence

24. Natural gas is an example of

- A. An exhaustible resource
- B. Not a resource
- C. An inexhaustible resource
- D. Man made resource

25. What would happen to the bulbs if a witch is closed on the parallel circuit?



- A. One bulb will light up
- B. No change
- C. All the bulbs will light up
- D. All the bulbs will go off

26. Which of the following is not prepared from forest products?

- A. Paper
- B. Plywood
- C. Matchsticks
- D. Thermocol

27. The most desirable way of waste management

is

- A. Landfilling
- B. Dumping
- C. Burning
- D. Recycling

28. Lightening is primarily caused by

- A. Heavy precipitation
- B. the accumulation of charges in the clouds
- C. Thunderstorms
- D. Cloudy sky

29. Most earthquakes are caused by

- A. Heavy rain
- B. Strong winds
- C. Landslides
- D. Movements of earth's plates

30. The blind spot in the eye is

- A. At the left corner of the eye
- B. The end point of retina
- C. The junction of retina and the optic nerve
- D. end point of optic nerve







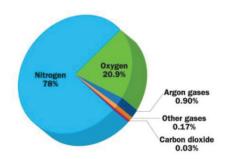
SOCIAL SCIENCE

- Which of the following physical features is rich in mineral resources?
 - A. Sunderbans
 - B. Himalayas
 - C. Chotanagpur Plateau
 - D. Coral reefs of Andaman and Nicobar Islands
- 2. Which of the following statement is an example of weather
 - A. A windy morning.
 - B. A hot summer day.
 - C. A cold winter night.
 - D. A rainy week
- 3. Your school has planned an educational trip to Jim Corbett national park. In which state you will be traveling to for this trip?
 - A. Uttarakhand
 - B. Rajasthan
 - C. Assam
 - D. Bihar
- 4. Which of the following states is first to experience South West Monsoon shower?
 - A. Odisha
 - B. Bihar
 - C. Kerala
 - D. Tamil Nadu
- 5. Why swimmer can float on dead sea?
 - A. Water is shallow
 - B. It is most dense due to high percentage of salt
 - C. Water is too clear
 - D. Statement is not correct
- 6. Indian states were formed on the basis of?
 - A. Food
- B. Language
- C. Population
- D. Religion

7. A teacher showed a map to the students and ask to label pampas? Which continent will they label?

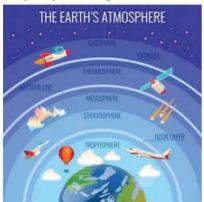


- A. North America
- B. South America
- C. Africa
- D. Europe
- 8. Observe the image and suggest why oxygen does not constitute the highest proportion of the atmosphere.



- A. Because oxygen is required in respiration.
- B. Because oxygen is required in water cycle
- C. Because oxygen is required in combustion
- D. Because oxygen is required in production

9. Observe the image and suggest why aeroplanes and jets fly in stratosphere.



- A. Because atmospheric turbulence occur in troposphere.
- B. Because atmospheric turbulence occur in stratosphere
- C. Because radioactivity occur in troposphere.
- D. Because ozone activity occur in stratosphere.
- 10. Observe the image of rain gauge. Which of the following would be an ideal place to keep this rain gauge?



- A. Under tree
- B. In open area
- C. Under shed
- D. In fountains

- 11. The rigid outer part of the earth, consisting of the crust and the upper mantle is called
 - A. Magma
 - B. Lithosphere
 - C. Ionosphere
 - D. Magnetosphere
- 12. Stubble burning is a major source of
 - A. Air pollution in Bangalore
 - B. air pollution in villages
 - C. air pollution in Delhi
 - D. air pollution in the coast
- 13. Vegetation that can survive in saline water is called
 - A. Tundra
 - B. Mangrove
 - C. Chapparal
 - D. grassland
- 14. The amount of water recommended by the United Nations for drinking, washing, cooking and maintaining proper hygiene per person per day is a minimum of
 - A. 15 litres
- B. 30
- C. 50 litres
- D. 60
- 15. The atmosphere is held to the earth by
 - A. Atmospheric pressure
 - B. Tidal Force
 - C. Gravitational force of the earth
 - D. Gravitational force of the sun
- 16. Land forms are found over
 - A. The ocean floors
 - B. The continents
 - C. Ocean basins
 - D. Ocean ridges
- 17. Using sea water for drinking at present is
 - A. Not possible
 - B. Possible through desalination but difficult
 - C. Possible, but not tried
 - D. Already in practice at large scales





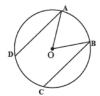


MATHEMATICS

- Ankit is packing 7 cookies in a packet. How many cookies can he pack in p such packets?

[C] 7p

- [D] 49p
- A rectangle has a length l and breadth b. The length of the rectangle is halved, and the breadth is doubled. What will be the perimeter of the new rectangle formed?
 - [A] 4l + b
- [B] 1 + 4b
- [C] 2l + 2b
- [D] l+b
- Which expression represents the statement "u multiplied by 5 and 7 is subtracted from the result"?
 - [A] u 7
- [B] 5(u-7)
- [C] 7u 5
- [D] 5u 7
- The digit at tens place of a two-digit number is three more than the digit at its ones place. If the digit at ones place is w, which of the following represents the two-digit number?
 - [A] (3 + w) + w
- [B] (3 + w) + 10w
- [C] 10(3 + w) + w
- [D] 10(3w) + w
- A circle is shown below.



Which of the following are radii of the circle?

- [A] OA and OB
- [B] AD and BC
- [C] OA and AD
- [D] OB and BC

- 6. Find the next fraction in series $\frac{4}{7}$, $\frac{8}{14}$, $\frac{12}{21}$,...?

 [A] $\frac{16}{28}$ [B] $\frac{2}{7}$

[C] $\frac{20}{35}$

- From a basket of 8 apples, sita took half of them Rita took another half from remaining how many apples are left?
 - [A] 4

[B] 5

[C] 0

- [D] 2
- The standard form of rational number $\frac{-90}{60}$ is
 - [A] $\frac{-3}{2}$

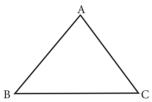
- 9. Additive inverse of $\frac{5}{7}$ is
 [A] $\frac{7}{5}$ [C] $\frac{-5}{7}$

- [D] None of the above
- 10. Which fraction has the highest value?
 - [A] 0.1666666667
- [B] 0.33333333333
- [C] 0.83333333333
- [D] 0.6666666667
- 11. A bird flew from its nest towards east for $\frac{4}{5}$ km in search of grains. While returning it got tired and stopped after $\frac{2}{3}$ km. How far it is from the nest?
- [B] $\frac{2}{2}$ KM
- [D] None of the above

12. Ankit mowed $\frac{2}{5}$ of the field in an hour. What

fraction of the field would he mow in 2 hours?

- 13. The ratio of Sahil's weight to the weight of a bag of rice is 5:3. If Sahil's weight is 60 kilograms, what is the weight of the bag of rice?
 - [A] 37.5 kilograms
- [B] 36 kilograms
- [C] 48 kilograms
- [D] 18 kilograms
- 14. Which of these expressions will always be equal?
 - [A] -3a and $a \times (-3)$
- [B] 5a and a + 5
- [C] $\frac{7}{a}$ and $\frac{a}{7}$
 - [D] $8-a \text{ and } \frac{8}{a}$
- 15. A triangle ABC is shown below.



Payal drew lines joining the vertex and the midpoint of the opposite sides. Which of the following statement is true about the point of intersection of the lines?

- [A] The point of intersection lies in the interior of the triangle.
- [C] The point of intersection lies on one of the side of the triangle.
- [B] The point of intersection lies in the exterior of the triangle.
- [D] The point of intersection lies on one of the vertices of the triangle.

- 16. X is such that $X\times0.75 = 1$. X is
 - [A] $\frac{3}{2}$ [C] $\frac{1}{4}$

- 17. The length of the side of a square is doubled. The ratio of the areas of the original square to the area of the new square is
 - [A] 1:1

[C] 1:2

[B] 1:4

- [D] 2:4
- 18. As of December 2019, the world population is about 7,700,000,000. This number in powers of ten is
 - [A] 7.70 109
- [B] 77.0 109
- [C] 0.70 109
- [D] 7.0 109
- 19. Four congruent isosceles right triangles are cut from the 4 corners of a square with a side of 20 units. The length of one leg of the triangles is equal to 4 units. The area of the remaining octagon is
 - [A] 372 square units
- [B] 368 square units
- [C] 358 square units
- [D] 348 square units
- 20. A person jogged 10 times along the perimeter of a rectangular field at the rate of 12 kilometers per hour for 30 minutes. If field has a length that is twice its width, the area of the field is
 - [A] 10,000 square meters
 - [B] 20 square kilometers
 - [C] 20,000 square meters
 - [D] 20,000 square ft
- 21. The reciprocal of 0 is
 - [A] 0
- [B] 1

[C] 1

- [D] undefined
- 22. The multiplicative inverse of -1/4 is
 - [A] $\frac{-1}{8}$

[D] 4



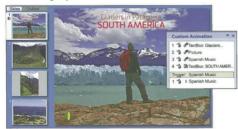


DIGITAL LITERACY/IT

- Raju was presenting his slides in a slide show view in a meeting room. He could not advance the slides. What could be the reason?
 - [A] He was pressing the Mouse Button
 - [B] He was pressing the Enter Key in the keyboard
 - [C] He was pressing the Space Bar in the keyboard
 - [D] He was pressing the Esc Key in the keyboard
- Poornima is making a slideshow in which each slide is to show for exactly 20 seconds once she has started the presentation. What settings does Poornima need to use?



- [A] click 'On Mouse Click', then change the time to 00:20
- [B] click 'On Mouse Click', change the time to 00:20, then click 'Apply to All'
- [C] Click 'Automatically After', then change the time to 00:20
- [D] Click 'Automatically After', change the time to 00:20, then click 'Apply to All'
- 3. Pratham created a multimedia presentation. He added animation effects to Slide 1. When Pratham plays Slide 1



- [A] five entrance effects will be shown
- [B] the entrance effects will be all identical
- [C] the sound file will play automatically
- [D] the text 'SOUTH AMERICA' will appear last

- 4. Regina wants her class to make a slideshow about themselves. The presentation will include each student's photograph and an audio recording. The first slide has Regina's photograph and and an audio recording of Regina saying "Good Morning". What could be
 - [A] regina.mp3, regina.ppt
 - [B] regina.jpg, regina.wmf
 - [C] regina.jpg, regina.mp3
 - [D] regina.xls, regina.pdf
- 5. Juhi is making a presentation on flowers. Her presentation must not extend beyond two minutes. She plans to show her title side for 5 seconds, her closing slide for 10 seconds and all other slides will be shown for 20 seconds each. What is the maximum number of slides Juhi can have in her presentation excluding title and closing slide?
 - [A] 15

[B] 11

[C] 7

- [D] 5
- 6. Ashwin is viewing the website shown below.
 When he clicks on the button "Student
 Registration", the browser will navigate to



- [A] http://www.kamp.res.in/ SchoolRegistrationNew
- [B] http://www.kamp.res.in/ StudentRegistrationNew
- [C] http://www.kamp.res.in/Payment
- [D] http://www.kamp.res.in/ Common?Page=StudentRegistration

- 7. Raji started presenting her Powerpoint by pressing the F5 key. Her presentation has 35 slides. Now she is in slide 20 and she had hit Ctrl + P once for some purpose. What was her motive to hit the shortcut Ctrl+P?
 - [A] To print the slide 20 in paper
 - [B] To pause the slideshow
 - [C] To use the mouse to write and/or draw on slide 20
 - [D] To slide up and show the previous slide to the presenter
- 8. In MS Powerpoint, the maximum value to which you could zoom your slide is
 - [A] 100%

[B] 200%

[C] 400%

[D] 600%

- 9. How do you save a Microsoft Powerpoint 2010 presentation as a video file?
 - [A] Choose Slide Show -> Record Video
 - [B] Choose File -> Share-> Publish Slides
 - [C] Choose File -> Compress Media
 - [D] Choose File -> Save & Send -> Create a Video
- 10. Margaret is making a Powerpoint presentation about her trip to France. It has large number of slides. She wanted to show different combinations of slides to different groups of people with the same Title Slide. Which of the following can be chosen as the best way to do so?
 - [A] Export All Slides as Images and Save it in a folder
 - [B] Create Custom Shows to launch from the Title
 - [C] Make separate presentation files for each group of people.
 - [D] Use Hyperlinks to slide to different locations from the title slide.
- 11. I am Program that does a useful task while simultaneously carry out some secret destructive task. What am I?
 - [A] Trojan Horse

[B] Virus

[C] Worm

[D] Spyware

- 12. When anti malware software finds malware on your computer system, which statement best describes what happens next?
 - [A] The infected file will be sent to quarantine, so that it is isolated away from the rest of your files. You can then decide whether to delete or repair the file.
 - [B] The anti malware software will delete the infected file instantly, along with any other files which are linked to it. This keeps the computer system safe and secure.

- [C] You will be told that you have malware and then have the option of deleting it.
- [D] The anti malware software will move the infected file instantly to Recycle Bin and you will have to decide whether to restore or delete the file
- 13. Which of the following is the most secure password?
 - [A] MreSchhatesgReencaBbages5
 - [B] Mreschhatesgreenc@bbages
 - [C] MrEschHatesC@bBage5
 - [D] mreschhatesgreenc@bbages5
- 14. Identify the attribute in the given HTML code. <h1 align = "center">Good<h1>

[A] h1

[B] align

[C] center

[D] Good

15. Which of the following tags is required to form the basic structure of a HTML document?

[A]

[C] <title>

[B] <h1>

[D] <basic>

16. Renu is creating a webpage using HTML. She wants to include an image of herself "pic.jpg" in the webpage. If the image is located in same folder as the web page, which of the following will be the correct HTML code for displaying the image on the webpage?

[A] <imgsrc="pic.jpg">

[B] <imgsrc="../pic.jpg">

[C] <imgsrc="images/pic.jpg">

[D] <imgsrc= "/images/pic.jpg">

17. What is the place where websites are stored, and works like your computer's hard drive?

[A] Desktop Computer

[B] OneDrive

[C] Mainframe

[D] Server

18. Sue wrote the below email to her sister named May.



She pressed the 'Send' button. She then received the following email message

Mail Delivery Sy... Undelivered Mail Returned to Sender Mon 23/01/2013 2:46 PM 47 KB

In which folder will the message be found by Sue?

[A] Deleted Items

[B] Drafts

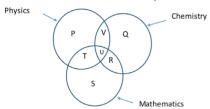
[C] Inbox

[D] Sent Items

19.	.com is we	bsite		RO	COPRESS		
	[A] commercial	[B] computer		[A]	Intel Core i7	[B]	Microsoft Edge
	[C] common	[D] commerce		[C]	Device Driver	[D]	SATA
20.	Which of the following st [A] A Trojan horse replic human action.		29.	yea	itya has been using his rs. Over sometime, per nputer has deteriorated	form	ance of the
	[B] Virus is a hardware as	nd can be easily detected			prove the performance		
	[C] Ping Pong is an exam				Run backup utility	01 1110	computer.
	[D] Computer virus is a b				Run the disk defragme	ontor	
	[D] Computer virus is a t	nological organism.	•			enter	
21.	I am a program that colle				Run snipping tool Completely format his	syste	m
	the computer users witho						
	and communicates it to a	n outsider through the	30.		ich one of the followin		
	internet. What am I?			mai	intains the HTML lang	uage	and keeps
	[A] Trojan Horse	[B] Spyware		inv	olving it in proper dire	ction	?
	[C] Worm	[D] Phising		[A]	Microsoft	[C]	HCL
		-		[B]	Google	[D]	W3C
22.	What is a reverse blog?						
	[A] A blog in which older	r posts appears first.	31.	A p	assive threat to compu	ter se	curity is
	[B] A blog which is comp	oosed by a single user.		[A]	Accidental malfunction	[B]	Circuit error
	[C] A blog that creates re-	verse proxy.	:	[C]	Breakdown	[D]	Malicious Intent
	[D] A blog which is comp	oosed by its users rather					
	than a single blogger.		32.	Pho	oto editing is an examp	les of	•
	0 00			[A]	Operating System		
23.	is a mass	mailing e-mail worm			system software		
	that attach random document	ments in its e-mail	:	[C]	Malware		
	and send them to e-mail a	addresses in the host's	:	[D]	Application software		
	address book.				11		
	[A] Sircam	[B] Zeus	33.	Wh	ich of the following is	not a	real security and
	[C] Sunday	[D] Stoned	•	priv	vacy risks		
	•			[A]	Hackers	[B]	Spam
24.	In the URL http://www.xy	zabc.com, which part is		[C]	viruses	[D]	Identity theft
	the protocol name?						
	[A] .com	[B] www	34.	Loa	ding Operating Systen	n onto	RAM is called
	[C] http	[D] xyzabc		[A]	Boosting	[B]	Booting
				[C]	Powering	[D]	Processing
25.	What does CC in an e-ma	il stands for?					
	[A] Correct Copy	[C] Carbon Copy	35.	Pro	gram in HTML coding	g back	end used is
	[B] Copy to Copy	[D] Combined Copy		[A]	Internet-Explorer	[B]	MS Word
				[C]	Notepad	[D]	FTP
26.	How many numbers are s						
	numeric web address con	tain?	36.		ry computer connected		
	[A] Three	[B] Two		ide	ntified by a unique fou	r-par	t string, known as
	[C] Four	[D] One		[A]	Host name	[B]	IP address
				[C]	Brand name	[D]	Domain name
27.	In the e-mail; kruthi@de	l2.vsnl.net.in. What					
	does the del2 refer to?		37.	Dei	nial-of-service (DoS) ir	ı com	puter and internet
	[A] User name	[B] Server		refe	ers to		
	[C] Network	[D] India		[A]	A cyber attack		
			:		Unavailability of some	e techi	nician
28.	Unscramble the given wo	rd and select the option			Unavailability of comp		
	with which it relates.	-			Unavailability of some		vare

LOGICAL REASONING

- K is the brother of N and X. Y is the mother of N and Z is the father of K. Which of the following statement is not definitely true?
 - [A] K is the son of Z
 - [B] Y is wife of Z
 - [C] K is the son of Y
 - [D] N is the brother of X
- 2. In the given diagram, students studying three subjects Physics, Chemistry, and Mathematics are indicated by three circles. Identify the area which represents students studying both Physics and Mathematics but not Chemistry.

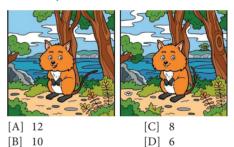


- [A] P+T+S
- [B] Only T
- [C] Q+R+S
- [D] P+T+S+R+U
- 3. To be awarded a scholarship in mathematics a student must be
 - At least a student of grade 7.
 - Must have scored 90% in Mathematics in the last exam
 - Must have at least 80% school attendance.
 - Overall grade should not be below A.

Who among the following should get the scholarship?

- [A] Romita is in grade 6. She has received an A+ in the last exam and scored 84% in mathematics. She has more than 80% attendance.
- [B] Soham is in grade 8 with an overall grade of A in the last exam. He has scored 91% in mathematics and has a 75% attendance in school.

- [C] Amrapali is in grade 8. She as 90% school attendance with an overall grade of A+ in the last exam. Her score in mathematics is 94%.
- [D] Rajesh is a student of Grade 7 with a 95% score in mathematics. He has an attendance of 88%.
 His overall grade stood at B+ due to his poor performance in the language and humanities group.
- 4. How many differences are there in the two images?



 P, Q, R, S, T, U are six members of a family. They are engaged in different professions – Doctor, Lawyer, Teacher, Engineer, Nurse, and Manager.

The lawyer stays at home on Thursday R is at home on Tuesday P is a Doctor and remains at home either on Saturday or on Wednesday. S is neither a Doctor nor a Teacher and she is at home on Friday O is Engineer and T is Manager.

Is the following combination true?

Q- Engineer R-Teacher
T-Manager S-Nurse
P- Doctor U-Lawyer

[A] Yes

[B] No

[C] Cannot determine

[D] None of the above



SECTION-A SCIENCE

- (D) A closed circuit is the one in which there is a continuous path for the electric current to flow. Electric current flowing through the closed circuit makes the bulb glow.
- 2. (D) The bare ends of the wire form the switch
- 3. (B) As magnet A has more number of iron filings attached to it, therefore, magnetic strength of magnet A is more than that of magnet B
- 4. (D) Only a magnet has a property that it can repel other magnet. So, the bar which is repelling the magnet is a magnet.
- 5. (D) Reet should use a scale with millimetre division to measure the diameter of a foam bead.
- 6. (B) It is called velocity
- 7. (C)
- 8. (B) Pumpkin is a fruit and rest all are the modified roots
- 9. (A) These plant derive their food from decaying organic material
- 10. (C) Lichen has two plant algae and fungus. Fungus collects raw material & algae makes food
- 11. (C) Shiny surfaces reflect light. Hence water surface acts as reflector
- 12. (D) A plane mirror shows image of object in same size and distance
- 13. (B) A good fuse wire has low melting pointand is made up to tin lead
- 14. (A) When switch is closed the, current divides between bulb B and C
- 15. (A) Loamy soil contains equal amounts of sand and clay, thus makes it perfect for agriculture
- 16. (B) Increase in size and move farther away from the lens.
- 17. (A) When red coloured marbles are put inside the blue coloured vase, it will appear black because when light is incident on blue coloured vase which is transparent (Glass), it absorbs all the

- colours of white light except blue, and when blue colour light incident on red marbles it will absorb blue colour and no light will be emitted by it. So it will appear black.
- 18. (A) The forest's middle level layer is called understorey
- 19. (B) Light always travels in a straight path and hence, boy is able to see the burning candle through the straight tube
- 20. (C) The convex lens will converge all the light falling on it to a single point and the paper begins to burn.
- 21. (D) In the given food chain bird is a consumer.
- 22. (D) Vitamin E protects cells and also protects tissues
- 23. (B) First law of reflection
- 24. (A) There are only limited reserves of natural gas in the world
- 25. (C) There is a single pathway for electric current in a parallel circuit
- 26. (D) Thermocol is an industrial product
- 27. (D) Recycling is most environmentally compatible
- 28. (B) The accumulation of charges in the clouds lead to electric circuits
- 29. (D) Collision of moving plates (tectonic movements) is a major cause of earthquakes
- 30. (C) The junction of retina and the optic nerve is called the blind spot. There is no photosensitive cell at this spot, and hence no image is formed at this spot on the retina.

SECTION-B SOCIAL SCIENCE

- 1. (C) Because Plateaus are rich in mineral deposits.
- (A) Because weather is a temporary atmospheric condition that changes quickly.
- 3. (A) Because Jim Corbett is located in Uttarakhand.
- 4. (C) Because Kerala is located on the Western Ghats, the entry location of the Southwest Monsoon.
- 5. (B) Dead sea has 340gm/litre salinity which make swimmer float on it
- 6. (B) Almost all the states apart from the Hindi belt

states were formed on the basis of different language and culture

- 7. (B) Because grasslands of South America's called Pampas.
- 8. (C) Because high concentration of oxygen will cause fire.
- 9. (A) Because aeroplanes and jets fly in stratosphere to avoid atmospheric turbulence that occur in troposphere.
- 10. (B) Because rain should freely fall in rain gauge for correct measurement.
- 11. (B)
- 12. (C) The smoke from stubble burning in the neighboring states pollute the air in Delhi
- 13. (B) Mangrove forests can survive and thrive in saline water
- 14. (D)
- 15. (C) Without earth's gravity the atmosphere would escape to space
- 16. (B)
- 17. (B) Desalination using various technologies is being tried out, but it is still an evolving technology.

SECTION-C MATHEMATICS

1. (C) "The table shows the number of packets and the number of cookies.

Number of Packets	1	2	3	4	
Number of Cookies	7	14	21	28	

So, the number of cookies that can be packet in p such packets is 7p."

2. (B) The length and breadth of the rectangle are l and b respectively.

Now the length of the rectangle is halved, and the breadth is doubled.

Length of the new rectangle = 1/2

Breadth of the new rectangle = 2b

Since, the perimeter of rectangle = 2(l + b)

Now, perimeter of the new rectangle = $2(\frac{1}{2} + 2b)$

$$= 2(\frac{l+4b}{2})$$
$$= l+4b$$

Therefore, the perimeter of the new rectangle is l + 4h.

- 3. (D) "u multiplied by 5 can be expressed as 5u. 7 is subtracted from 5u can be expressed as 5u - 7."
- 4. (C) "The digit at ones place = w

Since, the digit at tens place is three more than the digit at ones place.

So, the digit at tens place = 3 + w

Therefore, the two digit number formed = 10(3 + w) + w"

5. (A) "A circle is shown below.



A radius is a line segment that connects centre of the circle to a point on the circle.

So, OA and OB are the radii of the circle."

- 6. (A) The next fraction $i \frac{4}{7} \times \frac{4}{4} = 16/(28)$
- 7. (D) "8-4=4 First half 4-2=2 Second half"
- 8. (A) (-3)/2 the standard form of (-90)/(60)
- 9. (B) 5/7+((-5)/7)=0hence (-5)/7 is additive inverse of 5/7 "
- 10. (C) 0.8333 is higher than the other fractions
- 11. (C) "4/5 2/3 \Rightarrow 4/5 × 3/3 = 12/15 \Rightarrow 2/3 × 5/5 = 10/15 $4/5 \times 2/3 \Rightarrow$ (12-10)/15 = 2/15"
- 12 (D) Ankit mowed $\frac{2}{5}$ of the field in 1 hour.

So, in 2 hours he would mow $\frac{2}{5} \times 2$ of the field. $\frac{2}{5} \times 2 = \frac{2 \times 2}{5} = \frac{4}{5}$

Ankit would mow $\frac{4}{5}$ of the filed in 2 hours.

13 (B) "Let the weight of the bag of rice is x kilograms. In this case, the ratio of weight should be the same as the ratio of actual weights.

We have,
$$\frac{4}{5} = \frac{60}{x}$$

Solving for *x* we get,

$$x = \frac{60 \times 3}{5}$$
 (using cross multiplication)

So, the weight of the bag is 36 kilograms.

14. (A) **A:** -3a represents "amultiplied to -3" and $a \times (-3)$ represents "-3 multiplied to a".

So, are always equal.

B: 5 a represents "5 multiplied to a" and a + 5 represents "5 added to a".

So, 5a and a + 5 will not always be equal.

C:

 $\frac{7}{a}$ represents "7 divided by a" and $\frac{a}{7}$ represents "a divided by 7".

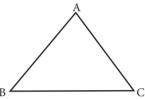
So, $\frac{7}{a}$ and $\frac{a}{7}$ will not always be equal.

D:

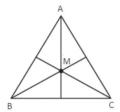
-a represents "a subtracted from 8" and $\frac{8}{a}$ represents "a divided from 8".

So, 8 - a and $\frac{8}{a}$ will not always be equal. Hence, A is correct.

15. (A) A triangle is shown below.



Payal drew lines joining the vertex and the midpoint of the opposite sides as shown below.



The point of intersection lies in the interior of the triangle.

So, A is correct.

- 16. (D) $X = 1/0.75 = 1 \times 4/3 = 11/3$
- 17. (B) Area of a square is square of its side
- 18. (A) Simple conversion
- 19. (B) Area of the square= 20×20. Area of the octagon= 4*area of one isosceles triangle

20. (C)

- 21. (D) 1/0 is undefined
- 22. (B) The multiplication, the identity element is 1. $1/4 \times -4 = 1$

SECTION-D DIGITAL LITERACY

- Except Esc key, Enterkey, space bar key and mouse button are all used to advance slides
- D As each slide should change after every 20 seconds, so it has to happen automatically. Since this has to happen for every slide, option 4 is correct

- 3. D there are only three entrance effects and they are not necessarily identical. The trigger for playing sound file is a mouse click. So only D is correct
- 4. C "Picture files are .png, .jpg etc. So the photo file here is regina.jpg
 Audio Recording are .mp3 and.wav etc. Here it is
- regina.mp3 So C is correct"

 5. D 2 minutes means 120 seconds. Out of these 120 seconds, 5 for title slide and 10 seconds for closing slide . So 15 seconds are already allocated for the show that should not go beyond 120 seconds. So 120-15=105 seconds is the maximum time for the other slides together. Each slide will show for 20 seconds. So 20x <105. So x cannot be more than 5
- 6. C When we hover over the button, the location it is destined to go when clicked is shown up at the bottom left corner of the page. The browser will navigate to that page only.
- C "After you start your Slide Show, you can write on your slides with a pen by hitting CTRL + P and use your mouse (or pen if you have a touch screen) to write and/or draw on your slides.
- 8. C PowerPoint allows users to zoom in and zoom out of the slides to help focus on specific sections or look at the entire slide as a whole. The minimum zoom supported by PowerPoint is 10% and the maximum is 400%
- 9. D "Create your PowerPoint presentation as normal and save it.

 If you're using narration for your presentation, record the narration and add timings to the slideshow.

 Select the File menu and click on Save & Send.
 Under the Save & Send menu, find and click on
- 10. B Usually used within a big presentation, a custom slideshow is a sequence of slides that expresses some exact idea or represents a particular subtopic. Custom slideshows can be launched within the PowerPoint's Slide Showtab, where you see the list of your custom shows

Create a Video."

- 11. A In computing, a Trojan horse is a program downloaded and installed on a computer that appears harmless, but is, in fact, malicious. Unexpected changes to computer settings and unusual activity, even when the computer should be idle, are strong indications that a Trojan is residing on a computer
- 12. A "Once malware has been found on a system, it needs to be removed. Many threats can be deleted by the anti-malware program as soon as they are detected. However, some malware is designed

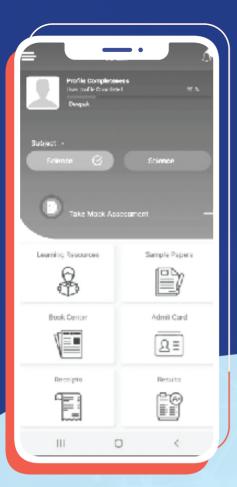
to cause further damage to your computer if it is removed. If your anti-malware suspects this is the case, it will usually quarantine the file in a safe area of your computer's storage. Basically, the anti-malware puts the malware in a timeout. Quarantining a malicious file prevents it from causing harm, and allows you to remove the file manually without damaging your computer.

- 13. C "According to the traditional advice-which is still good—a strong password: Has 12 Characters, Minimum: You need to choose a password that's long enough. Includes Numbers, Symbols, Capital Letters, and Lower-Case Letters: Use a mix of different types of characters to make the password harder to crack.
- 14. B "In this example, 'align' is an attribute of <H1>. It indicates that the text 'Good' inside the <H1> tag is to be displayed in the center.
- 15. C "the tags that form the basic structure of a HTML document.
 - <HTML> Tag: It identifies the document as a HTML document.
 - <HEAD> Tag: It is used to provide some additional information including title, script etc.
 - <TITLE> Tag: It specifies the title of a web page. <BODY> Tag: It defines the contents of a web
- 16. A The path <imgsrc= "pic.jpg"> indicates that pic.jpg is located in same folder as current page. The path <imgsrc= "images/pic.jpg"> indicates that pic.jpg is located in current folder. The path <imgsrc= "/ images/pic.jpg"> is located in images folder at root of current web. The path <imgsrc= "../pic.jpg"> indicates that pic.jpg is located in folder one level up from current folder.
- 17. D "A server is where websites are stored, and it works a lot like your computer's hard drive. Once the request arrives, the server retrieves the website and sends the correct data back to your computer.
- 18. C "An inbox is the main folder that your incoming mail gets stored in. Whether you check your mail through a webmail interface or use a program like Outlook or Mac OS X Mail, each downloaded message gets stored in your inbox.
- 19. A ".com was introduced as one of the first top-level domains (TLDs) when the Domain Name System was first implemented for use on the Internet in January 1985. Originally created to represent the "commercial" intent of a website, .com has since been at the epicenter of the digital revolution that has reshaped the way people work, live, play and connect with family and friends
- Trojan horse is not a worm, so it cannot replicate 20. C itself. Computer virus is a program, not a hardware

- and it is not a biological organism. So, among all the options only C is correct.
- 21. B Spyware is unwanted software that infiltrates your computing device, stealing your internet usage data and sensitive information. Spyware is classified as a type of malware — malicious software designed to gain access to or damage your computer, often without your knowledge
- 22. D "By definition
- 23. A It is a mass mailing worm which attach random documents.
- 24. C http is the protocol in the given URL
- 25. C "CC stands for carbon copy 26 C
- 27. B " It is the server"
- 28. A Unscrambled word is PROCESSOR and among the given options Intel Core i7 is a processor.
- 29. B Disk defragmenter increase access speed by rearranging files stored on a disk to occupy contiguous storage, so that disks and drives can work more efficiently.
- 30. D "W3C
- 31.(D) 32. (B)
- 33. (B) Spam messages do not threaten computer security
- 34. (B)
- 36. (B) IP address is the unique four-part string given to a computer connected to the internet
- 37. (A) Denial of Service refers to a situation where unwanted packages make the service unavailable

SECTION-E **LOGICAL REASONING**

- K is the brother of N and X. Y is mother of N and Z is father of K. Therefore, Y and Z are husband and wife. They have three children K, N, and X. But the gender of N and X are not mentioned. Hence, N is brother of X cannot be definitely true.
- 2. B The area that indicate students pursuing both Physics and Mathematics but not Chemistry is T.
- 3. C Amrapali matches all the criteria for receiving the scholarship.
- 4. B
- 5. A Given, P- Doctor, Q-Engineer, and T-Manager. R, S, and U must be Lawyer, Teacher and Nurse. As S is neither a Doctor nor a Teacher, S can be either a Lawyer or a Nurse. But S is at home on Friday and the lawyer is at home on Thursday. Therefore, S cannot be a Lawyer. S is Nurse. Now R can be either a Teacher or a Lawyer. But R is at home on Tuesday, so R is not a Lawyer. R is Teacher. Then, U is Lawyer.





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