

Test Booklet No. \_\_\_\_\_

This booklet consists of 100 questions and \_\_ printed pages.

RGUCET/2025/54

Series

A

**RGUCET 2025**  
**Common Entrance Test, 2025**  
**BACHELOR OF EDUCATION (SCIENCE STREAM)**

**Full Marks: 100**

**Time: 2 Hours**

Roll No.

Day and

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Date of Examination:

Signature of Invigilator(s) \_\_\_\_\_

Signature of Candidate \_\_\_\_\_

*General Instructions:*

***PLEASE READ ALL THE INSTRUCTIONS CAREFULLY BEFORE MAKING ANY ENTRY.***

1. DO NOT OPEN THIS TEST BOOKLET UNTIL YOU ARE TOLD TO DO SO.
2. Candidate must write his/her Roll Number on the space provided.
3. This Test Booklet contains 100 Multiple Choice Questions (MCQs) from the concerned subject. Each question carries 1 mark. There shall be negative marking of 0.25 against each wrong attempt.
4. Please check the Test Booklet to verify that the total pages and total number of questions contained in the test booklet are the same as those printed on the top of the first page. Also check whether the questions are in sequential order or not.
5. Candidates are not permitted to enter into the examination hall after the commencement of the entrance test or leave the examination hall before completion of Examination.
6. Making any identification mark in the OMR Answer Sheet or writing Roll Number anywhere other than the specified places will lead to disqualification of the candidate.
7. Candidates shall maintain silence inside and outside the examination hall. If candidates are found violating the instructions mentioned herein or announced in the examination hall, they will be summarily disqualified from the entrance test.
8. In case of any dispute, the decision of the Entrance Test Committee shall be final and binding.
9. The OMR Answer Sheet consists of two copies, the Original copy and the Student's copy

**RGUCET 2025**  
**BEd Science Series A**

1	'Nugatory' means:				Abortive
	a) Abortive	b) Opaque	c) Doltish	d) Oafish	a
2	<p>Which of the following statements is false?</p> <p>A. The class teacher's wordy explanations did not convince students in the class.</p> <p>B. Rambling speeches are devoid of substance.</p> <p>C. Though my boss does not talk much but on the day of meeting he becomes a yeast man.</p> <p>D. The chief guest spoke in an oblique manner which made the audience restless last week.</p> <p>Choose the correct answer from the options given below.</p>				C only
	a) A only	b) C only	c) A & C	d) B & D	b
3	Which of the following is the Friction Consonant?				/ h /
	a) / h /	b) / t /	c) / d /	d) / r /	a
4	<p>Which of the following statement is not true?</p> <p>A. I have never seen such a steady person like him.</p> <p>B. Easeful students do not get success in life.</p> <p>C. Due to otiose nature, he has got the best percentile.</p> <p>D. He has a nose of unearthing talent.</p> <p>Choose the correct answer from the options given below.</p>				C only
	a) D only	b) A & C	c) B & D	d) C only	d
5	<p>Choose the correct sequence for the following jumbled phrases/sentences:</p> <p>"the magistrate informing him that(R)/to be dropped. Civil Disobedience had triumphed, the first time in modern India. (S)/Gandhiji received a written communication from(Q)/the Lieutenant Governor of the province had ordered the case(P)!"</p>				QRPS
	a) PSQR	b) SQRP	c) QRPS	d) QRSP	c
6	Which of the following is the Lateral Consonant?				/ l /
	b) / m /	b) / p /	c) / l /	d) / f /	c
7	If INDIA is coded as KQHNG, then NEPAL will be coded as:				PHTFR
	a) PHRFT	b) HTFRP	c) PHTFR	d) PHFTR	c

8	A person walks 5 kms to the east, turns left and walks 5 kms and turns left and walks 5 kms and again turns left and walks 5 kms. What is the direction he is facing now?				South
	a) North	b) South	c) North East	d) West	b
9	If 'P' denotes as ' $\div$ ', 'Q' denotes as '+', 'R' denotes as '-', and 'S' denotes as 'X' then $80 R 20 P 5 S 8 Q 6 = ?$				42
	a) 50	b) 54	c) 64	d) 42	b
10	<p>Given below are two statements. One is labelled as <b>Assertion (A)</b> and other is labelled as <b>Reason (R)</b>.</p> <p><b>Assertion (A):</b> All crows have two legs.</p> <p><b>Reason (R):</b> The other two legs of the crow are modified into tail.</p> <p>In the light of above statements, choose the most appropriate answer from the options given below:</p>				<b>A is true but R is false.</b>
	a) A and R are true, and R is the correct explanation of A.	b) A and R are true, but R is not the correct explanation of A.	c) A is true, but R is false.	d) A is false, but R is true	c
11	Pointing to a woman, a girl said "She is the daughter-in-law of the grandmother of my mother's only son." How is the woman related to the girl?				Mother
	a) Sister	b) Mother	c) Grandmother	d) Aunt	b
12	The minute and the hour hands of clock make an obtuse angle between them. Which of these could be the time that the clock is showing?				4.00
	a) 2.15	b) 6.30	c) 4.00	d) 10.00	c
13	<p><b>Assertion (A):</b> The Cold War was a direct military conflict between the USA and the USSR.</p> <p><b>Reason (R):</b> The Cold War was marked by ideological rivalry, not open warfare.</p>				A is false, but R is true
	a) Both A and R are true, and R is the correct explanation of	b) Both A and R are true, but R is not the correct explanation of A.	c) A is true, but R is false.	d) A is false, but R is true.	d)
14	<p>Assertion (A): Ashoka annexed Kalinga to the Mauryan Empire:</p> <p>Justification (J): Kalinga controlled the land and sea routes to South India.</p> <p>(a) Both A and J are true, R is the correct explanation of A.</p> <p>(b) Both A and J are true, R is not the correct explanation of A.</p> <p>(c) A is true, but J is false.</p> <p>(d) J is true, but A is false.</p>				Both A and J are true, R is the correct explanation of A
	a) A	b) B	c) C	d) D	(a)

15	Assertion (A): The ICC men's Cricket World Cup 2023 was won by India.  Reason (R): India defeated England in the final match.				Both A and R are false
	a) Both A and R are true, and R is the correct explanation of A	b) Both A and R are true, but R is not the correct explanation of A	c) A is true, but R is false	d) Both A and R are false	d)
16	The main goal of MOOC is to:				Cater diverse learners
	a) Conduct student assessments	b) Ensure placements	c) Cater diverse learners	d) Provide secondary education	c
17	Which of the following options is correct with respect to practices followed by the teacher in case of misbehavior observed in a student?				Talk to the student calmly about the observed behavior and explain why it is unacceptable
	a) Punish the student and isolate him from the class for some days.	b) Ask the student about the reason for the misbehavior and confront him in the class.	c) Ignore the misbehavior of the student and take the class normally.	d) Talk to the student calmly about the observed behavior and explain why it is unacceptable.	d
18	Children who come to school have:				Significant learning experiences to be used for further learning
	a) A blank mind to be filled in through schooling	b) Significant learning experiences to be used for further learning	c) Experiences that are crude	d) Life experiences that are irrelevant	b
19	The ideal teacher needs to be:				A friend, philosopher and guide
	a) Conveyor of the knowledge	b) Helper for students in learning	c) Good disciplinarian	d) A friend, philosopher and guide	d

20	Matching the following pairs:				A-iii, B-i, C-iv, D-ii
A Secondary Education Commission		i 1964			
B National Education Commission		ii 2001			
C Mid-day Meal Programme		iii 1952			
D Sarva Shiksha Abhiyan		iv 1995			
	a) A-ii, B-I, C-iv, D-iii	b) A-iii, B-i, C-iv, D-ii	c) A-iii, B-iv, C-i, D-ii	d) A-ii, B-iii, C-iv, D-i	b
21	Which of the following was responsible for the inheritance of specific traits according to Mendel?				Factors
	a) Genes	b) Factors	c) Chromosomes	d) DNA	b
22	Which of the following sets does represent the biotic component of a habitat?  A. Sand, Turtle, Crab and Rock B. Insect, Frog, Fish and Aquatic plant C. Tiger, Deer, Grass and Soil D. Insect, Water, Aquatic Plant and Fish  Choose the correct answer from the options given below:				B only
	a) A only	b) B only	c) A & C	d) C & D	b
23	Given below are two statements. One is labelled as <b>Assertion (A)</b> and other is labelled as <b>Reason (R)</b> .  <b>Assertion (A):</b> Green plants appear to release Oxygen instead of Carbon dioxide into the atmosphere during the day time.  <b>Reason (R):</b> The rate of photosynthesis is higher than the rate of respiration during day time.  In the light of above statements, choose the most appropriate answer from the options given below:				A and R are true, and R is the correct explanation of A.
	a) A and R are true, and R is the correct explanation of A.	b) A and R are true, but R is not the correct explanation of A.	c) A is true, but R is false.	d) A is false, but R is true	a
24	Match the following pairs:				A-iv, B-iii, C-i, D-ii
A. Root		i Groundnut			
B. Stem		ii Apple			
C. Seed		iii Sugarcane			
D. Fruit		iv Carrot			

	a) A-iv, B-iii, C-i, D-ii	b) A-i, B-iv, C-iii, D-ii	c) A-iii, B-ii, C-iv, D-i	d) A-ii, B-i, C-iv, D-iii	a								
25	Which of the following is the botanical name of <i>garlic</i> ?				Allium sativum								
	a) Allium cepa	b) Solanum tuberosum	c) Cucumis sativus	d) Allium sativum	d								
26	Which of the following cell organelles has no membrane bound organelle?  A. Plasma membrane B. Mitochondria C. Ribosome D. Golgi complex  Choose the correct answer from the options given below:				C only								
	a) C only	b) A & B	c) B & C	d) D only	a								
27	A forest of trees and undergrowth plants inhabited by animals and rooted in soil containing bacteria and fungi is an example of:				Biological community								
	a) Species	b) Biological community	c) Hybrids	d) Biomass	b								
28	Which of the following is the part of lithosphere that is made up of soil and dirt?				Pedosphere								
	a) Atmosphere	b) Hydrosphere	c) Pedosphere	d) Biosphere	c								
29	In plants and trees, water goes up high due to suction pull. This suction pull phenomena is caused by:				Transpiration								
	a) Absorption	b)Photosynthesis	c)Transpiration	d)Respiration	c								
30	Which of following does not represent a single flower but a group of flowers?				Sunflower								
	a) Sunflower	b) Tulip flower	c) Rose flower	d) Lotus flower	a								
31	Which of the following statements are true related to plants and their classifications? A. Gymnosperms are considered as cryptogamae. B. Angiosperms are phanerogamae. C. Pteridophytes are non-vascular plants. D. Algae reproduce usually by asexual mode.  Choose the correct answer from the options given below:				B & D								
	a) C only	b) B & D	c) A & C	d) A only	b								
32	Match the following pairs: <table border="1"><tr><td>A Ginger</td><td>i Budding</td></tr><tr><td>B Yeast</td><td>ii Spore formation</td></tr><tr><td>C Ferns</td><td>iii Fragmentation</td></tr><tr><td>D Spirogyra</td><td>iv Vegetative propagation</td></tr></table>				A Ginger	i Budding	B Yeast	ii Spore formation	C Ferns	iii Fragmentation	D Spirogyra	iv Vegetative propagation	A-iv, B-i, C-ii, D-iii
A Ginger	i Budding												
B Yeast	ii Spore formation												
C Ferns	iii Fragmentation												
D Spirogyra	iv Vegetative propagation												

	a) A-iv, B-i, C-iii, D-ii	b) A-iv, B-i, C-ii, D-iii	c) A-iv, B-iii, C-ii, D-i	d) A-ii, B-iv, C-i, D-iii	b								
33	Which of the following does represent a group of autotrophs? A. Algae, Cuscuta, Banana and Mango B. Spinach, Mushroom, Tomato and Yeast C. Tulsi, Algae, Cuscuta and Mushroom D. Algae, Spinach, Tomato and Banana  Choose the correct answer from the options given below:				Algae, Spinach, Tomato and Banana								
	a) D only	b) B & D	c) A & C	d) C only	a								
34	The general chemical formula for rust is:				Fe <sub>2</sub> O <sub>3</sub>								
	a) FeO	b) Fe <sub>2</sub> O <sub>3</sub>	c) FeO <sub>3</sub> H <sub>3</sub> O	d) FeOOH	b								
35	Given below are two statements. One is labelled as <b>Assertion (A)</b> and other is labelled as <b>Reason (R)</b> .  <b>Assertion (A):</b> Vitamin C is not stored in our body.  <b>Reason (R):</b> Vitamin C is a water-soluble vitamin and dissolves in water, and is readily excreted through urine when it is not needed by the body.  In the light of above statements, choose the most appropriate answer from the options given below:				<b>Both A and R are true, and R is the correct explanation of A.</b>								
	a) <b>Both A and R are true, and R is the correct explanation of A.</b>	b) <b>Both A and R are true, but R is not the correct explanation of A.</b>	c) <b>A is true, but R is false.</b>	d) <b>A is false, but R is true.</b>	a								
36	Match the following pairs: <table border="1"><tr><td>A. Iodine</td><td>i. Water purification</td></tr><tr><td>B. Mercury</td><td>ii. On wounds</td></tr><tr><td>C. Aluminum</td><td>iii. Thermometers</td></tr><tr><td>D. Chlorine</td><td>iv. Food packing</td></tr></table>				A. Iodine	i. Water purification	B. Mercury	ii. On wounds	C. Aluminum	iii. Thermometers	D. Chlorine	iv. Food packing	A-ii, B-iii, C-iv, D-i
A. Iodine	i. Water purification												
B. Mercury	ii. On wounds												
C. Aluminum	iii. Thermometers												
D. Chlorine	iv. Food packing												
	a) A-iii, B-iv, C-i, D-ii	b) A-iii, B-i, C-ii, D-iv	c) A-ii, B-iii, C-iv, D-i	d) A-iv, B-iii, C-i, D-ii	c								
37	Which of the following metals was used by Rutherford in his alpha scattering experiment?				Gold								
	a) Gold	b) Platinum	c) Silver	d) Lead	a								
38	Which of the following is a homogeneous mixture?				Sugar solution								
	a) Mixture of soil and water	b) Sugar solution	c) Mixture of sugar, salt and sand	d) Chicken soup	b								

39	Match the following pairs:				A-ii, B-iv, C-iii, D-i
	A. Smoke		i. Dispersion of gas in liquid		
	B. Gel		ii. Dispersion of solid in gas		
	C. Emulsion		iii. Dispersion of liquid in liquid		
	D. Foam		Iv. Dispersion of liquid in solid		
	a) A-ii, B-iv, C-iii, D-i	b) A-iii, B-iv, C-ii, D-i	c) A-iv, B-ii, C- iii, D-i	d) A-iii, B-iv, C- ii, D-i	a
40	Zn+2NaOH $\longrightarrow$ X+H <sub>2</sub> , In this reaction, the product X is:				Na <sub>2</sub> ZnO <sub>2</sub>
	a) Na <sub>2</sub> ZnO <sub>2</sub>	b) 2NaZnO <sub>2</sub>	c) 2NaZn(OH) <sub>2</sub>	d) Na <sub>2</sub> Zn <sub>3</sub> O <sub>3</sub>	a
41	Which of the following true in case of exothermic reaction? A. Gas is liberated. B. Precipitation happens. C. Heat is liberated. D. Heat is absorbed.  Choose the correct answer from the options given below:				C only
	a) C only	b) A & B	c) C & D	d) A only	a
42	The process of converting sugar into alcohol is known as:				Fermentation
	a) Sterilization	b) Homogenization	c) Fermentation	d) Pasteurization	c
43	Which of the following groups of elements in the periodic table is incorrect? A. H, Li, Na, K B. Be, Mg, Ca, Sr C. F, Cl, Br, I D. He, Ne, Ar, As				D only
	a) D only	b) A & C	c) A & B	d) C only	a
44	Match the following pairs:				A-iv, B-iii, C-ii, D-i
	A. Sodium metal		i. in a steel container		
	B. Phosphorus		ii. in a plastic bottle		
	C. Sodium hydroxide pellets		iii. under water		
	D. Mercury		iv. in kerosene		
	a) A-i, B-iv, C-iii, D-ii	b) A-iv, B-iii, C-ii, D-i	c) A-iv, B-iii, C-i, D-ii	d) A-iv, B-i, C-iii, D-ii	b
45	When CNG or LPG undergoes complete combustion, the products are:				CO <sub>2</sub> and H <sub>2</sub> O
	a) CO <sub>2</sub> , SO <sub>2</sub> and H <sub>2</sub> O	b) CO <sub>2</sub> only	c) CO <sub>2</sub> , CO and H <sub>2</sub> O	d) CO <sub>2</sub> and H <sub>2</sub> O	d



46	Sodium is kept immersed in kerosene oil because:  A. It reacts with moisture in air. B. Immersing in kerosene cuts off supply of air. C. The reaction of sodium with air is violent. D. Kerosene, being as inert hydrocarbon liquid, does not react with sodium.  Choose the correct answer from the options given below:				A, B, C & D								
	a) A & B only	b) A, B & C only	c) A, B, C & D	d) B only	c								
47	Which of the following functions is the primary aspect of an operating system? A. Managing hardware and software resources B. Compiling programming code C. Designing graphical user interfaces D. Storing data permanently  Choose the correct answer from the options given below:				A only								
	a) D only	b) B & C	c) A only	d) C & D	c								
48	Match the following file extensions with their associated software: <table border="1"><tr><td>A .docx</td><td>i. Adobe Acrobat</td></tr><tr><td>B .pdf</td><td>ii. Microsoft Word</td></tr><tr><td>C .xlsx</td><td>iii. Microsoft Excel</td></tr><tr><td>D .pptx</td><td>iv. Microsoft PowerPoint</td></tr></table>				A .docx	i. Adobe Acrobat	B .pdf	ii. Microsoft Word	C .xlsx	iii. Microsoft Excel	D .pptx	iv. Microsoft PowerPoint	A-ii, B-i, C-iii, D-iv
A .docx	i. Adobe Acrobat												
B .pdf	ii. Microsoft Word												
C .xlsx	iii. Microsoft Excel												
D .pptx	iv. Microsoft PowerPoint												
	a) A-ii, B-i, C-iii, D-iv	b) A-i, B-ii, C-iii, D-iv	c) A-ii, B-iii, C-i, D-iv	d) A-iv, B-i, C-iii, D-ii	a								
49	Given below are two statements. One is labelled as <b>Assertion (A)</b> and other is labelled as <b>Reason (R)</b> .  <b>Assertion (A):</b> A spreadsheet is used for data analysis and calculations.  <b>Reason (R):</b> Spreadsheets like Microsoft Excel provide functions and formulas for processing data.  In the light of above statements, choose the most appropriate answer from the options given below:				<b>A and R are true, and R is the correct explanation of A.</b>								
	a) A and R are true, and R is the correct explanation of A.	b) A and R are true, but R is not the correct explanation of A.	c) A is true, but R is false.	d) A is false, but R is true	a								

50	Match the following network devices with their functions:				A-ii, B-i, C-iii, D-iv
	A. Router	i. Connects devices within a network.			
	B. Switch	ii. Connects multiple networks.			
	C. Hub	iii. Broadcasts data to all connected devices.			
	D. Modem	iv. Converts digital signals to analog.			
	a) A-i, B-ii, C-iv, D-iii	b) A-ii, B-i, C-iii, D-iv	c) A-iii, B-iv, C-i, D-ii	d) A-iv, B-iii, C-ii, D-i	b
51	If a file size is 2 MB, then the number of bytes in the file are:				2,097,152 bytes
	a) 2,000 bytes	b) 2,000,000 bytes	c) 2,097,152 bytes	d) 2,048 bytes	c
52	Which of the following is/are the antivirus software program(s)? A. Avast B. Norton C. Pixton D. Coursera  Choose the correct answer from the options given below:				A & B
	a) A & C	b) B & D	c) A & B	d) D only	c
53	Which of the following protocols is used for secure communication over the internet?				HTTPS
	a) HTTP	b) FTP	c) HTTPS	d) SMTP	c
54	Match the following pairs:				A-ii, B-iv, C-iii, D-i
	A. RAM	i. Permanent storage			
	B. ROM	ii. Temporary storage			
	C. CPU	iii. Executes instructions			
	D. HDD	iv. Read-only memory			
	a)A-ii, B-iv, C-iii, D-i	b) A-i, B-ii, C-iv, D-iii	c)A-iii, B-i, C-ii, D-iv	d)A-iv, B-iii, C-i, D-ii	a
55	Cloud storage is method of:				Storing data on remote servers via the internet.
	a) Storing data on a local hard drive.	b) Storing data on remote servers via the internet.	c) Increasing	d) Creating files and folders.	b




			computer processing speed.		
56	Wi-Fi stands for:				Wireless Fidelity
	a) Wireless Fidelity	b) Wide Frequency	c) Web Function	d) Wireless Function	a
57	URL stands for:				Uniform Resource Locator
	a) Universal Resource Locator	b) Uniform Resource Locator	c) Unique Reference Locator	d) Uniform Reference Locator	b
58	<p>Which of the following is/are example(s) of cyber crime:</p> <p>A. Phishing B. Bullying C. Catching D. Backdoor</p> <p>Choose the correct answer from the options given below:</p>				A, B & D
	a) B & D	b) A, B & C	c) A, B & D	d) A only	c
59	<p>Given below are two statements. One is labelled as <b>Assertion (A)</b> and other is labelled as <b>Reason (R)</b>.</p> <p><b>Assertion (A):</b> Malware can harm a computer system.</p> <p><b>Reason (R):</b> Malware includes viruses, worms, and spyware that disrupt or steal data.</p> <p>In the light of above statements, choose the most appropriate answer from the options given below:</p>				<b>A and R are true, and R is the correct explanation of A.</b>
	a) A and R are true, and R is the correct explanation of A.	b) A and R are true, but R is not the correct explanation of A.	c) A is true, but R is false.	d) A is false, but R is true	a
60	Study of <i>liver</i> is known as:				Hepatology
	a) Cardiology	b) Rhinology	c) Osteology	d) Hepatology	d
61	Zoological name of peacock is:				Pavo cristatus
	a) Paser domesticus	b) Pavo cristatus	c) Gallus domesticus	d) Columba livia	b

62	Which of the following statements is true?  A. Exhaled air does not contain carbon dioxide. B. Both inhaled air and exhaled air contain oxygen. C. Inhaled air does not contain carbon dioxide. D. Exhaled does not contain oxygen.  Choose the correct answer from the options given below:				B only								
	a) C only	b) A & B	c) C & D	d) B only	d								
63	Which of the following cell organelles has its own genetic material?				Mitochondria								
	a) Peroxisomes	b) Vacuole	c) Mitochondria	d) Lysosomes	c								
64	Match the following pairs: <table border="1"><tr><td>A. Fungi</td><td>i Nostoc</td></tr><tr><td>B. Animalia</td><td>ii Yeast</td></tr><tr><td>C. Protista</td><td>iii Sponges</td></tr><tr><td>D. Monera</td><td>iv Diniflagelletes</td></tr></table>				A. Fungi	i Nostoc	B. Animalia	ii Yeast	C. Protista	iii Sponges	D. Monera	iv Diniflagelletes	A-ii, B-iii, C-iv, D-i
A. Fungi	i Nostoc												
B. Animalia	ii Yeast												
C. Protista	iii Sponges												
D. Monera	iv Diniflagelletes												
	a) A-i, B-iv, C-iii, D-ii	b) A-iii, B-ii, C-iv, D-i	c) A-iv B-iii, C-ii, D-i	d) A-ii, B-iii, C- iv, D-i	d								
65	A tadpoles develops into an adult frog by the process of:				Metamorphosis								
	a)Fertilization	b) Metamorphosis	c) Embedding	d) Budding	b								
66	Pyramids of Energy is always upright, because the flow of energy is:				Unidirectional								
	a) Unidirectional	b) Bidirectional	c) Multidirectional	d) Random	a								
67	Which of the following hormone in our body does help us to adjust stress when we are angry, embarrassed or worried?				Adrenaline								
	a) Adrenaline	b) Insulin	c) Estrogen	d) Thyroxin	a								
68	Which of the following functions of Saliva is true?  A. Saliva helps us in taste food. B. Saliva converts starch into sugars. C. Saliva helps in lubrication and moistening of mouth. D. Saliva helps in protection and maintenance of teeth.  Choose the correct answer from the options given below:				A, B, C & D								
	a) B only	b) A, B & C only	c) A, B, C & D	d) B & C only	c								
69	Given below are two statements. One is labelled as <b>Assertion (A)</b> and other is labelled as <b>Reason (R)</b> .  <b>Assertion (A):</b> Mitochondria are considered semi-autonomous cell organelle.  <b>Reason (R):</b> Mitochondria have its own DNA and Ribosomes.				A and R are true, and R is the correct explanation of A.								

	In the light of above statements, choose the most appropriate answer from the options given below:				
	a) A and R are true, and R is the correct explanation of A.	b) A and R are true, but R is not the correct explanation of A.	c) A is true, but R is false.	d) A is false, but R is true	a
70	Match the following organelles with their corresponding functions:				A-iii, B-iv, C-i, D-ii
	A. Cilia		i Mating process		
	B. Centriole		ii Intracellular digestion		
	C. Pili		iii Motility		
	D. Lysosomes		iv Spindle fiber formation		
	a)A-ii, B-iv, C-iii, D-i	b) A-i, B-iv, C-iii, D-ii	c) A-iv B-ii, C-i, D-iii	d) A-iii, B-iv, C-i, D-ii	d
71	The joint between head and upper jaw is an example of:				Fixed joint
	a) Hinged joint	b) Ball and socket joint	c) Pelvic joint	d) Fixed joint	d
72	Which of the following statements are not true about veins in human circulatory system?  A. All veins carry deoxygenated blood. B. Veins have thin walls compare to arteries C. Veins carry blood from different organs to heart. D. Veins carry oxygenated blood.  Choose the correct answer from the options given below:				D only
	a) A & B	b) C only	c) A & C	d) D only	
73	Sex chromosomes in human male are known as:				XY
	a) XX	b) XY	c) XO	d) XZ	b
74	Who was the first to introduce the concept of antiparticle theoretically?				Paul Dirac
	a) Niels Bohr	b) Ernest Rutherford	c) Albert Einstein	d) Paul Dirac	d
75	Which of the following statements is not correct regarding conservation laws?  E. A conservation law is a hypothesis based on observations and experiments. F. Conservation laws do not have a deep connection with symmetries of nature. G. A conservation law cannot be proved.				B only

	H. Conservation of energy, linear momentum and angular momentum are considered to be fundamentals of Physics.  Choose the correct answer from the options given below:				
	b) A & C	b) A only	c) B only	d) B & D	c
76	Which of the following physical quantities has neither units nor dimensions?				Relative Density
	a) Relative Velocity	b) Relative Density	c) Angle	d) Energy	b
77	<p>Given below are two statements. One is labelled as <b>Assertion (A)</b> and other is labelled as <b>Reason (R)</b>.</p> <p><b>A:</b> Force can be added to Pressure.  <b>R:</b> Force and Pressure have same dimensions.</p> <p>In the light of above statements, choose the most appropriate answer from the options given below:</p>				A and R are false.
	a) A and R are true, and R is the correct explanation of A.	b) A and R are true, but R is not the correct explanation of A.	c) A is true, but R is false.	d) A and R are false.	d
78	<p>Given below are two statements. One is labelled as <b>Assertion (A)</b> and other is labelled as <b>Reason (R)</b>.</p> <p><b>A:</b> The accelerated motion of an object may be due to change in magnitude of velocity or direction of velocity or both.  <b>R:</b> Acceleration can be produced only by change in the magnitude of the velocity.</p> <p>In the light of above statements, choose the most appropriate answer from the options given below:</p>				A is true but R is false.
	a) A and R are true, and R is the correct explanation of A.	b) A and R are true, but R is not the correct explanation of A.	c) A is true but R is false.	d) A and R are false.	c
79	A man weighing 60 kg climbs up a staircase carrying a load of 20 kg on his head. The staircase has 20 steps each of height 0.2 m. If he takes 10 s to climb, find his power (in W).				313.6 W
	c) 313.6 W	b) 123.6 W	c) 510 W	d) 10 W	a

80	A stretched rubber has:				Increased potential energy								
	b) Increased kinetic energy	b) Increased potential energy	c) Decreased kinetic energy	d) Decreased potential energy	b								
81	Which of the following statements is true? E. Viscosity is a vector quantity. F. Surface tension is a vector quantity. G. Reynolds number is a dimensionless quantity. H. Angle of contact is a vector quantity.  Choose the correct answer from the options given below.				C only								
	c) A only	b) A & C	c) B & D	d) C only	d								
82	The coefficient of performance of refrigerator, whose efficiency is 25% is:				3								
	a) 1	b) 3	c) 5	d) 7	b								
83	Match the following pairs: <table border="1"><tr><td>A. Change in apparent frequency due to the relative motion between source and listener</td><td>i Beats</td></tr><tr><td>B. Intensity of sound varies with time</td><td>ii Transverse</td></tr><tr><td>C. Sound Waves in air</td><td>iii Doppler's Effect</td></tr><tr><td>D. Light waves</td><td>iv Longitudinal</td></tr></table>				A. Change in apparent frequency due to the relative motion between source and listener	i Beats	B. Intensity of sound varies with time	ii Transverse	C. Sound Waves in air	iii Doppler's Effect	D. Light waves	iv Longitudinal	A-iii B-i C-iv D-ii
A. Change in apparent frequency due to the relative motion between source and listener	i Beats												
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D. Light waves	iv Longitudinal												
	a) A-iv, B-ii, C-iii, D-i	b) A-ii, B-iii, C-iv, D-i	c) A-iii, B-i, C-iv, D-ii	d) A-i, B-iii, C-iv, D-ii	c								
84	The Halley's comet appears after every:				76 years								
	a) 72 years	b) 74 years	c) 76 years	d) 78 years	c								
85	1 volt is equivalent to:				joule/coulomb								
	a) newton/second	b) newton/coulomb	c) joule/coulomb	d) joule/second	c								
86	Given below are two statements. One is labelled as <b>Assertion (A)</b> and other is labelled as <b>Reason (R)</b> .  <b>A:</b> Current can be represented with an arrow. <b>R:</b> Current is a vector quantity.  In the light of above statements, choose the most appropriate answer from the options given below:				A is true, but R is false.								
	a) A and R are true, and R	b) A and R are true, but R is	c) A is true, but R is false.	d) A and R are false.	c								

	is the correct explanation of A.	not the correct explanation of A.											
87	Which of the following is not a special case of parallelogram				Trapezium								
	a) Trapezium	b) Triangle	c) Quadrilateral	d) None of the above	a								
88	Which of the following graph(s) is/are bipartite ?  <div></div> <p style="text-align: center;">(1)                  (2)                  (3)</p>				2 Only								
	a) Graph-1 only	b) Graph-2 only	c) Graph-2 & Graph-3 only	d) None of them	b								
89	<b>If the sum of three consecutive number is 81, then find the middle number?</b>				27								
	a) 27	b) 28	c) 29	d) -27	a								
90	Match the following pairs: <table border="1" data-bbox="285 1213 1177 1392"><tr><td>A. Number of factors of prime numbers</td><td>i. 9</td></tr><tr><td>B. Odd number</td><td>ii. 2</td></tr><tr><td>C. Even number</td><td>iii. <math>\sqrt{5}</math></td></tr><tr><td>D. Real Number</td><td>iv. Which is divided by itself</td></tr></table>				A. Number of factors of prime numbers	i. 9	B. Odd number	ii. 2	C. Even number	iii. $\sqrt{5}$	D. Real Number	iv. Which is divided by itself	A - iv, B-i, C - ii, D-iii
A. Number of factors of prime numbers	i. 9												
B. Odd number	ii. 2												
C. Even number	iii. $\sqrt{5}$												
D. Real Number	iv. Which is divided by itself												
	a) A -iv, B-i, C- ii, D-iii	b) A -ii, B-i C-iv, D-iii	c) A-iii, B-ii, C- i , D-iv	d)A-iv, B-i, C -ii, D-iii	a								
91	$Z = 7x + y$ , subject to $5x + y \geq 5$ , $x + y \geq 3$ , $x \geq 0$ , $y \geq 0$ . The minimum value of Z is:				( 0, 5)								
	a) (3, 0)	b) ( 7,0)	c) (0,5)	d) None of the above	c								
92	Region represented by $x \geq 0$ , $y \geq 0$ is:				First quadrant								
	a) first quadrant	b) Second quadrant	c) Third quadrant	d) Fourth quadrant	a								



93	If $6\sin^{-1}(x^2 - 6x + 8.5) = \pi$ , then x is equal to:				2								
	a) 1	b) 2	c) 3	d) 20	b								
94	Match the following pairs: <table border="1"><tr><td>A. Perimeter of polygons</td><td>i. <math>\frac{1}{2}</math> Base x Height</td></tr><tr><td>B. Area of Triangle</td><td>ii. Sum of their sides</td></tr><tr><td>C. Circumference of circle</td><td>iii. Base x Height</td></tr><tr><td>D. Area of Parallelogram</td><td>iv. <math>2\pi r</math></td></tr></table>				A. Perimeter of polygons	i. $\frac{1}{2}$ Base x Height	B. Area of Triangle	ii. Sum of their sides	C. Circumference of circle	iii. Base x Height	D. Area of Parallelogram	iv. $2\pi r$	A-ii, B-i, C -iv, D- iii
A. Perimeter of polygons	i. $\frac{1}{2}$ Base x Height												
B. Area of Triangle	ii. Sum of their sides												
C. Circumference of circle	iii. Base x Height												
D. Area of Parallelogram	iv. $2\pi r$												
	a) A-i, B-iv, C-iii, D-ii	b) A-i, B-ii, C-iii, D- iv	c) A-ii, B-i, C -iv, D- iii	d) A-iii, B- i C -ii, D -iv	c								
95	The value of $\sin(2\tan^{-1}(0.75))$ is equal to:				0.96								
	a) 0.75	b) 0.5	c) 0.96	d) $\sin 1.5$	c								
96	The area of a triangle with vertices (-3, 0), (3, 0) and (0, k) is 9 sq. units. The value of k will be:				3								
	a) 9	b) 3	c) -9	d) 6	b								
97	Match the following pairs: <table border="1"><tr><td>A. Cost Price</td><td>i. Amount received from selling an item</td></tr><tr><td>B. Selling Price</td><td>ii. Amount paid to buy an item</td></tr><tr><td>C. Profit</td><td>iii. Selling Price &gt; Cost Price</td></tr><tr><td>D. Loss</td><td>iv. Selling Price &lt; Cost Price</td></tr></table>				A. Cost Price	i. Amount received from selling an item	B. Selling Price	ii. Amount paid to buy an item	C. Profit	iii. Selling Price > Cost Price	D. Loss	iv. Selling Price < Cost Price	A-ii, B-i, C-iii, D-iv
A. Cost Price	i. Amount received from selling an item												
B. Selling Price	ii. Amount paid to buy an item												
C. Profit	iii. Selling Price > Cost Price												
D. Loss	iv. Selling Price < Cost Price												
	a) A-ii, B-i, C-iii, D-iv	b) A-i, B-ii, C-iii, d-iv	c) A-i, B-ii, C-iv, D-iii	d) A-ii, B-i, C-iv, D-iii	a								
98	The differential equation of a constant is:				0								
	a) 0	b) 1	c) 3	d) 5	a								
99	<b>Assertion (A):</b> The perfect square number out of 2, 3, 4 and 5 is 4. <b>Reason (R):</b> A perfect square is a number that cannot be expressed as the product of an integer by itself or as the second exponent of an integer.  In the light of the above statements, choose the most appropriate answer from the options given below.				A is true, but R is false.								
	a) Both A and R are true, and R is the correct explanation of A.	b) Both A and R are true, but R is not the correct explanation of	c) A is true, but R is false.	d) A is false, but R is true	c								

10 0	Which of the following does not indicate similar figures?				Isosceles triangle
	a) Square	b) Isosceles triangle	c) Equilateral triangle	d) Rectangle	b