

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

**This booklet consists of 100 questions and 19 printed pages.**

RGUCET/2024/\_\_\_/\_\_\_

Series

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**RGUCET 2024**  
**Common Entrance Test, 2024**

**POST GRADUATE DIPLOMA (GEOINFORMATICS)**

**Full Marks: 100**

**Time: 2 Hours**

Roll No.

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Day and Date of Examination: \_\_\_\_\_

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

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

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*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 within one hour thirty minutes.
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.



1	In the sentence, “ <i>She had been studying for hours,</i> ” what is the tense of the verb “studying”?				Answer option (a,b,c or d)
	a) present	b) past	c) future	d) past perfect continuous	Answer d
2	Match the word with their correct meanings				Answer option (a,b,c or d)
	A Ephemeral	i kind- hearted			
	B Benevolent	ii hungry			
	C Ubiquitous	iii Everywhere			
	D Voracious	iv Temporary			
	a) A-iv, B-i, C-iii, D-ii	b) A-iii, B-i, C-iv, D-ii	c) A-iii, B-ii, C-i, D-iv	d) A-i, B-iii, C-ii, D-iv	Answer a
3	Which of the following sentences contains a misplaced modifier? A “She served the cake on a plate covered with chocolate.” B “With a smile, the cat approached the friendly dog.” C “Quickly, he finished his homework before dinner.” D “The chef prepared the delicious meal in the kitchen.”				Answer option (a,b,c or d)
	a) A & B	b) Only A	c) B& C	d) A,B & C	Answer b
4	In the question given below, there are two statements labeled as Assertion (A) and Justification (B). Mark your answer as per the number codes provided below: A: In winters, people prefer wearing white clothes. B: White clothes are great reflectors of heat.				Answer option (a,b,c or d)
	a) Both A and B are true. B is the correct explanation of A.	b) Both A and B are true but B is not the correct explanation of A	c) A is false but B is true	d) Both A and B are false	Answer c
5	In the following question, arrange the given words in a meaningful sequence and then choose the most appropriate sequence from amongst the alternatives provided below each question: 1. Atomic Age 2. Metallic Age 3. Stone Age 4. Alloy Age				Answer option (a,b,c or d)
	a) 1,2,4,3	b) 3,2,4,1	c) 4,3,2,1,	d) 3,1,2,4	Answer b
6	Direction: An idiomatic expression/ a proverb has been given, followed by some alternatives. Choose the one which best expresses the meaning of the given idiom/ proverb. Proverb: “ <i>To take the bull by the horns</i> ”				Answer option (a,b,c or d)
	a) To punish a person severely for his arrogance	b) To grapple courageously with a difficulty that lies in our way.	c) To handle it by a fierce attack	d) To bypass the legal process and take action according to one’s own whims.	Answer b
7	Match the words with their antonyms.				Answer option
	A. Amuse		i. Biased		

	B. Affirmative	ii. Bore		(a,b,c or d)	
	C. Impartial	iii. Unaware			
	D. Insightful	iv. Negative			
	a) A -iii, B-iv, C-i, D-ii	b) A-iv, B-iii, C-i, D-ii	c) A-ii, B-i, C-iv, D-iii	d) A-ii, B-iv, C-i, D-iii	Answer d
8	<p>Read each sentence to find out whether there is any grammatical error in it. The error, if any will be in one part of the sentence. The latter of that part is the answer. If there is no error, the answer is 'D'.</p> <p>A. an Indian ship  B. laden with merchandise  C. got drowned in the Pacific Ocean  D. No error</p>				Answer option (a,b,c or d)
	a) A	b) B	c) C	d) D	Answer c
9	<p>Below is given a statement followed by two assumptions numbered I and II. An assumption is something supposed or taken for granted. You have to consider the statement and the following assumptions and decide which of the assumptions is implicit in the statement.</p> <p><b>Statement:</b> The government has decided to pay compensation to the tune of Rs. 1 lakh to the family members of those who are killed in railway accidents.</p> <p><b>Assumption I:</b> The government has enough funds to meet the expenses due to compensation.</p> <p><b>Assumption II:</b> There may be reduction in incidents or railway accidents in near future.</p>				Answer option (a,b,c or d)
	a) If only assumption I is implicit	b) If only assumption II is implicit	c) If neither I nor II is implicit	d) If both I and II are implicit	Answer a
10	<p>Choose the interjection in the sentence:  Wow, that was an amazing performance!</p>				Answer option (a,b,c or d)
	a) was	b) an	c) wow	d) that	Answer c
11	<p>Which of these plants is important in sericulture?</p>				Answer option (a,b,c or d)
	a) Cassia	b) Legumes	c) Pea	d) Mulberry	Answer d
12	<p>The father of Indian missile technology is _____?</p>				Answer option (a,b,c or d)
	a) Dr. Homi Bhabha	b) Dr. Chidambaram	c) Dr. U.R. Rao	d) Dr. A.P.J. Abdul Kalam	Answer d
13	<p>Statement A: Flamingo festival is celebrated in Andhra Pradesh.  Statement B: Hornbill festival is celebrated in Nagaland.</p>				Answer option (a,b,c or d)

	a) Statement A & B both are true	b) Only A is true	c) Only B is true	d) None A or B is true	Answer a
14	Assertion (A): On 26th January, 1950, the Indian Constitution came into force. Reason (R): 26th January is celebrated as the Republic Day.				Answer option (a,b,c or d)
	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 is false.	Answer b
15	Match the correct pairs.				Answer option (a,b,c or d)
	A. Jim Corbett National Park	i. Uttar Pradesh			
	B. Dudhwa National Park	ii. Uttrakhand			
	C. Silent Valley National Park	iii. Tripura			
	D. Bison National Park	iv. Kerala			
	a) A-ii, B-i, C-iv, D-iii	b) A-ii, B-iv, C-i, D-iii	c) A-ii, B-i, C-iii, D-iv	d) A-iv, B-ii, C-i, D-iii	Answer a
16	The instrument used to measure electric current is -				Answer option (a,b,c or d)
	a) ammeter	b) electrometer	c) galvanometer	d) spectrometer	Answer a
17	The official languages of United Nation are: A: African, Chinese, English, French, German and Spanish B: Arabic, Chinese, English, French, Russian and Spanish C: Arabic, Japanese, Chinese, English, French and German D: Chinese, English, French, Hindi, Japanese and Spanish				Answer option (a,b,c or d)
	a) A & B	b) Only B	c) Only C	d) C & D	Answer b
18	Amnesty International, an organization is associated with which of the following field?				Answer option (a,b,c or d)
	a) Protection of human rights	b) Protection of cruelty to animals	c) Protection of historical monuments	d) Environmental Protection	Answer a
19	Match the correct pairs.				Answer option (a,b,c or d)
	A. J. Robert Oppenheimer	i. atomic bomb			
	B. Alfred Nobel	ii. dynamite			
	C. Wilbur and Orville Wright	iii. laser			
	D. Theodore Maiman	iv. airplane			
	a) A-i, B-ii, C-iv, D-iii	b) A-ii, B-i, C-iii, D-iv	c) A-i, B-ii, C-iii, D-iv	d) A-ii, B-i, C-iv, D-iii	Answer a
20	Fathometer is used to measure -				Answer option (a,b,c or d)

	a) Sound Intensity	b) Ocean Depth	c) Rainfall	d) Magnetic field	Answer b
21	India's longest sea bridge, which is recently making headlines, connects which two locations?				Answer option (a,b,c or d)
	a) Bandra and Worli	b) Sewri and Chirle	c) Thane and Virar	d) Vallarpadam and Kochi	Answer b
22	Match the report with their publishing organisation				Answer option (a,b,c or d)
	A. World of Work Report	i. International Labour Organisation			
	B. Greening and Restoration of Wastelands with Agroforestry (G.R.O.W)	ii. Zoological Survey of India			
	C. State of the Climate in Europe 2022	iii. NITI Aayog			
	D. Animal Discoveries – New Species and New Records 2023	iv. World Meteorological Organization			
	a) A-i, B-iii, C-iv, D-ii	b) A-iii, B-i, C-iv, D-ii	c) A-iv, B-i, C-ii, D-iii	d) A-i, B-iii, C-ii, D-iv	Answer a
23	Read the statements below and choose the correct option: A. Japan won 30th Sultan Azlan Shah Trophy B. Sultan Azlan Shah Trophy is for wrestling. C. Sultan Azlan Trophy is for hockey. D. China won the 30 <sup>th</sup> Sultan Azlan Shah Trophy				Answer option (a,b,c or d)
	a) Only A is True	b) A & B both are True	c) C & D both are True	d) A & C both are True	Answer d
24	Given below are two statements one is labeled as <b>Assertion A:</b> and other as <b>Justification B:</b> <b>A: Assertion</b> The International Network for Terrestrial Research and Monitoring in the Arctic (INTERACT) is funded by European Union. <b>B: Justification</b> INTERACT grants researchers access to Arctic research stations across Europe, Russia, and North America, facilitating work in remote areas, fostering cross-fertilization and enabling comparative measurements. In the light of the above statements choose the most appropriate answer from the options given below.				Answer option (a,b,c or d)
	a) Both A & B are true, B is the correct explanation of A	b) Both A & B are true, B is not the correct explanation of A	c) A is true but B is false	d) A is false but B is true	Answer a
25	What was the theme of 'World Press Freedom Day 2024'?				Answer option (a,b,c or d)
	a) A Press for the Planet: Journalism in the Face of the	b) Shaping a Future of Rights	c) Journalism under Digital Siege	d) Information as a Public Good	Answer a

	Environmental Crisis				
26	Fraser Island, the world's largest sand island, is in which country?				Answer option (a,b,c or d)
	a) Sri Lanka	b) Australia	c) USA	d) Japan	Answer b
27	Match the following cups with their sports.				Answer option (a,b,c or d)
	A. Murugappa Gold Cup		i. Golf		
	B. Prince of Wales Cup		ii. Hockey		
	C. Sudirman Cup		iii. Badminton		
	D. Durand Cup		iv. Football		
	a) A-i, B-ii, C-iv, D-iii	b) A-i, B-ii, C-iii, D-iv	c) A-iv, B-iii, C-ii, D-i	d) A-ii, B-i, C-iii, D-iv	Answer d
28	Which among the following is correct about Sirocco? A. It's a warm & dry wind B. It's a warm & moist wind C. It's a cold & moist wind D. It's a winter wind that blows in Pacific Ocean				Answer option (a,b,c or d)
	a) C & D is correct	b) Only A is correct	c) Only B is correct	d) B & D is correct	Answer b
29	In geographical context, the terms mesa and butte are:				Answer option (a,b,c or d)
	a) Small tracts of saline and alkaline soils	b) The upland and marshy areas of the delta region	c) Fluvial and Aeolian landforms in the Ganga Plains	d) A hill and a flat land	Answer d
30	Where is the Chachin Grazing Festival celebrated?				Answer option (a,b,c or d)
	a) Assam	b) Uttar Pradesh	c) Manipur	d) Arunachal Pradesh	Answer d
31	Arrange the following in the English alphabetical order: (i) Exploration (ii) Exploitative (iii) Exploratory (iv) Exploitation				Answer option (a,b,c or d)
	a) iv, ii, i, iii	b) i, ii, iii, iv	c) iv, iii, ii, i	d) iv, ii, iii, i	Answer a
32	Match the countries with their national game/sports				Answer option (a,b,c or d)
	A. Scotland		i. Bandy		
	B. South Korea		ii. Golf		
	C. Russia		iii. Taekwondo		
	D. Afghanistan		iv. Buzkashi		

	a) A-iii, B-ii, C-iv, D-i	b) A-ii, B-iii, C-i, D-iv	c) A-ii, B-iii, C-iv, D-i	d) A-iii, B-ii, C-i, D-iv	Answer b
33	Assertion (A): Nuclear fusion is used to generate electricity. Reason (R): Nuclear power is not used because it cannot be controlled.				Answer option (a,b,c or d)
	a) Both A and R are true and R is the correct explanation of A.	b) )A is true but R is false	c) A is false but R is true	d) Both A & R is false	Answer d
34	In each of the questions below are given four statements followed by four conclusions numbered I, II, III and IV. You have to take the given statements to be true even if they seem to be at variance with commonly known facts. Read all the conclusions and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts. Statement: No stool is a desk. Some desks are tables. All tables are chairs. Some chairs are benches. Conclusion: I: No chair is a stool. II: Some benches are desks. III: Some desks are chairs. IV: Some desks are stools.				Answer option (a,b,c or d)
	a) Only I and III follow	b) Only II and III follow	c) Only I, II and III follow	d) Only III follows.	Answer d
35	7 years ago, Meera's age was equal to Heena's present age. The sum of Meera's age 10 years from now and Heena's age 5 years ago is 94 years. What was Reena's age 12 years ago if Reena is 6 years younger to Heena?				Answer option (a,b,c or d)
	a) 23	b) 25	c) 24	d) 14	Answer a
36	Choose the word which is different from the rest Tea Cinchona Chalk Rubber Cardamom				Answer option (a,b,c or d)
	a) Cardamom	b) Chalk	c) Rubber	d) Cinchona	Answer b
37	Match the pairs:				Answer option (a,b,c or d)
	A. Deductive reasoning	i. Drawing a general conclusion based on specific observations or evidence			
	B. Logical fallacy	ii. A form of logical argument that applies deductive reasoning to arrive at a conclusion based on two or more propositions. (iv)			



	C. Inductive reasoning	iii. Drawing a specific conclusion based on general principles or premises			
	D. Syllogism	iv. An error in reasoning that undermines the validity of an argument			
	a) A-ii, B-i, C-iv, D-iii	b) A-iii, B-iv, C-i, D-ii	c) A-ii, B-iv, C-i, D-iii	d) A-iii, B-i, C-iv, D-ii	Answer b
38	All mammals are animals. Some dogs are mammals. Which of the following conclusions can be drawn from the statements above?				Answer option (a,b,c or d)
	a) All animals are dogs	b) Some animals are dogs.	c) All dogs are mammals.	d) Some mammals are dogs	Answer d
39	In the question given below, there are two statements marked as Assertion (A) and Justification (B). Mark your answer as per the codes provided below: A: Assertion - In India, females have higher life expectancy than the males. B: Justification - Females receive a better diet.				Answer option (a,b,c or d)
	a) Both A and B are true and B is the correct explanation of A.	b) A is true but B is false	c) A is false but B is true	d) Both A and B are false.	Answer b
40	125, 80, 45, 20, ...?				Answer option (a,b,c or d)
	a) 5	b) 8	c) 10	d) 15	Answer a
41	A speedboat, whose speed in 15 km/hr in still water goes 30 km downstream and comes back in a total of 4 hours 30 minutes. What is the speed of the stream in km/hr?				Answer option (a,b,c or d)
	a) 2.5 km/hr	b) 3.5 km/hr	c) 5 km/hr	d) 4 km/hr	Answer c
42	Match the pairs:			Answer option (a,b,c or d)	
	A. Pythagorean theorem	i. $2\pi r$			
	B. Prime number	ii. $a^2+b^2=c^2$			
	C. Circumference of a circle	iii. 101			
	D. Area of a cuboid	iv. $2lw+2lh+2wh$			
	a) A-iii, B-ii, C-i, D-iv	b) A-ii, B-iii, C-i, D-iv	c) A-i, B-iii, C-ii, D-iv	d) A-iv, B-iii, C-i, D-ii	Answer b
43	Solve the given problem below and answer correctly A builder appoints three construction workers Akash, Sunil and Rakesh on one of his sites. They take 20, 30 and 60 days respectively to do a piece of work. It will take 15 days for Akash to complete the entire work if he is assisted by Sunil and Rakesh every third day.				Answer option (a,b,c or d)

	a) True, it will take 15 days	b) False, it will take more than 15 days	c) False, it will take less than 15 days	d) Neither one is correct	Answer a								
44	<p>For the given question two statements are given- one labeled Assertion (A) and the other labeled Reason (R). Select the correct answer to these questions from the codes (a), (b), (c) and (d) as given below.</p> <p>Assertion A: The product of any two rational numbers is always a rational number. Reason R: The product of two rational numbers can never be an integer.</p>				Answer option (a,b,c or d)								
	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) A is false but R is true.	Answer b								
45	<p>Find an approximate value of what should come in place of question mark (?) <math>39.012 \times 14.98 - 28.013 \times 9.999 = (20 + ?) \times 5.23</math></p>				Answer option (a,b,c or d)								
	a) 45	b) 42	c) 41	d) 43	Answer c								
46	<p>The HCF of two numbers is 11 and their LCM is 7700. One number is 308, the other number is:</p>				Answer option (a,b,c or d)								
	a) 275	b) 300	c) 278	d) 280	Answer a								
47	<p>Match the equation with their function:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">A. Linear function</td> <td style="width: 50%;">i. <math>k(x)=2x</math></td> </tr> <tr> <td>B. Exponential function</td> <td>ii. <math>g(x)=x^2-4x+3</math></td> </tr> <tr> <td>C. Quadratic function</td> <td>iii. <math>f(x)=2x+3</math></td> </tr> <tr> <td>D. Cubic function</td> <td>iv. <math>h(x)=x^3-2x^2-x+2h(x)</math></td> </tr> </table>				A. Linear function	i. $k(x)=2x$	B. Exponential function	ii. $g(x)=x^2-4x+3$	C. Quadratic function	iii. $f(x)=2x+3$	D. Cubic function	iv. $h(x)=x^3-2x^2-x+2h(x)$	Answer option (a,b,c or d)
A. Linear function	i. $k(x)=2x$												
B. Exponential function	ii. $g(x)=x^2-4x+3$												
C. Quadratic function	iii. $f(x)=2x+3$												
D. Cubic function	iv. $h(x)=x^3-2x^2-x+2h(x)$												
	a) A-iii, B-i, C-ii, D-iv	b) A- iii, B-iv, C-i, D-ii	c) A-i, B-ii, C-iii, D-iv	d) A-iii, B-ii, C-i, D-iv	Answer a								
48	<p>Which one of the following statements is not correct in the context of Venn diagram method? A: It is a method of testing the validity of arguments. B: It represents both the premises of a syllogism in one diagram. C: It requires two overlapping circles for the two premises of a standard-form categorical syllogism D: It can be used to represent classes as well as propositions</p>				Answer option (a,b,c or d)								
	a) A & B	b) A, B & D	c) A, B & C	d) Only C	Answer d								
49	<p>Two statements are given- one labeled Assertion (A) and the other labeled Justification (B).</p>				Answer option								

	Select the correct answer to these questions from the codes (a), (b), (c) and (d) as given below. Assertion A: Cube can be obtained by extruding a square. Justification B: Cube has 8 vertices.				(a,b,c or d)
	a) Both A & B is true	b) Both A & B is false	c) A is true and B is correct explanation of A	d) A is true but B is not correct explanation of A	Answer d
50	In an examination, the average marks of 4 girls and 6 boys are 24. Each of the girls has the same marks while each of the boys has the same marks. If the marks of any girl is at most double the marks of any boy, but not less than the marks of any boy, then the number of possible distinct integer values of the total marks of 2 girls and 6 boys is -				Answer option (a,b,c or d)
	a) 90	b) 92	c) 94	d) 84	Answer d
51	In a frequency distribution, the difference between the highest and lowest values is called?				Answer option (a,b,c or d)
	a) Mean	b) Range	c) Mode	d) Frequency	Answer b
52	Type Questions here for matching pairs:				Answer option (a,b,c or d)
	A. Skewness	i. measures the degree of peakedness and flatness of the distribution			
	B. Kurtosis	ii. measures the degree of asymmetry of the distribution			
	C. Variance	iii. measure of the dispersion or spread of a dataset			
	D. Covariance	iv. measure of the relationship between two random variables			
	a) A-ii, B-i, C-iii, D-iv	b) A-i, B-ii, C-iii, D-iv	c) A-ii, B-i, C-iv, D-iii	d) A-iv, B-iii, C-ii, D-i	Answer a
53	Read the following sentences carefully and answer True or False: A: The probability of an event always lies between 0 and 1. B: If two events are independent, the occurrence of one event does not affect the probability of the other event. C: The probability of an event always remains the same regardless of the number of trials conducted.				Answer option (a,b,c or d)
	a) All are true	b) All are false	c) Only A is true	d) A & B is true	Answer d
54	Two statements are given- one labeled Assertion (A) and the other labeled Justification (B). Select the correct answer to these questions from the codes (a), (b), (c) and (d) as given below. A: Assertion - In stratified sampling, the population is divided into mutually exclusive groups called strata. R: Reason - Stratified sampling ensures that each stratum is represented proportionally in the sample.				Answer option (a,b,c or d)
	a) Both A and R are true and R is	b) Both A and R are true and R is NOT the	c) A is true but R is false	d) A is false but R is true	Answer a

	the correct explanation of A	correct explanation of A			
55	Which of the following measures is used to describe the spread or dispersion of a dataset?				Answer option (a,b,c or d)
	a) median	b) standard deviation	c) mean	d) mode	Answer b
56	In analysis of variance (ANOVA), what does the F-test evaluate?				Answer option (a,b,c or d)
	a) The difference between sample means	b) The variability within groups compared to the variability between groups	c) The presence of outliers in the data	d) The shape of the distribution	Answer b
57	Match the given pairs:				Answer option (a,b,c or d)
	A. Primary data source		i. Individual respondents		
	B. Non probability		ii. Stratified Sampling		
	C. Secondary data source		iii. Census report		
	D. Probability		iv. Quota Sampling		
	a) A-i, B-iv, C-iii, D-ii	b) A-i, B-ii, C-iii, D-iv	c) A-i, B-iv, C-iii, D-ii	d) A-ii, B-iv, C-iii, D-i	Answer a
58	$E(X) = \lambda$ is used for which distribution?				Answer option (a,b,c or d)
	a) Poisson's distribution	b) Binomial Distribution	c) Bernoulli's distribution	d) Laplace distribution	Answer a
59	Read the following assertion and reason, answer accordingly A: Assertion - Type I error occurs when the null hypothesis is incorrectly rejected. R: Reason - Type I error is the probability of rejecting the null hypothesis when it is actually true.				Answer option (a,b,c or d)
	a) Both A and R are true and R is the correct explanation of A.	b) Both A and R are true and R is NOT the correct explanation of A.	c) A is true but R is false	d) A is false but R is true	Answer b
60	Find the mode of the call received on 7 consecutive day 11,13, 13, 17, 19, 23, 25				Answer option (a,b,c or d)
	a) 25	b) 13	c) 11	d)17	Answer b

61	Nowadays Vishing has become a criminal practice of using social engineering over which of the following?				Answer option (a,b,c or d)
	a) Social networking sites	b) Mobile Phones	c) E-mails	d) Cyber cafés	Answer b
62	Match the following and answer the correct codes.				Answer option (a,b,c or d)
	A. Google		i. John McCarthy		
	B. Father of Computer		ii. Bill Gates and Paul Allen		
	C. Artificial Intelligence		iii. Charles Babbage		
	D. Microsoft		iv. Larry Page and Sergey Brin		
	a) A-i, B-iii, C-ii, D-iv	b) A-iv, B-iii, C-i, D-ii	c) A-i, B-iii, C-iv, D-ii	d) A-ii, B-iii, C-i, D-iv	Answer b
63	There are many application software packages available at present. Which of the following is an application software package? A. Redhat Linux B. Adobe PageMaker C. Open Office				Answer option (a,b,c or d)
	a) A & B	b) B & C	c) Only B	d) Only C	Answer b
64	Read the following assertion and reason, answer accordingly Assertion A: Binary code is the fundamental language used by computers to represent and process data. Reason R: Computers understand and manipulate only alphanumeric data.				Answer option (a,b,c or d)
	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) A is false but R is true	Answer c
65	Which of the following is an advantage of using Ring network topology?				Answer option (a,b,c or d)
	a) Troubleshooting is easy	b) Failure of one computer has no effect on others	c) Network is not affected by high traffic	d) All of the options	Answer c
66	Which of the following computer memory is both static and nonvolatile?				Answer option (a,b,c or d)
	a) RAM	b) Cache Memory	c) ROM	d) Hard Disk	Answer c
67	Match the following				Answer option (a,b,c or d)
	A. Python		i. System and application software development		
	B. C++		ii. Web page structure and content		

	C. SQL	iii. Data manipulation and querying in databases			
	D. HTML	iv. General-purpose programming with a focus on readability and simplicity.			
	a) A-i, B-ii, C-iv, D-iii	b) A-iv, B-i, C-ii, D-iii	c) A-i, B-iv, C-iii, D-ii	d) A-iv, B-i, C-iii, D-ii	Answer d
68	What is the full form of ASCII?				Answer option (a,b,c or d)
	a) Asian Standard Code for Information Interchange	b) American Standard Code for Intelligence Interchange	c) American Suitable Code for Intelligence Interchange	d) American Standard Code for Information Interchange	Answer d
69	<p>Two statements are given- one labeled Assertion (A) and the other labeled Reason (R).            Select the correct answer to these questions from the codes (a), (b), (c) and (d) as given below.</p> <p>Assertion A: The CPU (Central Processing Unit) is considered the brain of the computer.            Reason R: The CPU performs arithmetic and logical operations and controls the execution of instructions.</p>				Answer option (a,b,c or d)
	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) A is false but R is true.	Answer a
70	What would be the number of bytes, transferred at the rate of 1 Kilobit per second?				Answer option (a,b,c or d)
	a) 100	b) 108	c) 125	d) 140	Answer c
71	Fossils are most commonly found in which type of rock?				Answer option (a,b,c or d)
	a) igneous	b) metamorphic	c) sedimentary	d) none of these	Answer c
72	Match the pairs:				Answer option (a,b,c or d)
	A. Karst Topography	i. Ox-bow lake			
	B. Glacial Topography	ii. Stalagmites			
	C. Fluvial landform	iii. Moraine			
	D. Aeolian landform	iv. Loess			
	a) A-ii, B-i, C-iii, D-iv	b) A-iii, B-ii, C-i, D-iv	c) A-ii, B-iii, C-i, D-iv	d) A-ii, B-iii, C-iv, D-i	Answer b
73	Read the sentences below and answer True or False A. The Richter scale measures the size of ocean waves during a tsunami.				Answer option

	B. The Richter scale measures the magnitude of earthquake during a tsunami. C. The Mercalli scale measures the intensity of earthquake during a tsunami. D. The Mercalli scale measures the intensity of oceanic current during a tsunami.			(a,b,c or d)	
	a) A & D are true	b) B & C are true	c) None is True	d) All are True	Answer b
74	Read the following statements and answer appropriately Assertion A: The Grand Canyon in the United States was primarily formed by erosion from wind. Reason R: Canyons are generally formed in humid region				Answer option (a,b,c or d)
	a) Both A & R is false	b) Both A and R are true and R is the correct explanation of A.	c) Both A and R are true but R is not the correct explanation of A.	d) A is true but R is false	Answer d
75	Which one of the following types of sea floor sediments includes calcareous and siliceous oozes?				Answer option (a,b,c or d)
	a) Terrigenous	b) Fluvial	c) Biogenous	d) Hydrogenous	Answer c
76	Which of the following features is NOT commonly associated with convergent plate boundaries?				Answer option (a,b,c or d)
	a) volcanoes	b) mountain ranges	c) rift valleys	d) earthquakes	Answer c
77	Match the layers of the atmosphere with their correct positions:				Answer option (a,b,c or d)
	A. Exosphere	i. Layer closest to Earth's surface			
	B. Stratosphere	ii. Layer containing the ozone layer			
	C. Troposphere	iii. Layer where meteors burn up			
	D. Mesosphere	iv. Layer containing satellites			
	a) A-iv, B-ii, C-i, D-iii	b) A-iv, B-i, C-ii, D-iii	c) A-iv, B-ii, C-iii, D-i	d) A-i, B-ii, C-iii, D-iv	Answer a
78	Determine whether the following statements are true or false A) The Earth's inner core is composed of liquid iron and nickel. B) The Mohs scale is used to measure the hardness of minerals. C) The Coriolis effect is caused by the rotation of the Earth. D) Pangea is the name of the supercontinent that existed around 200 million years ago.				Answer option (a,b,c or d)
	a) All are true	b) All are false	c) only C & D is true	d) only A& B is true	Answer a
79	Read the assertion given as A and justification given as B and answer using the correct codes. A: Assertion - Geodesy is the scientific discipline that deals with the measurement and representation of the Earth,				Answer option (a,b,c or d)

	B: Justification - Geodesy primarily focuses on the study of weather patterns and atmospheric phenomena.				
	a) Both A & B are true, B is the correct justification of A	b) A is true but B is false	c) Both A & B is true	d) Both A & B is false	Answer b
80	Which type of volcano has the steepest slopes and is composed of alternating layers of ash and lava?				Answer option (a,b,c or d)
	a) Shield volcano	b) Cinder cone volcano	c) Stratovolcano	d) Caldera volcano	Answer c
81	Which of the following techniques can be used to separate cream from milk?				Answer option (a,b,c or d)
	a) Filtration	b) Distillation	c) Centrifugation	d) Chromatography	Answer c
82	Match the pairs:				Answer option (a,b,c or d)
	A. Phrenology	i. study of soil			
	B. Astronomy	ii. study of physical properties and behavior of celestial bodies			
	C. Pedology	iii. study of the mental faculties of the brain including emotions			
	D. Astrophysics	iv. study of positions and movements of stars and planets			
	a) A-iv, B-iii, C-i, D-ii	b) A-iii, B-iv, C-i, D-ii	c) A-iii, B-ii, C-i, D-iv	d) A-iv, B-iii, C-ii, D-i	Answer b
83	Read the statements given and answer whether it's True or False  A. Acceleration is defined as the rate of change of velocity over time. B. Inertia is a force that causes objects to move.				Answer option (a,b,c or d)
	a) A is true but B is false	b) Both A & B is true	c) A is false but B is true	d) Both A & B is false	Answer a
84	Two statements are given- one labeled Assertion (A) and the other labeled Justification (B). Select the correct answer Assertion A: Water always boils at exactly 100 Degree Celsius. Justification B: The boiling point of water can vary depending on factors such as altitude and atmospheric pressure.				Answer option (a,b,c or d)
	a) A is true and B is the correct justification	b) A is false but B is true	c) A & B both are true	d) A & B both are false	Answer b
85	How do neurons communicate with one another?				Answer option (a,b,c or d)
	a) Electrically	b) Chemically	c) Through weak, radio-	d) Both a & b	Answer d



			wave-like impulses		
86	There are three types of heterotrophs. Which of the following is not one of them?				Answer option (a,b,c or d)
	a) Omnivores	b) Herbivores	c) Consumers	d) Carnivores	Answer c
87	Match the pairs:				Answer option (a,b,c or d)
	A. Baking Soda		i. Calcium Hypochlorite		
	B. Bleaching powder		ii. Sodium Chloride		
	C. Caustic Soda		iii. Sodium hydrogen carbonate		
	D. Common Salt		iv. Sodium hydroxide		
	a) A-iii, B-i, C-ii, D-iv	b) A-iv, B-i, C-iii, D-ii	c) A-i, B-ii, C-iii, D-iv	d) A-iii, B-i, C-iv, D-ii	Answer d
88	Read the statements given and answer whether it's True or False A. Photosynthesis occurs in plant cells. B. Yeast is multicellular organism. C. All fungi are unicellular organisms. D. Mushrooms are multicellular organism.				Answer option (a,b,c or d)
	a) All are True	b) All are false	c) Only A & D is true	d) Only B & C is true	Answer c
89	Two statements are given- one labeled Assertion (A) and the other labeled Reason (R). Select the correct answer Assertion A: Oxygen is necessary for combustion to occur. Reason R: Combustion is a chemical reaction that involves the rapid combination of a fuel with oxygen.				Answer option (a,b,c or d)
	a) Both the A and R are true, and R is the correct explanation of the A.	b) Both the A and R are true, and R is NOT the correct explanation of the A.	c) Both A & R is false	d) only A is true	Answer a
90	Which of the following intermolecular forces enables us to write on the blackboard with a chalk?				Answer option (a,b,c or d)
	a) Cohesive force	b) Adhesive force	c) Both a & b	d) None	Answer b
91	Anuradha Sawhney is well known for her work in which of the following fields?				Answer option (a,b,c or d)
	a) Animal Rights	b) Rain water Harvesting	c) Human Rights	d) Micro Finance	Answer a
92	Match the pairs:				Answer option (a,b,c or d)
	A. Kyoto Protocol		i. Sustainable development		
	B. Johannesburg Summit		ii. Climate change mitigation		

	C. SAARC	iii. Agency focused on improving the well-being of children worldwide											
	D. UNICEF	iv. Promote regional cooperation and development											
	a) A-i, B-ii, C-iv, D-iii	b) A-iii, B-ii, C-iv, D-i	c) A-ii, B-i, C-iv, D-iii	d) A-i, B-ii, C-iii, D-iv	Answer c								
93	<p>Read the statements given and answer whether it's True or False:</p> <p>A. Eutrophication leads to increased algae growth and depletion of oxygen levels.</p> <p>B. Eutrophication is primarily caused by a shortage of nutrients in water bodies, leading to decreased plant growth and biodiversity.</p> <p>C. Eutrophication is a natural process.</p>				Answer option (a,b,c or d)								
	a) All the options are true	b) Only B is true	c) Only A & C is true	d) A & B is false	Answer c								
94	<p>Two statements are given- one labeled Assertion (A) and the other labeled Reason (R).</p> <p>Select the correct answer</p> <p>A: Assertion - Thermal pollution is a problem for marine organisms.</p> <p>B: Justification - Marine organisms live in narrow temperature range and thermal pollution may breakdown their metabolism.</p>				Answer option (a,b,c or d)								
	a) Both A and B are true, and B is the correct explanation of A.	b) Both A and B are true and B is NOT the correct explanation of A.	c) Both A & B is false	d) Only A is true	Answer a								
95	Which among the following is the major cause of acid rain?				Answer option (a,b,c or d)								
	a) Carbon monoxide	b) Oxygen	c) Nitrogen dioxide	d) Carbon dioxide	Answer c								
96	Which country is home to the largest portion of the Amazon rainforest?				Answer option (a,b,c or d)								
	a) Venezuela	b) Colombia	c) Peru	d) Brazil	Answer d								
97	<p>Match the pairs:</p> <table border="1" style="width: 100%;"> <tr> <td>A. hot, dry summers and mild, wet winters</td> <td>i. Tropical Rainforest (Af)</td> </tr> <tr> <td>B. warm temperatures year-round and abundant rainfall</td> <td>ii. Tropical Savanna climate (Aw)</td> </tr> <tr> <td>C. Warm temperatures year-round with distinct wet and dry seasons</td> <td>iii. Mediterranean (Csa)</td> </tr> <tr> <td>D. Cold temperatures year-round with heavy snowfall</td> <td>iv. Tundra</td> </tr> </table>				A. hot, dry summers and mild, wet winters	i. Tropical Rainforest (Af)	B. warm temperatures year-round and abundant rainfall	ii. Tropical Savanna climate (Aw)	C. Warm temperatures year-round with distinct wet and dry seasons	iii. Mediterranean (Csa)	D. Cold temperatures year-round with heavy snowfall	iv. Tundra	Answer option (a,b,c or d)
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98	Read the statements about Coral Reefs below and answer correctly:				Answer option								

	<p>A. Coral reefs are diverse underwater ecosystems built by colonies of tiny animals called coral polyps.</p> <p>B. Coral reefs are found only in shallow, warm waters in tropical and subtropical regions.</p> <p>C. Calcium carbonate skeletons form the structure of the reef.</p> <p>D. Coral reefs are found in freshwater ecosystems.</p>				(a,b,c or d)
	a) All are true except D	b) All are true except B	c) All are false except A	d) All are false except B	Answer a
99	<p>Two statements are given- one labeled Assertion (A) and the other labeled Reason (R).</p> <p>Select the correct answer</p> <p>A: Assertion - Biofuels are considered as non-renewable energy source.</p> <p>B: Justification - Biofuels are derived from materials such as industrial waste, which can be replenished through natural processes.</p>				Answer option (a,b,c or d)
	a) Both the A and B are true, and B is the correct explanation of the A.	b) Both the A and B are true, and B is NOT the correct explanation of the A.	c) Only A is true	d) Both A & B are false.	Answer d
100	Xerophytes can tolerate and stand against				Answer option (a,b,c or d)
	a) severe cold	b) drought conditions	c) high temperature	d) humidity	Answer b