

Exam ID: 112	
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Date:

- 1. The timer has been set for the exam, and a countdown will display the remaining time. When the timer runs out, the exam will end automatically. No further action will be required after that.
- 2. You can flag any question that you want.
- 3. If you don't want to submit any of your provided answers, you can clear them.
- 4. If you choose to drop this exam, it will not be submitted, and no result will be generated.
- 5. Once you finish the exam, you cannot resume it.

Secure Exam Advice

This exam is specially secured. Which means you cannot leave your browser window once the exam starts.

The following actions are not supported during your exam.

- Minimizing the browser
- · Resizing the browser
- · Open a new tab
- Open a new program
- Taking a screenshot
- Pressing Ctrl + C
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- Pressing Print Screen
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We are monitoring your activity during the exam, and any unusual behaviour is being tracked. Your admin has set the exam to terminate if a certain number of unusual activities are detected, which could be as low as one. To avoid your exam from being terminated, please refrain from any behaviour that may be considered unusual. All the best!

Question: 1 of 50	QID: 587	Marks: 4
Which of the following aquatic plants grows c	ompletely submerged in water?	
Please mark (>) for the correct answer.		
A. Water hyacinth	B. Water lily	
C. Hydrilla	O. Lotus	

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Question: 2 of 50	QID: 591		Marks: 4
The direction of current in a conducting wire is			
Please mark (✓) for the correct answer.			
A positive to negative terminal	○ В.	may vary	
C. none of these	O.	negative to positive terminal	
Question: 3 of 50	QID: 618		Marks: 4
The epicentre of an earthquake is			
Please mark (✓) for the correct answer.			
A. in the middle of earth	○ В.	none of these	
C. in the core of earth	○ D.	on the surface of earth	
Question: 4 of 50	QID: 620		Marks: 4
If you hold a pen in your right hand and stand in front called	of the mirror, the pen v	vill be in the left hand in the image. This	phenomenon is
Please mark (✓) for the correct answer. A inversion	О В.	diffraction	
C. lateral inversion	○ D.	reflection	
Question: 5 of 50	QID: 605		Marks: 4
Which one of the following is a metal?			
Please mark (✓) for the correct answer.			
A. Ca	○ В.	0	
C. Na	○ D.	N	
	OID, FOE		Markey 4
Question: 6 of 50	QID: 585		Marks: 4
Which is a correct set of parts of a pistil?			
Please mark (/) for the correct answer.			
A. Ovary, style and stigma	○ В.	Ovary, style and filament	
C. Ovary, anther and filament	O.	Filament and anther	

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	QID: 596		Marks: 4
Which of the following is based on the study of the shadow	cast by the sun?		
Please mark (✓) for the correct answer.			
A. Atomic clock	О В.	Sun dial	
C. Simple pendulum	D.	Quartz clock	
Question: 8 of 50	QID: 612		Marks: 4
In the list of animals given below, hen is the odd one out. 'h	numan being, cow,	dog, hen'	
Please mark (✓) for the correct answer.			
○ A it is viviparous	○ В.	it is oviparous	
C. The reason for this is	O D.	it undergoes internal fertilisation	
E. it undergoes external fertilisation			
Question: 9 of 50	QID: 615		Marks: 4
Whenever the surfaces in contact tend to move or move with	th respect to each	other, the force of friction comes into play	
Please mark (✓) for the correct answer.			
A only if one of the two objects is liquid.	○ В.	irrespective of whether the objects are soli gaseous.	d, liquid or
C. only if one of the two objects is gaseous.	○ D.	only if the objects are solid.	
C. only if one of the two objects is gaseous. Question: 10 of 50	QID: 616	only if the objects are solid.	Marks: 4
	QID: 616		
Question: 10 of 50 The maximum value of static friction that comes into play where the static friction is the static friction of the static friction of the static friction is the static friction of the sta	QID: 616		
Question: 10 of 50 The maximum value of static friction that comes into play where called	QID: 616		
Question: 10 of 50 The maximum value of static friction that comes into play where called Please mark () for the correct answer.	QID: 616 hen a body is just	at the point of sliding over the surface of an	
Question: 10 of 50 The maximum value of static friction that comes into play where called Please mark (✓) for the correct answer. A all of these	QID: 616 hen a body is just	at the point of sliding over the surface of an	
Question: 10 of 50 The maximum value of static friction that comes into play where called Please mark (✓) for the correct answer. A all of these C. sliding friction	QID: 616 hen a body is just B. D.	at the point of sliding over the surface of an	other body is
Question: 10 of 50 The maximum value of static friction that comes into play where called Please mark (✓) for the correct answer. A all of these C. sliding friction Question: 11 of 50	QID: 616 hen a body is just B. D.	at the point of sliding over the surface of an	other body is
Question: 10 of 50 The maximum value of static friction that comes into play where called Please mark (✓) for the correct answer. A all of these C. sliding friction Question: 11 of 50 Metals react with acids to produce respective salts with evo	QID: 616 hen a body is just B. D.	at the point of sliding over the surface of an	other body is

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Question: 12 of 50	QID: 586		Marks: 4
Both clavicle and scapula constitutes the			
Please mark (✓) for the correct answer.			
A. chest bones	О В.	hand bone	
C. backbone	O D.	shoulder bone	
Question: 13 of 50	QID: 611		Marks: 4
Sets of reproductive terms are given below. Choose the set that	has an inco	rrect combination.	
Please mark (✓) for the correct answer.			
A. Sperm, oviduct, egg, uterus	○ В.	Menstruation, egg, oviduct, uterus	
C. Sperm, testis, sperm duct, penis	O D.	Ovulation, egg, oviduct, uterus	
Question: 14 of 50	QID: 604		Marks: 4
In displacement reactions			
Please mark (✓) for the correct answer.	O -	***	
A. both (a) and (b)C. a less reactive metal displaces a more reactive metal.	○ B.○ D.	none of these a more reactive metal displaces a less reac	tivo motal
C. a less reactive metal displaces a more reactive metal.	О В.	a more reactive metal displaces a less reac	live metal.
Question: 15 of 50	QID: 581		Marks: 4
The ovary contains female sex cells inside			
Please mark (✓) for the correct answer.			
A. style	○ В.	ovules	
C. stigma	O D.	anther	
Question: 16 of 50	QID: 606		Marks: 4
The gap between the orbit of Mars and Jupiter have			
Please mark (✓) for the correct answer.			
A. meteorite	О В.	meteor	
C. comets	O D.	asteroids	

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Question: 17 of 50	QID: 619		Marks: 4
A major tsunami occurred on 26th December 2004 in wh	hich ocean?		
Please mark (✓) for the correct answer.			
A Pacific Ocean	○ В.	Indian Ocean	
C. South Atlantic Ocean	○ D.	North Atlantic Ocean	
Question: 18 of 50	QID: 592		Marks: 4
Objects that do not give out or emit light of their own are	e called		
Please mark (✓) for the correct answer.			
A opaque	○ В.	non-luminous	
C. translucent	○ D.	luminous	
Question: 19 of 50	QID: 609		Marks: 4
Cells which lack nuclear membrane are			
Please mark (✓) for the correct answer.			
A. single cells	○ в.	eukaryotic cells	
C. prokaryotic cells	○ D.	multicells	
Question: 20 of 50	QID: 584		Marks: 4
Composition of fats are			
Please mark (✓) for the correct answer.			
A carbon, sulphur and nitrogen	О В.	carbon, hydrogen and oxygen	
C. carbon, sulphur and hydrogen	○ D.	oxygen, nitrogen and hydrogen	
Question: 21 of 50	QID: 607		Marks: 4
Pole Star cannot be seen in which of the following count	tries?		
Please mark (✓) for the correct answer.			
A. New Zealand	○ В.	UK	
C. India	O.	USA	

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Question: 22 of 50	QID: 614	Marks: 4
Two boys A and B are applying force on a block. If the block m	oves towards	the boy A, which one of the following statements is correct?
Please mark (✓) for the correct answer.		
A Magnitude of force applied by A is equal to that of B.	О В.	Magnitude of force applied by A is smaller than that of B.
C. Net force on the block is towards B.	O D.	Magnitude of force applied by A is greater than that of B.
Question: 23 of 50	QID: 590	Marks: 4
Which of the following is the biggest unit?		
Please mark (/) for the correct answer.		
A cm	○ В.	m
C. mm	O D.	km
Question: 24 of 50	QID: 597	Marks: 4
Swati walks to his school which is at a distance of 4 km from his comes back in his friend's vehicle to home in 10 minutes. His at Please mark () for the correct answer. A 16 km/h C. 24 km/h	verage speed	
Question: 25 of 50	QID: 602	Marks: 4
Metalloids possess the properties of		
Please mark (✓) for the correct answer.		
A. none of these	○ В.	both metals and non-metals
C. metals	O D.	non-metals
Question: 26 of 50	QID: 613	Marks: 4
The force exerted by a charged body on another charged or u	ncharged bod	y is called
Please mark (✓) for the correct answer.		
A gravitational force	○ в.	contact force
C. non-contact force	O D.	electrostatic force

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Question: 27 of 50	QID: 610		Marks: 4
Which of the following cells is of irregular shape?			
Please mark (✓) for the correct answer.			
A WBC	О В.	RBC	
C. Neuron	D .	Muscle cell	
Question: 28 of 50	QID: 600		Marks: 4
Medicine that kills or stops the growth of harmful disease-	causing microbes is	s known as	
Please mark (✓) for the correct answer.			
A antibody	○ В.	antigen	
C. vaccine	D .	antibiotic	
Question: 29 of 50	QID: 599		Marks: 4
Spherical-shaped bacteria are called			
Please mark (✓) for the correct answer.			
A vibrio	○ В.	spirilla	
C. cocci	D.	bacilli	
Question: 30 of 50	QID: 595		Marks: 4
The distance travelled by the vehicles is recorded by			
Please mark (✓) for the correct answer.			
A motometer	○ В.	monometer	
C. speedometer	D.	odometer	
Question: 31 of 50	QID: 582		Marks: 4
Which carbohydrate is present in sugar cane?			
Please mark (✓) for the correct answer.			
A None of these	○ В.	Both (a) & (b)	
C. Complex carbohydrate	O.	Simple carbohydrate	

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Question: 32 of 50	QID: 617	Marks: 4
Waste from an electroplating factory must be disposed off		
Please mark (✓) for the correct answer.		
 A according to the disposal guidelines of Waste Management Bodies 	B. in the nearby river	
C. in the nearby cornfield	D. in the nearby pond	
Question: 33 of 50	QID: 588	Marks: 4
In which year, SI system was recommended by general confe	rence of weights and measures?	
Please mark (✓) for the correct answer.		
A. 1970	B. 1980	
○ C. 1950	D. 1960	
Question: 34 of 50	QID: 608	Marks: 4
The Halley's comet is seen after every		
Please mark (✓) for the correct answer.		
A. 76 years	B. 56 years	
C. 56 months	O. 76 months	
Question: 35 of 50	QID: 593	Marks: 4
Which of the following will make a closed circuit?		
Please mark (✓) for the correct answer.		
A. Battery	B. Eraser	
C. Metal Key	O. Bulb	
Question: 36 of 50	QID: 594	Marks: 4
Who was the discoverer of magnet?		
Please mark (✓) for the correct answer.		
A. Aryabhatta	B. Einstein	
C. Magnes	O. Newton	

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Question: 37 of 50	QID: 601		Marks: 4
The microorganisms that cause diseases in human beings, p	olants and anima	ils are called	
Please mark (✓) for the correct answer.			
A pathogens	○ В.	antibodies	
C. mosquitoes	D .	carriers	
Question: 38 of 50	QID: 583		Marks: 4
Which one of the following occurs when we straighten our arr	m?		
Please mark (✓) for the correct answer.			
A. Triceps contracts but biceps relaxes	○ В.	Both biceps and triceps relax	
C. Biceps contracts but triceps relaxes	O D.	Both biceps and triceps contract	
Question: 39 of 50	QID: 589		Warks: 4
Which of the following types of motion are possessed by a fo Circular Please mark () for the correct answer.	otball rolling on	the ground? (A) Rotational (B) Rectilinear	(C) Periodic (D)
A. (A) and (B)	() В.	(A), (B) and (D)	
C. (B) and (C)	O D.	(A) and (C)	
Question: 40 of 50	QID: 598		Marks: 4
Which of the following measures the most accurate time?			
Please mark (✓) for the correct answer.			
A Water clock	○ В.	Quartz clock	
C. Sand clock	O D.	Sundial	
Question: 41 of 50	QID: 559		Marks: 4
Which one of the following events is correctly matched with the	ne time period in	a normal menstrual cycle?	
Please mark (✓) for the correct answer.			
A. Rise in progesterone level : 1-15 days	○ В.	Endometrium secretes nutrients for impla days	ntation: 11-18
C. Endometrium regenerates: 5-10 days	O D.	Release of egg: 5th day	

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Question: 42 of 50	QID: 550		Marks: 4
Assertion: Sponges have body organization of "cellular level".			
Reason: There is some physiological division of labour.			
Please mark (/) for the correct answer.			
A. If both Assertion and Reason are correct, but Reason not the correct explanation of Assertion. {c}	is B.	If both the Assertion and Reason are incorrect.	
C. If both Assertion and Reason are correct and Reason the correct explanation of Assertion.	is O.	If Assertion is correct but Reason is incorrect.	
Question: 43 of 50	QID: 564		Marks: 4
An iron sphere of mass 10 kg has the same diameter as an alum simultaneously from a tower. When they are lo m above the grou			
Please mark (✓) for the correct answer.			
A acceleration	○ В.	potential energy	
C. momenta	O D.	kinetic energy	
Question: 44 of 50	QID: 565		Marks: 4
A key of a mechanical piano struck gently and then struck again	but mush ha	arder this time. In the second case	
Please mark (✓) for the correct answer.			
A sound will be louder and pitch will also be higher	() в.	both loudness and pitch will remain unaffected	
C. sound will be louder but pitch will be lower	O D.	sound will be louder but pitch will not be different	
Question: 45 of 50	QID: 577		Marks: 4
The least resistance obtained by using 2 $\Omega,$ 4 $\Omega,$ 1 Ω and 100 Ω	Ωis		
Please mark (✓) for the correct answer.			
A <100 Ω	○ в.	> 2 Ω	
C. <4 Ω	O D.	<1Ω	
Question: 46 of 50	QID: 569		Marks: 4
Which of the following represents 12 u?			
Please mark (✓) for the correct answer.			
A Mass of 1 hydrogen atom	О В.	1/12th of mass of C-12 atom.	
C. Mass of 0-16 atom	O D.	Mass of C-12 atom	

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Question: 47 of 50	QID: 573		Marks: 4
Three beakers labelled as A, B and C each containing 25 ml of w were added to the beakers A, B and C respectively. It was observ contained in beakers A and B, whereas in case of beaker C, the t statement(s) is (are) correct? (i) In beakers A and B, exothermic poccurred. (iii) In beaker C exothermic process has occurred.(iv) In	ed that tempera process	the ture has	re was an increase in the temperature of the solution of the solution falls. Which one of the following occurred. (ii) In beakers A and B, endothermic process has
Please mark (✓) for the correct answer.			
A (i) and (iv)	\bigcirc	В.	(i) only
C. (ii) only	\bigcirc	D.	(iv), (ii) and (iii)
Question: 48 of 50	QID: 558		Marks: 4
Assertion: The earliest organisms that appeared on the earth we	ere non	-gre	en and presumably anaerobes.
Reason: The first autotrophic organisms were the chemoautotrop	phs that	nev	ver released oxygen.
Please mark (✓) for the correct answer.			
A If Assertion is correct but Reason is incorrect.	\bigcirc	B.	If both Assertion and Reason are correct, but Reason is not the correct explanation of Assertion.
C. If both the Asse <mark>rtion and Reason</mark> are incorrect.	\bigcirc	D.	If both Assertion and Reason are correct and Reason is the correct explanation of Assertion.
Question: 49 of 50	QID: 578		Marks: 4
Question: 49 of 50 Assertion (A): As the speed of the coil in the motor increases, the rotation in an electric motor, some induced current is produced.		redu	
Assertion (A): As the speed of the coil in the motor increases, the		redu	
Assertion (A): As the speed of the coil in the motor increases, the rotation in an electric motor, some induced current is produced.		B.	
Assertion (A): As the speed of the coil in the motor increases, the rotation in an electric motor, some induced current is produced. Please mark (/) for the correct answer. A. Both (A) and (R) are correct, but (R) is not the correct			Marks: 4 ction in the current flowing through it.Reason (R): During
Assertion (A): As the speed of the coil in the motor increases, the rotation in an electric motor, some induced current is produced. Please mark (/) for the correct answer. A. Both (A) and (R) are correct, but (R) is not the correct explanation of (A) C. (A) is correct and (R) is incorrect		В.	Marks: 4 ction in the current flowing through it.Reason (R): During (A) is incorrect and (R) is correct Both (A) and (R) are correct but (R) is the correct
Assertion (A): As the speed of the coil in the motor increases, the rotation in an electric motor, some induced current is produced. Please mark (✓) for the correct answer. A. Both (A) and (R) are correct, but (R) is not the correct explanation of (A) C. (A) is correct and (R) is incorrect	QID: 563	B.	Marks: 4 ction in the current flowing through it.Reason (R): During (A) is incorrect and (R) is correct Both (A) and (R) are correct but (R) is the correct explanation of (A) Marks: 4
Assertion (A): As the speed of the coil in the motor increases, the rotation in an electric motor, some induced current is produced. Please mark (✓) for the correct answer. A. Both (A) and (R) are correct, but (R) is not the correct explanation of (A) C. (A) is correct and (R) is incorrect Question: 50 of 50	QID: 563	B.	Marks: 4 ction in the current flowing through it.Reason (R): During (A) is incorrect and (R) is correct Both (A) and (R) are correct but (R) is the correct explanation of (A) Marks: 4
Assertion (A): As the speed of the coil in the motor increases, the rotation in an electric motor, some induced current is produced. Please mark (/) for the correct answer. A. Both (A) and (R) are correct, but (R) is not the correct explanation of (A) C. (A) is correct and (R) is incorrect Question: 50 of 50 Two army persons A and B each of weight of 500 N climb up a rot this task. What is ratio of the powers of person A and B?	QID: 563	B.	Marks: 4 ction in the current flowing through it.Reason (R): During (A) is incorrect and (R) is correct Both (A) and (R) are correct but (R) is the correct explanation of (A) Marks: 4

--- END OF QUESTION PAPER ---

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National Level ScienceX Olympiads ScienceX Olympiad | Level 2

Answer Key

No	Question Type	QID	Correct Answer
Question - 1	Multiple Choice (Radiobutton)	587	С
Question - 2	Multiple Choice (Radiobutton)	591	А
Question - 3	Multiple Choice (Radiobutton)	618	D
Question - 4	Multiple Choice (Radiobutton)	620	С
Question - 5	Multiple Choice (Radiobutton)	605	A
Question - 6	Multiple Choice (Radiobutton)	585	A
Question - 7	Multiple Choice (Radiobutton)	596	В
Question - 8	Multiple Choice (Radiobutton)	612	В
Question - 9	Multiple Choice (Radiobutton)	615	В
Question - 10	Multiple Choice (Radiobutton)	616	В
Question - 11	Multiple Choice (Radiobutton)	603	D
Question - 12	Multiple Choice (Radiobutton)	586	D
Question - 13	Multiple Choice (Radiobutton)	611	A
Question - 14	Multiple Choice (Radiobutton)	604	D
Question - 15	Multiple Choice (Radiobutton)	581	В
Question - 16	Multiple Choice (Radiobutton)	606	D
Question - 17	Multiple Choice (Radiobutton)	619	В
Question - 18	Multiple Choice (Radiobutton)	592	В
Question - 19	Multiple Choice (Radiobutton)	609	С
Question - 20	Multiple Choice (Radiobutton)	584	В
Question - 21	Multiple Choice (Radiobutton)	607	A
Question - 22	Multiple Choice (Radiobutton)	614	В
Question - 23	Multiple Choice (Radiobutton)	590	D
Question - 24	Multiple Choice (Radiobutton)	597	A
Question - 25	Multiple Choice (Radiobutton)	602	В
Question - 26	Multiple Choice (Radiobutton)	613	D
Question - 27	Multiple Choice (Radiobutton)	610	A
Question - 28	Multiple Choice (Radiobutton)	600	D
Question - 29	Multiple Choice (Radiobutton)	599	С
Question - 30	Multiple Choice (Radiobutton)	595	D
Question - 31	Multiple Choice (Radiobutton)	582	D
Question - 32	Multiple Choice (Radiobutton)	617	A
Question - 33	Multiple Choice (Radiobutton)	588	D
Question - 34	Multiple Choice (Radiobutton)	608	A
Question - 35	Multiple Choice (Radiobutton)	593	С
Question - 36	Multiple Choice (Radiobutton)	594	С
Question - 37	Multiple Choice (Radiobutton)	601	A
Question - 38	Multiple Choice (Radiobutton)	583	A
Question - 39	Multiple Choice (Radiobutton)	589	В
Question - 40	Multiple Choice (Radiobutton)	598	В
Question - 41	Multiple Choice (Radiobutton)	559	С
Question - 42	Multiple Choice (Radiobutton)	550	A

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No	Question Type	QID	Correct Answer
Question - 43	Multiple Choice (Radiobutton)	564	A
Question - 44	Multiple Choice (Radiobutton)	565	D
Question - 45	Multiple Choice (Radiobutton)	577	D
Question - 46	Multiple Choice (Radiobutton)	569	D
Question - 47	Multiple Choice (Radiobutton)	573	A
Question - 48	Multiple Choice (Radiobutton)	558	В
Question - 49	Multiple Choice (Radiobutton)	578	D
Question - 50	Multiple Choice (Radiobutton)	563	С

--- END OF ANSWER KEY---



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