## **FIITJEE**

(JSTSE PAPER QUESTIONS)

1.	and trace missing and abandon children in India  1. Re unite  3. Pathway	? 2.	Scout Umang
2.	Which city will host the 15 <sup>th</sup> Pravasi bharatiya Di  1. New Delhi	vas	-
	3. Allahabad	4.	Varanasi
3.	Which country has successfully launched a new 1. India 3. China	con 2. 4.	
4.	Which platform has been launched by the Unic Women's day?	n G	Sovernment on the occasion of 2018 International
	<ol> <li>Women Entrepreneurship platform</li> <li>Women Literacy platform</li> </ol>		Women Power platform Women Health platform
5.	Which IIT institute has installed India's first 5G ra		
	<ol> <li>IIT – Delhi</li> <li>IIT – Indore</li> </ol>		IIT – Mumbai IIT – Roorkee
6.	India's flag-bearer at the closing ceremony of the	e 21	st common wealth games held in 2018:
	<ol> <li>Monika Batra</li> <li>Mary Kom</li> </ol>		Saina Nehwal Heena Sidhu
7.	How many India states share border with Myann	nar?	
	1. 01 3. 03	2.	02 04
8.	First Indian Woman lawyer to be directly promot		
	<ol> <li>Ranjana Prakash Desai</li> <li>Gyan Sudha Mishra</li> </ol>		Indu Malhotra Ruma Pal
9.	In which city, India's first helicopter – taxi service		
	<ol> <li>Bengaluru</li> <li>Delhi</li> </ol>		Kochi Kolkata
10.			piko movement' which gets inspired by 'Chipko
	1. Karnataka	2.	Uttrakhand
	3. Andhra Pradesh	4.	Maharashtra
11.	Official Mascot of winter Olympics – 2018:	2	Micho
	<ol> <li>Soohorang</li> <li>Olly</li> </ol>	2. 4.	Misha Sam
12.	India's first insect museum opened in :		
	<ol> <li>Kerala</li> <li>Jharkhand</li> </ol>	2. 4.	Tamilnadu West Bengal
13.	First Indian woman to fly a fighter aircraft solo:		
	1. Harita Kaur	2.	Punita Arora
	3. Bhawna Kanth	4.	Avani Chaturvedi
14.	In which Indian state, the Nipah virus outbreak w	_	
	Kerela     Tamilnadu	2. 4.	

15.	Rajasthan.		conducted by India on May 18, 1974, in Pokhran
	<ol> <li>Operation Vijay</li> <li>Smiling Buddha</li> </ol>		Operation Shakti Operation Ashwamedh
16.	Project launched by FSSAI to address vitamin I		, , , , ,
	<ol> <li>Project Sun</li> <li>Project Dhoop</li> </ol>		Project Sky Project Sunlight
	•		
17.	<ol> <li>on incredible India?</li> <li>Ministry of Electronics and Information Technology</li> <li>Ministry of Information and Broadcasting.</li> <li>Ministry of Social Justice and Empowerment</li> </ol>	hnol	ndia has launched a 360° virtual reality (VR) video
	4. Ministry of Tourism.		
18.	year 2018. Headquarter of EBRD is:	Bank	for Reconstruction and Development (EBRD) in
	1. Berlin		Geneva
	3. London	4.	Paris
19.	'Mount Ojos de Salado' is the highest volcano i		
	1. Japan		Afghanistan and Russia Border
	3. Cuba and USA border	4.	Argentina and Chile border
20.	Theme of the 2018 World Population Day (WPI		
	<ol> <li>Family planning is a human right</li> <li>Family planning – Save Earth</li> </ol>	2. 4.	Family planning – Call for people Family planning – Say what you need?
21.	The Novel that has won the 2018 'Golden Man	Воо	ker Prize' is:
	In a free state     Wolf Hall	2. 4.	The English Patient Moon Tiger
			-
22.	The thickness of stratospheric ozone layer is m  1. Sieverts		
	Sieverts     Melson units	2. 4.	Dobson units Beaufort scale
23.	Mudumalai Tiger Resrve (MTR) is now an Eco- 1. Kerala	_	sitive Zone (ESZ) located in: Karnataka
	3. Tamilnadu		Telangana
0.4	A conful biological indicator of Culphur disvide	. مال د	Alon in
24.	A useful biological indicator of Sulphur dioxide    1. Bryophyte	pollu 2.	tion is: Lichen
	3. Pseudomonas		Algal blooms
25.	The person who won the first gold medal for Inc	dia in	common wealth game 2019 is :
20.	M. Chanu	וו מונ 2.	
	3. Mary Kom	4.	
26.	The inventor of video games is :		
20.	Ralph Baer	2.	Ralph Nadal
	3. Dustin Johnson	4.	Michael Johnson
27.	The Sangai festival is celebrated in ;		
	1. Assam	2.	Manipur
	3. Mizoram	4.	Nagaland
28.	Each year Ramzan occurs about from	the	previous year.
	1. 11 days earlier	2.	11 days later
	3. 17 days earlier	4.	17 days later

29.	'The world Beneath His Feet' is a biography of 1. Ajit wadekar 3. Nawab Patoudi	2.	Sachin Tendulkar Pulela Gopichand
30.	Which among the following is played on a synth     Australian open     French open	2.	hard-court? Wimbledon All the three
31.	The share of Government of India in NABARD 1. 50% 3. 75%	2.	51% More than 98%
32.	If an egg with shell is placed in a microwave over the following is most likely happen?  1. The egg will not get warmed.  2. The egg will get cooked slowly similar to a language of the egg shell will explode.  4. The egg shell become yellow.		and microwave oven is switched on. Which among
33.	'Saffron ' is obtained from part of th 1. Stigma 3. Stamen	2.	ant: Anther Pollen
34.	· · · · · · · · · · · · · · · · · · ·	-cott	on' is genetically engineered by inserting a gene
	from: 1. Bacterium 3. Microalgae		Virus Protist
35.	From which language the word "Democracy' ha 1. French language 3. Urdu language	2.	en derived? Greek language Dutch language
36.	Who is called the 'Patron of Constitution'?  1. President  3. High Court		Prime-Minister Supreme Court
37.	What are the Prime minister's office, Defence I called in Delhi?  1. North Block 3. East Block		ster's office and Ministries of External affairs jointly South Block West Block
38.	Who prepares the topographical maps of India?  1. Geological survey of India  3. Defence Ministry	2. 4.	Survey of India Home Ministry
39.	Which state is famous for step wells?  1. Maharashtra  3. Rajasthan	2.	Gujarat Manipur
40.	Who has been honoured with Ashok Chakra (p 1. Jyoti Kumar Singh 3. Jyoti Vishal Gupta	osth 2. 4.	Jyoti Prakash Nirala
41.	World Sustainable Development Summit-2018 1. America 3. India	2.	in: Japan Pakistan
42.	In which year 'Sh. Atal Bihari Vajpayee' was ho 1. 2012 3. 2014		2013

- 43. 11th World Hindi Conference was held in which country?
  - 1. India

2. Myanmar

3. Mauritius

- 4. Thailand
- 44. The Zero Discrimination Day (ZDD) is celebrated on?
  - 1. May 8

2. June 6

3. March 1

- 4. February 7
- 45. In which country of world 'Universal Adult Franchise started in 1893?
  - 1. England

2. America

3. Japan

- 4. New Zealand
- 46. The company that has set up the world's largest mobile phone factory in NOIDA:
  - 1. Apple

2. Samsung

3. Xiomi

- 4. OPPO
- 47. The curriculum that has been launched by Delhi government in July 2018 is:
  - 1. Mindfulness curriculum

2. Meditation for all

3. Fit Delhi

- 4. Happiness Curriculum
- 48. In which year 'Dadasaheb Phalke Award' was instituted?
  - 1. 1963

2. 1965

3. 1967

- 4. 1969
- 49. The Japanese art "Ikebana" is related to which among the following?
  - 1. Wall painting

2. Flower Decoration

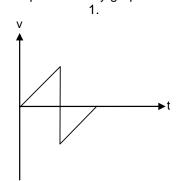
3. Chorus Dance

- 4. Sculptures
- 50. The mountain pass-that forms the 'Tri-Junction' of India, China and Myanmar:
  - 1. Nathula

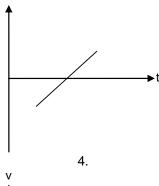
2. Jelepla

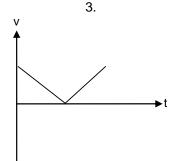
3. Bomdila

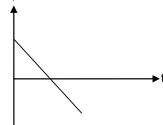
- 4. Diphu
- 51. The velocity (v) time (t) graph of a body falling freely from rest under gravity and rebound from solid surface is represented by graph :–



2.







- 52. A ball falls freely from rest. The ratio of distance travelled by it in first, second, third and fourth seconds is
  - 1.1:1:1:2

2.1:2:3:4

3.1:1:1:13

- 4.1:3:5:7
- What is the ratio of SI unit and CGS unit of  $\left(\frac{G}{g}\right)$ ? 53.

G = universal constant of gravitation

g = acceleration due to gravity

1.10

 $2.10^{2}$ 

 $3.10^{-1}$ 

- $4.10^{-2}$
- 54. A bullet in motion hit and get embedded in a solid resting on a frictionless table. What will be conserved
  - 1. Momentum and kinetic energy
- 2. Momentum alone

3. Kinetic energy alone

- 4. Neither momentum nor kinetic energy
- A graph is drawn with force along y-axis and time along x-axis. The area under the graph represents 55.
  - 1. Momentum

2. Impulse of force

3. Change in velocity

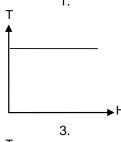
- 4. None of these
- A body floats with  $\frac{1}{3}$  rd of its volume outside water and  $\frac{3}{4}$  th of its volume outside a liquid. Then 56. density of liquid is
  - 1.  $\frac{3}{8}$ g/cc

2.  $\frac{8}{3}$ g/cc

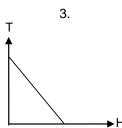
3.  $\frac{9}{4}$ g/cc

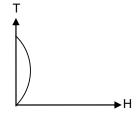
- 4.  $\frac{4}{9}$ g/cc
- 57. A bullet is fired from gun. Which will have greater kinetic energy the bullet or gun :-

- 2. bullet
- 3. both have same kinetic energy
- 4. insufficient data
- Which is the best graph of total energy (T) of freely falling body and its height H 58.



4.



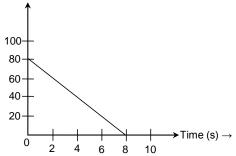


- 59. A mass of M kg is suspended by a weightless string. The horizontal force that is required to displace it until the string makes an angle of 45° with the initial vertical direction is -
  - 1. Mg

2.  $Mg(\sqrt{2}+1)$ 

Mq√2

60. Velocity time graph for a ball of mass 50 g rolling on a floor is given, the frictional force of the floor on the ball will be :-



61. The average density of the earth in terms of g, G and R

1. 
$$\frac{9g}{4\pi G^2 R}$$

$$2. \ \frac{3g}{4\pi GR}$$

$$3. \ \frac{3g}{2\pi GR^2}$$

4. 
$$\frac{2g}{3\pi RG}$$

g = acceleration due to gravity

G = universal gravitational constant

R = Radius of earth

A ball is droped from a height of 10 m. If the energy of ball reduces by 40% after striking on the 62. ground. How much high can the ball bounce back.

A submarine emits a sonar pulse which returns from an under water cliff in 1.05 second. If speed of 63. sound in salt water is 1531 m/s. How far away is the cliff.

64. The frequency of a source is 20kHz. The frequency of sound wave produced by it in water and air will be -

- 1. Be the same as that of source
- 2. Depends on the velocity of the wave
- 3. Depends on the wavelength of the wave
- 4. Depends on the density of medium

65. A particle is moving in a straight line with initial velocity u and uniform acceleration a. If the sum of the distances travelled in tth and (1+1)th second is 100 cm. Then its velocity after t second in cm/s is

1.20

In a rocket fuel burns at the of 1 kg/s. This fuel is ejected from rocket with a velocity of 60 Km/s. This 66. exerts a force on rocket equal to -

1.6000 N

2.60,000 N

3.60 N

4.600 N

67. A ball is dropped on the floor from a height of 20 m. It rebounds to a height of 10 m. If the ball is in contact with floor for 0.1s. What is average acceleration during contact.

1. 142 m/s<sup>2</sup>

2. 285 m/s<sup>2</sup>

3. 338 m/s<sup>2</sup>

4. 564 m/s<sup>2</sup>

68. The roofs and walls of the auditorium are generally covered with sound absorbent material to reduce

1. Velocity of sound

2. Reverberation of sound

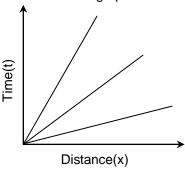
3. Frequency of sound

4. None of these

- 69. A stone is fropped from the top of a tower of 125m height into a pond which is at bottom of tower. When will the splash be heard at top. ( $g = 10 \text{ m/s}^2$ , speed of sound = 340 m/s)
  - 1.5s

2. 0.36 s 4. 2 s

- 3. 5.36 s
- 70. In distance time graph of 3 cars A, B and C which car has highest speed and lowest speed.



1. A,C 3. A,B

- 2. C,A 4. B,A
- 3. A,D
- 71. A riffle bullet losses  $\frac{1}{20}$  of its speed in passing through a plank. The least number of such planks
  - required to stop the bullet is
  - 1.5

2. 10

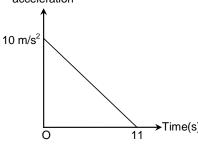
3. 11

- 4. 20
- 72. Minimum number of unequal forces which can give zero resultant is
  - 1. 2

2. 3

3.4

- 4. More than 4
- 73. A particle starts from rest, its acceleration v/s time graph is shown in figure.

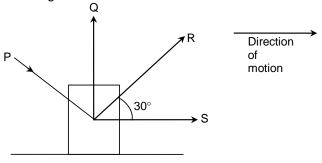


- The maximum speed of particle will be
- 1. 110 m/s

2.55 m/s

3.550 m/s

- 4.660 m/s
- 74. Four forces of equal magnitude P, Q, R, S are acting on an object as shown in figure. Which of the following forces does the least work.



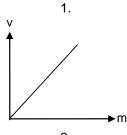
- 1. P
- 3. R

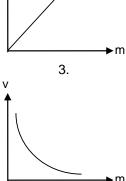
75.

- 2. Q 4. S
- An object is vertically thrown with some velocity and passes through same point after 2sec and 10sec
- respectively, the time at which its velocity becomes zero 1. 2 sec
  - 2. 10 sec

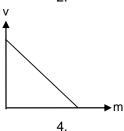
3. 4 sec

- 4. 6 sec
- 76. The graph between velocity (v) and mass (m) for constant linear momentum is





2.





- 77. A stone is dropped from a certain height which can reach on the ground in 5s. If this stone is stopped after 3s on its fall and is again released, then the total time taken by the stone to reach the ground will be  $(g = 10 \text{ m/s}^2)$ 
  - 1. 6s

2.7s

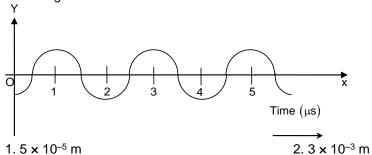
3.8s

 $3.2 \times 10^{-6} \text{ m}$ 

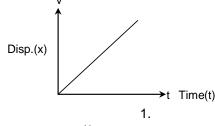
4. 9s

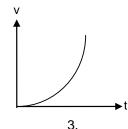
 $4. 1.5 \times 10^{-3} \text{ m}$ 

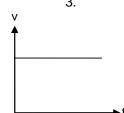
78. Displacement time graph for a sound wave traveling with a velocity of 1500 m/s is given. Find the wavelength of the sound wave

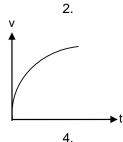


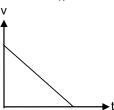
79. Displacement time graph for an object is given. Its velocity time graph will be











80. The rate of change of momentum per unit area represent.

1. Force

2. Energy

3. Pressure

4. Power

81. Which of the following works on the principle of conservation of linear momentum -

1. JET

2. AEROPLANE

3. ROCKET

4. All of these

82. When the surfaces are coated with lubricant then they -

1. Roll upon each other

2. Slide upon each other

3. Stick to each other

4. None of these

83. If momentum of a body is increased by 20%. Then its kinetic energy will increase by

1.48%

2. 44%

3.40%

4.36%

84. Kepler's II law regarding constancy of areal velocity of a planet is consequence of the law of conservation of -

1. Energy

2. Angular momentum

3. Linear momentum

4. None of these

85. On increasing the temperature of iron body gradually its colour becomes

1. Red

2. Green

3. Yellow

4. White

86. A beaker is completely filled with water of 4°C. It will overflow if

- 1. heated above 4°C
- 2. Cooled below 4°C
- 3. Both heated and cooled above 4°C and below 4°C respectively
- 4. None of the above

87. Time period of simple pendulum of a clock is

1. 1s

2. 2s

3. 3s

4. 4s

88. If a watch with a wound spring is taken on the moon, then it 1. Show no change 2. Does not work 3. Runs slowly 4. Runs faster 89. A particle is executing simple harmonic motion with frequency v. The frequency of oscillation of kinetic energy will be 2. v 3. 2v 4. 4v 90. A boy of mass 50 kg runs up a staircase of 45 steps in 9s. If the height of each step is 15 cm. Power of boy is 1. 0.375 Kw 2. 3.75 Kw 3. 37.5 Kw 4. 375 Kw 91. The electronic bulb on long use forms a black coating on its inner surface. The process associated with this is -1. Melting of tungsten Sublimation of tungsten 3. Oxidation of tungsten Reduction of tungsten 92. The unit of latent heat is 1. Joules per kilogram 2. Calories per gram per °C Kilojoules per kilogram per °K 3. Ergs per k 93. Which of the following is not an example of plasma 1. Aurora boreale's (polar lights) Fluorescent light bulb 3. Neon sign boards Incandescent light blub When a teaspoon of solid sugar is dissolved in a glass of liquid water what phase/phases are 94. present after mixing? 1. Liquid only 2. Still solid and liquid 3. Solid only 4. Gas and liquid 95. Which is the most fevourable condition of liquefaction of ammonia? 1. High pressure, high temperature 2. High pressure, low temperature 3. Low pressure, low temperature 4. Low pressure, high temperature Which of the following has more heat content 96. 1. 10 g of ice at 0°C 2. 10 g of water at 0°C 3. Both have the same 4. Can't say If we add common salt to water then its freezing point 97. 1. becomes less than 0°C 2. becomes more than 0°C 3. remains 0°C 4. can not be determined 98. Match column I with column II and choose the correct option using the codes given below Column I Column I Separation technique Mixture Black ink Distillation a) i) Evaporation and crystallization Liquid Air b) ii) Fractional distillation Copper sulphate solution in water iii) d) Acetone iv) Chromatography and water

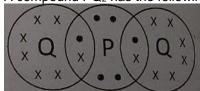
2. A(ii), B(iii), C(i), D(iv)

4. A(iv), B(iii), C(ii), D(i)

1. A(i), B(ii), C(iii), D(iv)

3. A(iv), B(i), C(iii), D(ii)

99. A compound PQ2 has the following arrangement of electrons



The elements, P and Q are respectively

1. N, CI

2. Cl, S

3. Q.F

- 4. Na. P
- 100. The nucleon number of atom X is 37. It exists as a diatomic molecule X<sub>2</sub>. One molecule of X<sub>2</sub> contains 34 protons. How many neutrone are present in the nucleus of atom X?
  - 1. 17

2. 20

3. 21

- 101. Which of the following correctly represents 360 g of water.
  - 1. 2 moles H<sub>2</sub>O

- 2. 0.2 moles of H<sub>2</sub>O
- 3.  $6.022 \times 10^{23}$  molecules of H<sub>2</sub>O
- 4.  $1.2044 \times 10^{25}$  molecules of H<sub>2</sub>O
- 102. Which of the following contains maximum number of molecules
  - 1. 1g SO<sub>2</sub>

2. 1g NO<sub>2</sub>

3. 1g NH₃

- 4. 1g H<sub>2</sub>
- 103. What mass of hydrogen and oxygen will be produced on complete electrolysis of 18g of water.
  - 2g hydrogen and 32g of oxygen
- 2. 2g hydrogen and 18g
- 3. 2g hydrogen and 16 g oxygen
- 4. 12 g hydrogen and 6g oxygen
- A sample of MgCO<sub>3</sub> contains  $3.01 \times 10^{23}$  Mg<sup>2+</sup> and  $3.01 \times 10^{23}$  CO<sub>3</sub><sup>2-</sup> ions. The mass of the 104. sample is
  - 1. 45 mg

2. 84 g

3. 42 g

- 4. 42 mol
- How many moles of electrons weigh one kilogram? [Mass of electron =  $9.108 \times 10^{-31}$  kg; NA = 105.  $6.023 \times 10^{23}$ ].

2.  $6.023 \times 10^{23}$ 

4.  $\frac{6.023}{9.108} \times 10^{54}$ 

- 106. Solubility of KNO<sub>3</sub>
  - 1. Increase with temperature
- 2. Decreases with temperature
- 3. Remains constant with temperature
- 4. It is not related to temperature fluctuations
- 107. A mixture of sulphur and carbon disulphide is
  - 1. Heterogeneous and shows Tyndall effect
  - 2. Heterogeneous and does not shown Tyndall effect
  - 3. Homogenous and shows Tyndall effect
  - 4. Homogeneous and does not show Tyndall effect
- 108. Dry ice is an example of which of the following processes
  - 1. Evaporation

2. Crystallization

3. Sublimation

- 4. Purification
- 109. Ninhydrin having molecule formula C<sub>9</sub>H<sub>6</sub>O<sub>4</sub> is commonly used by forensic scientists to detect and analyse fingerprints. The number of molecules in 7.4 g of ninhydrin is

2.  $2.5 \times 10^{23}$ 4.  $4.2 \times 10^{23}$ 

1.  $1.5 \times 10^{22}$ 3.  $2.5 \times 10^{22}$ 

110.	Percentage aboundance of different isotopes of Pb–206 23.6% Pb–207 22.6% Pb–208 53.8% The average atomic mass of lead is 1. 208 3. 207.302	2.	207.567 209
111.	Vitamin B <sub>12</sub> contain 1. Fe(II) 3. Zn(I)	2. 4.	Co(III) Co(II)
112.	Tincture of iodine is:  1. Aqueous solution of I <sub>2</sub> 3. Alcoholic solution of I <sub>2</sub>		Solution of I <sub>2</sub> in aqueous KI Aqueous solution of KI
113.	Fog is colloidal solution of  1. Gas in liquid  3. Gas is solid		Liquid in gas Solid in gas
114.	The oxidation state of P in H <sub>3</sub> PO <sub>3</sub> is –  1. +6  33	2. 4.	+7 +3
115.	The weight of a molecule of the compound $C_{60}$ H 1. $1.4 \times 10^{-21}$ g 3. $5.025 \times 10^{23}$ g	2.	1.09 × $10^{-21}$ g 16.023 × $10^{23}$ g
116.	Calculate the number of ions present in 5.85 g of 1. $0.204 \times 10^{23}$ ions 3. $6.023 \times 10^{23}$ ions		$1.204 \times 10^{23}$ ions
117.	Which of the following is purified by sublimation 1. Cane sugar 3. Urea	2.	npurities are non volatile? Acetic acid Naphthalene
118.	In the following is not polymer  1. Sucrose  3. Starch	2. 4.	Enzyme Teflon
119.	In carbon disulphide (CS $_2$ ) the mass of sulphur 1. 4.0 g 3. 64.0 g		ombination with 3.0 g carbon is 6.0 g 16.0 g
120.	is a semiconductor  1. Boron  3. Lead	2. 4.	Copper Gold
121.	Which of the following weighs maximum?  1. 0.5 mole of H <sub>2</sub> O  3. 1 mole of NH <sub>3</sub>	2. 4.	0.5 mole of C <sub>2</sub> H <sub>6</sub> 0.1 mole of CO <sub>2</sub>
122.	1. Fe – 59 3. Co – 60		P – 32 I <sub>2</sub> – 131
123.	In Fe <sub>2</sub> O <sub>3</sub> , Fe is 1. Monovalent 3. Neutral	2. 4.	Bivalent Trivalent

4 gas evolved when Mn react with very dilute HNO₃				
——————————————————————————————————————		H <sub>2</sub>		
3. N2O	4.	NO		
25 Alloy is used for welding electrical wires				
	2.			
3. Stairliess steel	4.	Guil metal		
126. Aqua regia is the mixture of cone. HCl and Cone. HNO <sub>3</sub> in the ratio				
		2:3 3:2		
4. 3.1	4.	3.2		
gas is filled in tyres of aeroplane	_			
		Hydrogen Helium		
o. Milogon	٦.	Tienam		
		Mg > Zn > Fe > Al Mg > Zn > Al > Fe		
J. Al > Mg > ZII > T e	٦.	Mg > ZH > AI > T G		
Electrolysis of water gives :	_			
		H <sub>2</sub> gas at anode and O <sub>2</sub> gas at cathode H <sub>2</sub> O(I) converted into H <sub>2</sub> O(g)		
o. Oz gas at anode and 112 gas at outlode	٦.			
Antiknocking compound in gasoline is:	_			
	_	Trimethyl lead Tetraethyl lead		
3. Tetrametry lead	٦.	retraetry read		
	_			
		Mitochondria Plastid		
e. Lydddinio	••	T labila		
IR-36 is improved variety of:	_	Miles		
		Wheat Cotton		
o. Grounding	••	Collon		
Vaccine of small pox is discovered by:	_	Educad James		
		Edward Jenner Anton Von Leeuwenhoek		
o. Alexander Florring	••	7 illen ven zeedwermeek		
• •		Gymnosperm Pteriodophyta		
5. 2.,,op.,,.a		, tollogophyta		
	2	Mustord		
		Mustard Lemon		
o. mango		266.1		
Vector of Encephalitis is	_	Ananhalaa		
		Anopheles Tse tse fly		
o. 7,0000	••	100 to 119		
BCG vaccine is given for immunity against:	_	La contra de la contra del la contra del la contra del la contra de la contra del la contra de la contra del la contra d		
		Jaundice Hepatitis		
	••			
Starch is stored in	2	Amydonloot		
	2. 4.	Amyloplast Chloroplast		
	Alloy is used for welding electri  Solder  Stainless steel  Aqua regia is the mixture of cone. HCl and Cone 1. 1:3 4. 3:1	1. NO2 3. N2O 4.  Alloy is used for welding electrical or 2. 3. Stainless steel 4. Aqua regia is the mixture of cone. HCl and Cone. HI 1. 1:3 4. 3:1  ———————————————————————————————————		

139.	Which animal is an amphibian?  1. Salamander  3. Lizard	2. 4.	Chameleon Cobra			
140.	The 'binomial nomenclature' was proposed by: 1. Aristotle 3. Copeland	2. 4.	Carolus Linnaeus Kashyap			
141.	Companion cell is a component of 1. Parenchyma 3. Xylem	2. 4.	Sclerenchyma Phloem			
142.	Which of the following does not have ability to fit  1. Anabaena  3. Nitrosomonas	x atr 2. 4.				
143.	Intestinal muscles are: 1. Voluntary and unstriated 3. Voluntary and striated	2. 4.	Involuntary and striated Involuntary and unstriated			
144.	Ribosomes are the centre for: 1. Lipid synthesis 3. Photosynthesis	2. 4.	Protein synthesis Respiration			
145.	In which of the following plant tissues, 'Intercellu 1. Parenchyma 3. Sclerenchyma	ılar s 2. 4.	·			
146.	Unicellular green algae is 1. Ulothrix 3. Spirogyra	2. 4.	Chlamydomonas Chara			
147.	'Haemocoel' is present in  1. Octopus  3. Starfish	2. 4.	Cockroach Earthworm			
148.	The antibiotic penicillin blocks the bacterial process that builds:  1. Lysosome 2. Cell membrane 3. Cell wall 4. Ribosome					
149.	An organism having characteristic of both plant 1. Spirogyra 3. Paramecium	and 2. 4.	Amoeba			
150.	Slime mould are classified in kingdom:  1. Monera  3. Fungi	2. 4.	Protista Plantae			
151.	Colonial coelenterate is: 1. Coral 3. Jellyfish	2. 4.	,			
152.	Bacteria which can cause acne is 1. Staphylococci 3. Vibrio	2. 4.	Methanogens Aceno bacteria			
153.	Which of the following process occur only in anii 1. Respiration 3. Nervous control	mals 2. 4.				

154.	Which of the following metal is present in chloro  1. Mg  3. Zn	2.	II? Cu Fe
155.	Kala - azar is caused by 1. Nematode 3. Bacteria	2. 4.	Virus Protozoan
156.	World AIDS Day is celebrated on: 1. 2 December 3. 4 January	2. 4.	
157.	Water Vascular System of locomotion is found in 1. Jellyfish 3. Silver fish	n 2. 4.	Starfish Octopus
158.	Pseudocoelom is found in 1. Roundworm 3. Planaria	2. 4.	Liverfluke Tapeworm
159.	The eukaryotic cell without plastid is found in  1. Blue green algae  3. Fungi	2. 4.	Bacteria Euglena
160.	Which cell organelles are capable of forming the 1. Mitochondria 3. Plastids	eir o 2. 4.	_ `
161.	In the following which one is a ciliated protozoar  1. Amoeba  3. Euglena	n? 2. 4.	Paramoecium Trypanosoma
162.	The life supporting zone of the earth is  1. Biosphere  3. Lithosphere	2. 4.	Atmosphere Hydrosphere
163.	Indigenous breed of poultry in India is 1. Leghorn 3. Aseel		Lepra Dino
164.	Rain water which have dissolved oxides of sulph 1. Water gas 3. Alkaline rain	nur a 2. 4.	Pure rain
165.	Gonorrhoea, a sexually transmitted disease is c  1. Virus  3. Bacteria	ause 2. 4.	ed by Protozoan Fungus
166.	In which of the following animals, cutaneous res 1. Rabbit 3. Tortoise	•	Cockroach
167.	<ul><li>2, 4-D chemical is used as</li><li>1. Weedicide</li><li>3. Fungicide</li></ul>	2. 4.	
168.	Chemical responsible for ozone depletion is 1. DDT 3. BHC	2. 4.	CFCs CO <sub>2</sub>

- 169. Which of the following is egg laying mammal?
  - 1. Kangaroo

2. Echidna

3. Whale

- 4. Bat
- In the following which is a fungal disease? 170.
  - Malaria

2. Tetanus

3. Ringworm

- 4. Leprosy
- If  $x = \frac{\sqrt{3} + 1}{\sqrt{3} 1} + \frac{\sqrt{3} 1}{\sqrt{3} + 1} + \frac{\sqrt{3} 2}{\sqrt{3} + 2}$ , then the value of  $x^2 + \left(\frac{39}{x}\right)^2$  is 171.

2.114

3.124

- 4. 144
- If  $\frac{a}{b} + \frac{b}{a} = 1$ , (a, b \neq 0) then the value of  $a^3 + b^3$  is 172.

2. – 1

3.0

- 4. 2
- The value of  $\sqrt{2+\sqrt{3}} + \sqrt{2-\sqrt{3}}$  is 173.
  - 1.  $8\sqrt{3}$

2.  $2\sqrt{3}$ 

3.  $3\sqrt{2}$ 

- 4.  $\sqrt{6}$
- 174. If one angle of a triangle is 130°, then the angle between the angle bisectors of the other two angle is

2. 155°

3. 135°

- 4.95°
- 175. If  $4^{x} - 4^{x-1} = 24$ , then  $(2x)^{x}$  equals
  - 1.  $5\sqrt{5}$

2. √5

3.  $25\sqrt{5}$ 

- 4. 125
- If  $\frac{(2.3)^3 (0.027)}{(2.3)^2 + 0.69 + 0.09}$  = K, then the value of K is 176.
  - 1. 2.273

2. 2.327

3. 2

- 4. 3
- 177. If  $(3x - 1)^7 = a_7x^7 + a_6x^6 + a_5x^5 + \dots + a_1x + a_0$ , then the value of  $(a_7 + a_6 + a_5 + a_5 + \dots + a_1 + a_0)$  is
  - 1.128 3.0

- 2.64
- If a: b = 2: 3, x: y = 3: 4 then the value of  $\frac{25by 2ax}{a}$ 178.

1.5:24

2.24:5

3.1:2

- 4.2:1
- If  $x^3 3x^2 + 3x + 7 = (x + 1)(ax^2 + bx + c)$ , then value of (a + b + c) is 179.
  - 1.4

2. 12

3. - 10

- 180. In the given figure, PQRS is a square. RST is an equilateral triangle, then the value of x is
  - 1.60°

2.75°

3.45°

4.80°

- 181. One angle of a pentagon is 140°. If the remaining angles are in the ratio 1 : 2 : 3 : 4, then the greatest angle is
  - 1. 160°

2. 170°

3. 140°

- 4. 150°
- 182. If the mean of age of 18 students of a class is 14.5 years, two more students of ages 15 years and 16 years join the class, then the new mean of age is
  - 1. 14 years

2. 14.6 years

3. 14.5 years

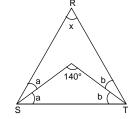
- 4. 14.7 years
- 183. The value of  $\sqrt{42 + \sqrt{42 + \sqrt{42 + \dots \infty}}}$  is
  - 1. 9

2. 8

3. 6

- 4. 7
- 184. In the given triangle RST, the value of x is
  - 1. 40°
  - 1. 40 3. 80°

- 2. 90°
- 4. 100°



- 185. If the cost price of 25 articles is equal to the selling price of 20 articles, the gain percent is
  - 1. 20%

2. 25%

3.5%

- 4. 10%
- 186. The value of  $0.272 + 0.13\overline{63}$  is
  - 1.  $\frac{3}{22}$

2.  $\frac{41}{100}$ 

3.  $\frac{1}{2}$ 

- 4.  $\frac{9}{22}$
- 187. If  $a = 2 + \sqrt{3}$ , then the value of  $\left(a \frac{1}{a}\right)$  is
  - 1.0

2. 2 +  $\sqrt{3}$ 

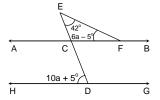
3.4

- 4. 2√3 <sup>°</sup>
- 188. In the given figure, AB || HG then the value of 'a' is
  - 1.8

2. 9

3. 7.5

4. 10



- 189. If one factor of  $(x^4 + x^2 20)$  is  $(x^2 + 5)$ . The other factor is
  - 1.  $x^2 4$

 $2. x^2 + 4$ 

3. x - 4

- 4. x + 20
- 190. If  $x = 7 + 4\sqrt{3}$  and xy = 1, then  $\left(\frac{1}{x^2} + \frac{1}{y^2}\right)$  is
  - 1. 64

2. 134

3.194

- 4. 149
- 191. If  $5^{2m-1} = 25^{m-1} + 100$ , then the value of  $3^{2+m}$  is
  - 1. 27

2. 81

3. 9

4. 343

- 192. If 5 coins are tossed together, what will be the probability of getting atleast 2 heads?

3.  $\frac{13}{16}$ 

- If  $\frac{3\sqrt{2}+2\sqrt{3}}{5\sqrt{2}-4\sqrt{3}}=x+y\sqrt{6}$ , then the value of (x-y) is 193.

3. 22

- If p + q + r = 0, then the value of  $\frac{\left(q+r\right)^2}{qr} + \frac{\left(r+p\right)^2}{rp} + \frac{\left(p+q\right)^2}{pq}$  is 194.
  - 1.0

3. 2

- 195. If  $2\ell - m + n = 0$ , then the value of  $4\ell^2 - m^2 + n^2 + 4\ell n$  is
  - 1.1

3. 0

- If  $m^2 + \frac{1}{25m^2} = 8\frac{3}{5}$ , then the value of  $m^3 + \frac{1}{125m^3}$  is 196.
  - 1.  $50\frac{1}{5}$

2.  $25\frac{1}{5}$ 

3.  $12\frac{1}{5}$ 

- 4.  $15\frac{1}{5}$
- 197. The cost price of a bag and a book is Rs 371. If the bag costs 12% more than the book, then cost price of bag is
  - 1. Rs 175

2. Rs 196

3. Rs 150

- 4. Rs 221
- 198. In the given figure, AE = DC = 13 cm, BE = 5 cm. ∠ABC = 90° and AD = EC, then length of AD is
  - 1.5 cm

2.6 cm

3.7 cm

- 4. 12 cm
- 199. Two dice are rolled, then probability of getting a total of 9 is

- If A: B: C = 2:3:4 and  $A^2 + B^2 + C^2 = 11600$ , then the value of (A B + C) is 200.
  - 1.20

2. 24

3.60

4.100