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## CUET Model Test Paper [PG Diploma]

Direction (1-5): Read the following passage carefully and choose the most appropriate answer to the question out of the four alternatives.

The automotive industry is quietly but resolutely preparing for the electric vehicle (EV) revolution. No less than 22 original equipment manufacturers (OEM) for automobiles have registered themselves as EV manufacturers in the last three years and they plan to manufacture 77 EV variants. At the same time, we have seen a lot of debate about India's EV vision. The dominant belief is that India will need both internal combustion and EV technologies to survive and coexist. There are many reasons for this belief to have taken shape; but this piece aims to focus on the issue of batteries.
Whether it is pure EVs or hybrids, the one thing common among them is the battery-what really makes the vehicles electric. The lithium-ion batteries, based on various chemistries of lithium, are widely considered to be a long-term constituent of all EVs. However, the EV vision often assumes that batteries will be available in plenty at unprecedented low-price points, and this hypothesis in turn assumes that the basic constituents of lithium-ion cells will always be available in surplus. Often, the unappreciated risk to any growth story is the strain on resources that are critical for driving growth. A recent A T Kearney study, in fact, firmly establishes that the supply of core elements that make up the lithium-ion batteries, including lithium and cobalt, will increasingly become a cause of concern. While the global supply just does not seem sufficient for cobalt, the ability to mine and extract lithium could prove to be a bottleneck.
Not surprisingly, the demand for, and prices of, cobalt have increased steadily since 2016, from less than $\$ 30,000$ per metric ton (MT) to $\$ 60,000 / \mathrm{MT}$. They are now breaching the $\$ 90,000 / \mathrm{MT}$ mark. In addition, reports of electronic OEMs attempting to procure cobalt directly from miners indicate a looming supply shortage. Lithium, on the other hand, has demonstrated a similar trend-while prices only doubled from around $\$ 4,000 / \mathrm{MT}$ to $\$ 8,000 / \mathrm{MT}$ between 2011 and 2016 , they have shot up spectacularly to higher than $\$ 16,000 / \mathrm{MT}$ levels between 2016 and early 2018. These trends pose a formidable challenge to India as our country depends largely on global markets for supply of these metals. Given the limited availability, it becomes important to look at newer energy storage technologies that can find a use in mobility applications. This could mean non-cobalt-based lithium chemistries or new storage technologies. Also, lithium batteries still have usable life left after reaching the end of mobility applications, which means they can potentially find a second life when they can be put to stationary applications.

Planning for reuse of "end-of-life" batteries should, in fact, be a part of any electric mobility business case. Even after second use, batteries will finally come to the end of their useful life. What happens when the internal chemistry exhausts all its cycles? Battery recycling, especially for lithium batteries, is still at an early stage globally. Any economy that aspires to push automobile electrification, among other uses of batteries, will need to think about the economics of end-of-life batteries. In India, the traditional lead-acid battery business successfully created a parallel industry of battery breaking units and recycling. Operating these was relatively easier; but handling lithium and its chemistries is a different ball game altogether. Globally, however, there are some signs of progress in lithium recycling processes. Belgian recycling group Unicore today operates a dedicated recycling facility with a capacity of 7,000 tons per year-equivalent to $35,000 \mathrm{EV}$ batteries. US market leader Retriev, which operates three sites, and Tesla's Gigafactory, will have on-site recycling and refurbishment facilities. What we need now is to step back and think about creating the ecosystem of enabling businesses that focus on four key factors necessary for EV growth: raw material supply, reuse, recycling and resale.

Q1. Why is there a lot of debate about India's EV vision?
(a) A section of the society is against the adoption of EV technology.
(b) There are doubts about the claims of vehicular pollution leading to global climate change.
(c) India is not prepared to make a switch to EV technology at present and needs to employ both EV and the present technology together.
(d) The number of original equipment manufacturers in India are too less to adopt this technology sustainably.

Q2. Which of the following is/are synonyms of dominant?
I. Authoritative
II. Superior
III. Alternative
IV. Heritable
(a) Only II
(b) Only I and II
(c) Only II, III and IV
(d) Only I, II and III



Q3. What is the major issue with respect to the use of lithium-ion batteries?
(a) The batteries would be available in plenty in the times to come and there would thus be a drop in prices due to increase in supply.
(b) The basic materials to build the batteries would have to be mined from the Arctic.
(c) It may not be feasible to procure the batteries owing to Intellectual Property Rights related issues.
(d) The supply of the basic materials that make up the battery are expected to drop in the future, leading to an increase in prices.

Q4. As per paragraph 3, what are some ways the limited availability of these batteries can be managed?
(a) Scrap the plan for using EV vehicles in India.
(b) Look for other technologies that can be used as a substitute.
(c) Make a plan for sustainable disposal of used batteries.
(d) We should start mining for these metals

Q5. Which of the following is/are true as per paragraph 4?
I. Recycling the lead-acid battery is similar to recycling lithium ones.
II. Re-using batteries is a fundamental part of the mobility business.
III. Recycling lithium batteries is still at an early stage globally.
(a) Only III
(b) Only I and II
(c) Only II and III
(d) Only I and III

Directions (6-8): In the following question, some part of the sentence may have errors. Find out which part of the sentence has an error and select the appropriate option. If a sentence is free from error, select 'No Error'.

Q6. The boss reminded them of the old saying (A)/ that honesty was the best policy (B)/ and told them that they had better be honest in their work. (C)/ No error (D)
(a) A
(b) B
(c) C
(d) D

Q7. We swam up to the drowning man, caught hold of his clothes (A)/ before he could go down again (B)/ and pulled him out, safe to the shore. (C)/ No error (D)
(a) A
(b) B
(c) C
(d) D


Q8. Meena was so tired (A)/ that she could not hardly (B)/ talk to the guests for a few minutes. (C)/ No error (D)
(a) A
(b) B
(c) C
(d) D

Directions (9-11): Four alternatives are given for the idiom/phrases underlined in the sentence. Choose the alternative which best expresses the meaning of the idiom/phrase and mark it in the Answer-Sheet.

Q9. Get into a soup
(a) To make things difficult
(b) To be worrisome
(c) To be familiar of
(d) To get an advantage

Q10.Haul over the coals
(a) Talk irrelevantly
(b) Laugh heartily
(c) To scold
(d) Without hope

Q11.To carry the day
(a) To run away
(b) To die while in service
(c) To take an unimportant task
(d) To succeed

Directions (12-14): In the following question, out of the four alternatives, choose the one which can be substituted for the given words/sentence.

Q12. A word which can be interpreted in any way
(a) confusing
(b) misnomer
(c) ambiguous
(d) precise

Q13. A group of persons united by common interests
(a) society
(b) class
(c) clique
(d) coterie


Q14. A person who is inexperienced and easily deceived
(a) fool
(b) blackthorn
(c) immature
(d) greenhorn

Directions (15-17): In the following question, a sentence has been given in Active/Passive Voice. Out of the four alternatives suggested, select the one which best expresses the same sentence in Passive/Active Voice.

Q15. The customers should adhere to all the term and conditions.
(a) All the terms and conditions adhered to the customers.
(b) All the terms and conditions should be adhered to by all the customers.
(c) All the terms and conditions should be adhered to by the customers.
(d) All should adhere to the terms and conditions of the customers.

Q16. His assistant charged him with various wrongdoings.
(a) They accused charged with various wrongdoings.
(b) It was charged by his assistant that he had done various wrongdoings.
(c) His assistant charged that he had done various wrongdoings.
(d) He was charged with various wrongdoings by his assistant.

Q17. Has someone made all the necessary arrangements?
(a) Has all the necessary arrangements been made by someone?
(b) Have the necessary arrangements been all made by someone?
(c) All the necessary arrangements have been made by some?
(d) Have all the necessary arrangements been made by someone?

Directions (18-20): In the following questions, a sentence / a part of the sentence is bold. Below are given alternatives to the bold part which may improve the sentence. Choose the correct alternative. In case no improvement is required, choose "No Improvement" option.

Q18. The Portsmouth summer art festival is the only place in New Hampshire where we are fortunately see such diverse tales all in one place.
(a) We are able to fortunately see
(b) We are fortunate to see
(c) We are fortunate seeing
(d) No improvement.

Q19. He asked me that how I got time to write all these poems?
(a) that how did I get
(b) would have been
(c) will have
(d) No improvement $\square$ वd


Q20. Sumit would have been looked smart in traditional clothes.
(a) was looked
(b) would be looked
(c) would have looked
(d) No improvement

Direction (21-23): Choose among the following that best expresses the meaning of the given word.

Q21. GAMBOL
(a) Brittle
(b) Frisk
(c) Shallow
(d) Work

Q22. JANGLE
(a) Quite
(b) Flatter
(c) Clash
(d) Spongy

Q23. DIDACTIC
(a) Graceful
(b) Instructive
(c) Qualified
(d) Vindictive

Direction (24-25): In the following questions, out of the four alternatives, choose the word which is opposite in meaning to the given word and click the button corresponding to it.

Q24. BLAZON
(a) Declare
(b) Deny
(c) Homely
(d) Pleasing

Q25. NATTY
(a) Spruce
(b) Snappy
(c) Messy
(d) Dashing

Q26.Queries in Access can be used as:
(a) View, change and analyze data in different ways

(b) A source of records for forms and reports
(c) to access internet
(d) Both (a) and (b)

Q27.Digital computers use a $\qquad$ system to encode data and programs.
(a) Semiconductor
(b) Decimal
(c) Binary
(d) RAM

Q28.0n which of the following models does the working of Bluetooth devices depend?
(a) Client/server
(b) Peer-to-peer
(c) Master/slave
(d) Analog/digital

Q29.Which of the following is a video format?
(a) JPEG
(b) GIF
(c) FLV
(d) PNG

Q30.Commands at the top of a screen such as File-Edit, Format and Tools to operate and change things are incorporated in $\qquad$ .
(a) Menu bar
(b) Tool bar
(c) User friendly
(d) Word processor

Q31.What is the default the cell content alignment in Excel?
(a) left aligned
(b) centrally aligned
(c) text left aligned and numbers right aligned
(d) text right aligned and numbers left aligned

Q32.Which of the following is any malicious computer program which is used to hack into a computer by misleading users of its true intent?
(a) Worm
(b) Spyware
(c) Trojan horse
(d) Keylogger

(c) Bug
(d) Petabyte

Q34.Which among the following is a language directly understood by CPU?
(a) Machine
(b) C
(c) C++
(d) Java

Q35.Which of the following is the type of software that controls the internal operations in the computer and controls how the computer works with all its parts?
(a) Shareware
(b) Public domain software
(c) Application software
(d) Operating system software

Q36.Which process check to ensure the components of the computer are operating and connected properly?
(a) Booting
(b) Processing
(c) Saving
(d) Editing

Q37.Alt+F4 is used for:
(a) Close the currently active program
(b) Undo last action
(c) Insert hyperlink for selected text
(d) Redo last action

Q38.To select a column the easiest method is to?
(a) drag from the top cell in the column to the last cell in the column
(b) double click any cell in the column
(c) click the row heading
(d) click the column heading

Q39.What is a handout master in PowerPoint?
(a) A terminal to establish a connection
(b) An animation tool for handy and swift actions
(c) A convertor of .ppt file to .doc
(d) Printout of slide representations from your presentation

Q40. Which of the following number system has base-16?
(a) Unary number system
(b) Binary number system
(c) Octal number system
(d) Hexadecimal Number System

Q41.What is a note or an annotation that an author or reviewer adds to a document?
(a) Comment
(b) Caption
(c) Footer
(d) Header

Q42.What type of technology captures spoken words and forms them into sentences that a computer can understand and react to?
(a) Language translators
(b) Automatic speech recognition
(c) Interpreters
(d) Dialogue decipher

Q43.Codes consisting of varying widths and spacing of parallel lines, which may be optically read, is known as $\qquad$ _.
(a) mnemonic
(b) Bar code
(c) Decoder
(d) All of the above

Q44.What is that computer program called which translates one program instruction at a time into machine language?
(a) Compiler
(b) CPU
(c) Assembler
(d) Interpreter

Q45.What is the software frequently utilized by end users called (like Word, PowerPoint)?
(a) System Software
(b) System Appliances
(c) Application Software
(d) Operating System

Q46. A series is given with one term missing. Choose the correct alternative from the given ones that will complete the series.
BCF, CFI, DIL, ?
(a) ELO
(b) CJM
(c) EML
(d) EMI


Q47. A prime number between 10 to 50 remains unchanged if its digits are reversed. Then the square of such a number is
(a) 121
(b) 484
(c) 1089
(d) 1936

Q48. Gopal is older than Mohan but younger than Ram. Mohan is older than Sohan but younger than Ram, Who is the oldest.
(a) Gopal
(b) Mohan
(c) Ram
(d) Sohan

Q49. From the given alternative words, select the word which cannot be formed using the letters of the given word
ENDEAVOUR
(a) DEVOUR
(b) ROUND
(c) DROWN
(d) DROVE

Direction (50-51): In the question two statements are given, followed by two conclusions, I and II. You have to consider the statements to be true even if it seems to be at variance from commonly known facts. You have to decide which of the given conclusions, if any, follows from the given statements.

Q50. Statement I: Some pizzas are pancakes
Statement II: All bread are pizzas
Conclusion I: All pancakes are bread
Conclusion II: Some bread are pizzas
(a) Only conclusion I follows
(b) Only conclusion II follows
(c) Both conclusions I and II follow
(d) Neither conclusion I nor conclusion II follows

Q51. Statements:

1. All elephants are men
2. All men are socks

Conclusions

1. Some socks are elephants
2. All elephants are socks
(a) only conclusion I follow
(b) Only conclusion II follow
(c) Both follow

(d) Neither follow

Q52. Select the related number from the given alternatives.
42:56::110:?
(a) 18
(b) 132
(c) 136
(d) 140

Q53. In the following question, select the missing number from the given series.
93, 100, 107, 114, ?, 128
(a) 120
(b) 121
(c) 123
(d) 122

Q54. The following equation is incorrect. Which two signs should be interchanged to correct the equation?
$24 \div 5 \times 8-10+14=34$
(a) $x$ and -
(b) $\div$ and $x$
(c) $\div$ and -
(d) - and +

Q55. A starts from his home. He pushes his cycle 1 km East, then he turns North and walks 4 km , then he turns West and walks 9 km , then he turns to his left and walks 4 km . Where is he with respect to his home?
(a) 8 km West
(b) 10 km West
(c) 8 km East
(d) 10 km East

Q56. A series is given with one term missing. Select the correct alternative from the given ones that will complete the series.
CAP, AXL, YUH, WRD, ?
(a) VOA
(b) UPB
(c) VPB
(d) UOZ

Q57. In the following question, select the missing number from the given series. 29, 59, 122, 253, 522 ,?
(a) 1044
(b) 1069
(c) 1582
(d) 2072

Q58. Statements: Water supply in ward A and B of the city will be affected by about $50 \%$ on Friday because repairing work of the main lines is to be carried out

## Conclusion:

(i) The residents in these wards should economise on water on Friday.
(ii) The residents in these ward should store some water on previous day
(a) Only I follow
(b) Only II follows
(c) Both I and II follow
(d) Neither I nor II follows

Q59. Two statements with two conclusions are given followed by four alternatives. Select the one which is most appropriate

## Statement:

1. Bureaucrats marry only intelligent girls
2. Tayra is very intelligent

## Conclusions -

(i) Tanya will marry a bureaucrat
(ii) Tanya will not marry a bureaucrat
(a) Only I
(b) Only II
(c) Either I or II
(d) Neither I nor II

Q60. How many 4s immediately preceded by 5 but not immediately followed by 7 , we there in the following series of the number?
54874954774554654754733247
(a) 2
(b) 3
(c) 4
(d) 5

Q61. If you are twelfth in a queue from starting as well as from end, how many people are there in the queue?
(a) Twelve
(b) Twenty two
(c) Twenty three
(d) Twenty

Directions (62-66): Study the following information carefully and answer the questions that follow:
Eight students i.e, P, Q, R, S, T, U, V and X are sitting in two rows with 4 students in each row. Student sitting in row 1 face south and those sitting in row to faces North. P, Q, R, S sit in Row 1 while others in row 2 . T sits third to the right of the one that faces $P$. $U$ and $V$ sit together. $X$ faces the one that sits third to the right of S . R six immediate right of the one that faces T . V does not sit next to X .

Q62. Who sits third to the right of $S$ ?
(a) X
(b) P
(c) Q
(d) R

Q63. Who sits to the left extreme in Row 2?
(a) X
(b) U
(c) V
(d) Q

Q64. Who sits opposite to S ?
(a) X
(b) U
(c) V
(d) T

Q65. P is diagonally opposite to-
(a) X
(b) U
(c) V
(d) T

Q66. X is diagonally opposite to-
(a) $P$
(b) Q
(c) R
(d) S

Q67. The HCF of 268 and 469 is
(a) 67
(b) 53
(c) 73
(d) 59

Q68. One fifth of a number is 4 less than one-fourth of number preceding it. Find the original number.
(a) 84
(b) 85
(c) 57
(d) 58

Q69. Atul can cycle at 8 km an hour and walk at 5 km an hour. To cover a distance of 61 km , he takes 9.5 hrs. how many kilometers did he cover on cycle?
(a) 45
(b) 30
(c) 36
(d) 48

Q70. The LCM of 228 and 399 is:
(a) 2105
(b) 1877
(c) 1744
(d) 1596

Q71. An article is sold for Rs. 657.90 after successive discounts of $15 \%$ and $10 \%$. What is the marked price of the article?
(a) Rs. 920
(b) Rs. 860
(c) Rs. 900
(d) Rs. 880

Q72. The difference between the compound interest and simple interest on Rs. x at $8.5 \%$ per annum for 2 years is Rs. 28.90. The value of $x$ is:
(a) 3500
(b) 3800
(c) 4000
(d) 4500

Q73. The distance between two points A and B is covered in $5 \frac{1}{2}$ hours at a speed of $50 \mathrm{~km} / \mathrm{hr}$. If the speed in increased by $5 \mathrm{~km} / \mathrm{hr}$, how much time would be saved?
(a) 5 minutes
(b) 15 minutes
(c) 50 minutes
(d) 30 minutes

Q74. A wire is in the shape of a rectangle. Its length is 42.7 m and breadth is 21.8 m . If the same wire is rebent in the shape of a square, what will be the measure of the side of the square?
(a) 16.125
(b) 32.25
(c) 11.35

(d) 22.70

## Q75.

What is the value of $\sqrt{13-4 \sqrt{10}}$ ?
(a) $\sqrt{8}-\sqrt{5}$
(b) $\sqrt{8}+\sqrt{5}$
(c) $\sqrt{6}-\sqrt{3}$
(d) $\sqrt{6}+\sqrt{3}$

Q76. Aryabhatta and Kalidasa were in the court of which Gupta Emperor?
(a) Kumara Gupta I
(b) Chandra Gupta II
(c) Samudra Gupta
(d) Skanda Gupta

Q77. Rainfall caused by intense evaporation in equatorial areas is called $\qquad$ .
(a) Orographic rainfall
(b) Cyclonic rainfall
(c) Frontal rainfall
(d) Convectional rainfall

Q78. Which one of the following is the correct sequence of the victories of Babur?
(a) Panipat, Chanderi, Ghaghara and Khanwah
(b) Panipat, Ghaghara, Khanwah and Chanderi
(c) Panipat, Khanwah, Chanderi and Ghaghara
(d) Ghaghara, Panipat, Khanwah and Chanderi

Q79.During the Mughal period Polaj was the
(a) Land annually cultivated
(b) Land left fallow
(c) Land uncultivated
(d) Barren land

Q80. Consider the following statements

1. When the Sun, the Earth and the Moon are aligned in a straight line, the position is referred to as SYZYGY.
2. When the Sun and Moon are in straight line, it results in Spring Tide.
3. When the Sun and moon are in right angle, it results in Neap Tide.

Which of the statements given above is/are correct?
(a) 1 and 2
(b) 2 and 3
(c) 1 and 3
(d) 1, 2 and 3

Q81. Buyer's market denotes the place where

(a) the demand exceeds the supply
(b) the supply exceeds the demand
(c) commodities are available at competitive rates
(d) the demand and supply are well balanced

Q82. Which part of Indian constitution deals with administration of Union Territories?
(a) Part VI
(b) Part VII
(c) Part VIII
(d) Part IX

Q83. Taiyuan Satellite Launch center is in which Country?
(a) Japan
(b) North Korea
(c) Indonesia
(d) China

Q84. Name of first ever orbital flight crewed entirely by tourists launched by NASA is
(a) Aspiration4
(b) Inspiration4
(c) Amusement 4
(d) Motivation4

Q85.Vande Mataram the national song was written by
(a) Bankim chandra Chatterjee
(b) Ravindra Nath Tagore
(c) Bhagat Singh
(d) Jawahar lal Nehru

Q86.Who was the last British Viceroy of India?
(a) Lord Lintithgow
(b) Lord Wavell
(c) Clement Atlee
(d) Lord Mountbatten

Q87. Which river does not form a delta?
(a) Ganga
(b) Brahmaputra
(c) Godavari
(d) Tapi

Q88. Bandhavgarh National Park is located in which State?
(a) Maharashtra
(b) Madhya Pradesh
(c) Gujarat
(d) Jharkhand


Q89.The Chief Minister of a state can be removed if


1. A no-confidence motion is passed by the legislative assembly
2. A no-confidence motion is passed by both the houses of parliament against the chief minister of state
3. A resolution is passed by two-third of the members of the legislative council or the Rajya Sabha
4. In the opinion of the Governor, there is a breakdown of constitutional machinery in the state

Choose the correct answer from the following codes:
(a) 1 and 2
(b) 2 and 3
(c) 1, 2 and 4
(d) 1 and 4

Q90. Prime Minister Narendra Modi will inaugurate a 216 -foot statue of Ramanujacharya in a sitting position in Hyderabad. The statue will be called as the $\qquad$ .
(a) Statue of Equality
(b) Statue of Unity
(c) Statue of Quality
(d) Statue of Peace

Q91. Which of the following states/UTs has declared Jerri hamlet as its first 'Milk Village'?
(a) Jammu and Kashmir
(b) Ladakh
(c) Haryana
(d) Punjab

Q92. Which Union Ministry launched the "Koyla Darpan" portal?
(a) Ministry of Steel
(b) Ministry of Coal
(c) Ministry of Power
(d) Ministry of Rural Development

Q93. Ayesha Malik became the first-ever woman judge of the Supreme Court of which country?
(a) Israel
(b) Pakistan
(c) Afghanistan
(d) Bangladesh

Q94.This tax is entirely borne by the entity it is levied upon and cannot be passed
(a) Direct tax
(b) Indirect tax
(c) Straight tax
(d) Advance tax

Q95.What was the main motive of Third Five Year Plan in India?
(a) Rural development
(b) Agriculture
(c) Financial inclusion
(d) Economic reform

Q96.At which rate, Reserve Bank of India borrows money from commercial banks?
(a) Bank Rate
(b) Repo Rate
(c) Reverse Repo Rate
(d) Statutory Liquidity Rate

Q97. Who is referred to as 'Frontier Gandhi'?
(a) Sheikh Abdullah
(b) Manilal Gandhi
(c) Khan Abdul Gaffar Khan
(d) Gopal Krishna Gokhale

Q98. Who was the first Indian Governor General of Independent India?
(a) Rajendra Prasad
(b) C. Rajagopalachari
(c) A. Kriplani
(d) Lord Mountbatten

Q99. Which is the first Indian sports establishment to gain unicorn status?
(a) Mumbai Indians
(b) Punjab Kings
(c) Rajasthan Royals
(d) Chennai Super Kings

Q100. Spituk Gustor Festival is celebrated in which of the following state/UT?
(a) Arunachal Pradesh
(b) Manipur
(c) Daman \& Diu
(d) Ladakh

## Solution

## S1. Ans.(c)

Sol. Refer to, 'At the same time, we have seen a lot of debate about India's EV vision. The dominant belief is that India will need both internal combustion and EV technologies to survive and coexist.'

## S2. Ans.(b)

Sol. Dominant: having power and influence over others.
E.g.: They are now in an even more dominant position in the market.

Both I and II are synonyms while III and IV are irrelevant.

## S3. Ans.(d)

Sol. Refer to, 'However, the EV vision often assumes that batteries will be available in plenty at unprecedented low-price points, and this hypothesis in turn assumes that the basic constituents of lithium-ion cells will always be available in surplus. Often, the unappreciated risk to any growth story is the strain on resources that are critical for driving growth. A recent A T Kearney study, in fact, firmly establishes that the supply of core elements that make up the lithium-ion batteries, including lithium and cobalt, will increasingly become a cause of concern.'

## S4. Ans.(b)

Sol. Refer to, '. Given the limited availability, it becomes important to look at newer energy storage technologies that can find a use in mobility applications. This could mean non-cobalt-based lithium chemistries or new storage technologies.'

## S5. Ans.(a)

Sol. Refer to,
I. 'In India, the traditional lead-acid battery business successfully created a parallel industry of battery breaking units and recycling. Operating these was relatively easier; but handling lithium and its chemistries is a different ball game altogether.'

## $I$ is incorrect.

II. 'Planning for reuse of "end-of-life" batteries should, in fact, be a part of any electric mobility business case'
II is incorrect as the paragraph states that it should be an integral part and not that it is.
III. 'Battery recycling, especially for lithium batteries, is still at an early stage globally.'

III is correct.
Hence, option A is correct.

## S6. Ans. (b)

Sol. All the proverbs, quotations, universal facts are written in present indefinite.

## S7. Ans.(a)

Sol. Caught hold should be replaced with got hold: to reach out for something.

## S8. Ans.(b)

Sol. "Not" should be removed as "hardly" has been used already.

S9. Ans.(a)
Sol. Get into a soup means to make things more difficult.

## S10. Ans.(c)

Sol. Haul over the coals means to scold or to speak angrily.

## S11. Ans.(d)

Sol. To carry the day means to succeed.

## S12. Ans.(c)

Sol. Ambiguous: open to more than one interpretation; not having one obvious meaning.

## S13. Ans.(d)

Sol. Coterie: a small group of people with shared interests or tastes, especially one that is exclusive of other people.

S14. Ans.(d)

## S15. Ans.(c)



S16. Ans.(d)
S17. Ans.(d)

S18. Ans.(b)
Sol. Option B is correct choice.

## S19. Ans.(a)

Sol. I got time to write all these poems is an assertive sentence
When we change an assertive into interrogative sentence we have to do the inversion and in inversion we have to bring h.v. before the subject. If h.v. is not given then we have to use do/does/did or has/have/had as per tense and number.
Option (a) is correct as it has the inversion and did is used according to the tense used in the main sentence.

## S20. Ans.(c)

Sol. Would have been - we use this structure in passive
Would have - we use this structure in active.
Sentence should be in active.
Correct statement is 'Sumit would have looked smart in traditional clothes'.

## S21. Ans.(b)

Sol. Gambol: run or jump about playfully.

## S22. Ans.(c)

Sol. Jangle: a ringing metallic sound.

## S23. Ans.(b)

Sol. Didactic: intended to teach, particularly in having moral instruction as an ulterior motive.

## S24. Ans.(b)

Sol. Blazon: display prominently or vividly.

## S25. Ans.(c)

Sol. Natty: (especially of a person or an article of clothing) smart and fashionable.

## S26. Ans.(d)

Sol. Using a query makes it easier to view, add, delete, or change data in your Access database. Some other reasons for using queries: Find specific quickly data by filtering on specific criteria (conditions), Calculate or summarize data. Automate data management tasks, such as reviewing the most current data on a recurring basis.

## S27. Ans.(c)



Sol. Digital Computers use Binary System.

## S28. Ans.(c)

Sol. The working of Bluetooth devices is based on a master/slave model. This model contains 266 devices out of which one is a master device and 255 and slave devices. Any device can be master and the master device can select up to seven slave devices and communicate with them simultaneously.

## S29. Ans.(c)

Sol. FLV (Flash Video Format), the FLV file extension is a file that uses Adobe Flash Player or Adobe Air to transmit video/audio over the internet. Flash Video has long been the standard video format used by nearly all embedded video on the internet including the videos found on YouTube, Hulu, and many more websites.

## S30. Ans.(a)

Sol. Those commands, options are available in menu bar.

## S31. Ans.(c)

Sol. Text left aligned and numbers right aligned is default alignment in

## S32. Ans.(c)

Sol. In computing, Trojan horse, or Trojan, is any malicious computer program which is used to hack into a computer by misleading users of its true intent.

## S33. Ans.(d)

Sol. Petabyte among the given options is the largest unit of storage, Nibble $=4$ Bits, Byte $=8$ Bits. 1 Petabyte = 1024 Terabyte

## S34. Ans.(a)

Sol. CPU doesn't understand the C++ language (or any high- level programming language). All the Highlevel language statements must be translated into machine code before they can be executed.

## S35. Ans.(d)

Sol. An operating system (OS) is a program or software that manages and coordinates the functions of all the components of a computer. It also acts as an interface between the user and the hardware of a computer.

## S36. Ans.(a)

Sol. Booting is a startup sequence that starts the operating system of a computer when it is turned on. A boot sequence is the initial set of operations that the computer performs when it is switched on. Every computer has a boot sequence. The average computer doesn't understand the boot sequence but is important to know for customizing and troubleshooting your computer.

## S37. Ans.(a)

S38. Ans.(d)


## S39. Ans. (d)

Sol. Handouts are documents you can print from within PowerPoint that include slide representations from your presentation -- you can opt to include as many as 9 slides on each handout page, and then the slides look more like thumbnails.

S40. And.(d)
Sol. Hexadecimal number system has base 16, Octal- Base 8, Binary- Base 2 and Decimal- Base 10

## S41. Ans.(a)

Sol. Word allows you to add comments to your document, as a separate element of the document. Comments do not interfere with the main text and appear in their own area of the document.

## S42. Ans.(b)

Sol. Automated speech recognition (ASR) is a technology that allows users of information systems to speak entries rather than punching numbers on a keypad.

## S43. Ans.(b)

Sol. A barcode is a machine-readable representation of data relating to the object to which it is attached.

## S44. Ans.(d)

Sol. Interpreter Takes Single instruction as input and Compiler Takes Entire program as input.

## S45. Ans.(c)

Sol. Application software is a program or group of programs designed for end users. An application program (app or application for short) is a computer program designed to perform a group of coordinated functions, tasks, or activities for the benefit of the user. Examples of an application include a word processor, a spreadsheet, an accounting application, a web browser etc.

## S46. Ans.(a)

Sol. BCF , CFI , DIL , ELO

## S47. Ans.(a)

Sol. $11^{2}=121$
Since, 11 is prime number and its value does not change after interchanging its digits.

## S48. Ans.(c)

Sol. Ram > Gopal > Mohan > Sohan

## S49. Ans.(c)

Sol. Clearly, there in no 'W' in question word and DROWN contains W.


## S51. Ans.(c)

Sol.

I. ㅂTㄹ
II. $\checkmark$

## S52. Ans.(b)

Sol. $\mathrm{x}^{2}-\mathrm{x} ; \mathrm{x}^{2}+\mathrm{x}$ series
$11^{2}+11=132$

S53. Ans.(b)
Sol. +7 series 121

## S54. Ans.(c)

Sol. $24 \div 5 \times 8-10+14=34$
Interchanging - and $\div \&$ we get $24-5 \times 8 \div 10+14=34$

## S55. Ans.(a)

Sol.


## S56. Ans.(d)

Sol. $-2,-3,-4$, series

## S57. Ans.(b)

Sol. $29 \times 2+1^{2}=59$
$59 \times 2+2^{2}=122$
$122 \times 2+3^{2}=253$
$253 \times 2+4^{2}=522$
$522 \times 2+5^{2}=1069$


## S58. Ans.(c)

S59. Ans.(c)
Sol. In the statement nothing is been said about Intelligent girls getting married to only bureaucrats

S60. Ans.(a)
Sol. 548, 546
S61. Ans.(c)
Sol. $12+12-1=23$

## S62. Ans.(b)

Sol. $\underline{P} \underline{R}$ S Row 1
X UVT Row 2

## S63. Ans.(a)

## S64. Ans.(d)

## S65. Ans.(d)

S66. Ans.(d)

S67. Ans.(a)
Sol. HCF is 67
S68. Ans.(b)
Sol. ATQ,
$(x-1) \frac{1}{4}-\frac{1}{5} \times x=4$
$\Rightarrow \frac{1}{20} x=\frac{17}{4}$
$\Rightarrow \mathrm{x}=85$

## S69. Ans.(c)

Sol. $\frac{x}{8}+\frac{(61-x)}{5}=9.5$
$\Rightarrow 3 x=108$
$\Rightarrow \mathrm{x}=36 \mathrm{~km}$

S70. Ans.(d)
Sol. Factors of $228=19 \times 3 \times 4$
Factors of $399=19 \times 3 \times 7$
LCM $=19 \times 3 \times 4 \times 7$
$=1596$

## S71. Ans.(b)

Sol. M.P $\times \frac{85}{100} \times \frac{90}{100}=657.90$
$\Rightarrow \mathrm{M} . \mathrm{P}=$ Rs 860

## S72. Ans.(c)

Sol. $8.5 \%=\frac{17}{200}$
Let the principle be 40,000 units
$1^{\text {st }} \mathrm{yr} \rightarrow \underline{3400}$
$2^{\text {nd }} \mathrm{yr} \rightarrow \underline{3400} \underline{289}$
Now, 289 units $\rightarrow$ Rs 28.9
40,000 units $\rightarrow \frac{28.9}{289} \times 40,000$
$=$ Rs 4000

S73. Ans.(d)
Sol. Distance covered $=$ speed $\times$ time
$=\left(50 \times \frac{11}{2}\right) \mathrm{km}$
$=275 \mathrm{~km}$
$\therefore$ Time taken with new speed $=\frac{275}{55}=5 \mathrm{~h}$
$\therefore$ Time saved $=5 \frac{1}{2} h-5 h=30 \mathrm{~min}$

## S74. Ans.(b)

Sol. Length of the wire $=$ Perimeter of rectangle $=2(1+b)$
$=2 \times(42.7+21.8)$
$=129 \mathrm{~m}$
Length of side of square $=\left(\frac{129}{4}\right) \mathrm{m}=32.25 \mathrm{~m}$

## S75. Ans.(a)

Sol.

$$
\begin{aligned}
& \sqrt{13-4 \sqrt{10}} \\
& =\sqrt{13-2 \sqrt{40}} \\
& =\sqrt{13-2 \sqrt{8 \times 5}}=\sqrt{8+5-2 \sqrt{8} \sqrt{5}} \\
& \Rightarrow \sqrt{(\sqrt{8}-\sqrt{5})^{2}}=\sqrt{8}-\sqrt{5}
\end{aligned}
$$

## S76. Ans.(b)

Sol. Aryabhatta and Kalidasa were in the court of Chandrgupta II.

## S77. Ans.(d)

Sol. Rainfall caused by intense evaporation in equatorial areas is called Conventional rainfall.

## S78. Ans.(c)

Sol. Battle of Panipat -1526
Battle of Khanwah -1527
Battle of Chanderi- 1528
Battle of Ghaghara- 1529

## S79. Ans.(a)

Sol. Polaj was the ideal and best type of land throughout the empire. This land was cultivated always and was never allowed to lie fallow.

## S80. Ans.(d)

Sol. In astronomy, a syzygy is a straight-line configuration of three or more celestial bodies in a gravitational system. When the Sun and Moon are in straight line, it results in Spring Tide. These spring tides occur because the Sun and Moon's gravity tug on Earth together. Weaker, or neap, tides happen when the Sun, the Moon, and Earth form an L-shape.

## S81. Ans.(b)

Sol. A buyer's market is a situation in which supply exceeds demand, giving purchasers an advantage over sellers in price negotiations. The term "buyer's market" is commonly used to describe real estate markets, but it applies to any type of market in which there is more product available than there are people who want to buy it.

## S82. Ans.(c)

Sol. Part VIII of Indian Constitution deals with the administration of Union Territories.

## S83. Ans.(d)

Sol. The Taiyuan Satellite Launch Center (TSLC) also known as Base 25 is a People's Republic of China space and defense launch facility (spaceport).

## S84. Ans.(b)

Sol. Inspiration 4 - the first-ever orbital flight crewed entirely by tourists - just launched from NASA's Kennedy Space Center. The crew will now spend three days in space aboard a SpaceX rocket.

## S85. Ans.(a)

Sol. Vande Mātaram is a poem composed by Bankim Chandra Chattopadhyay in 1870s, which he included in his 1881 novel Anandamath.

## S86. Ans.(d)

Sol. Lord Mountbatten was the Last Viceroy of British India and the first Governor General of free India.

## S87. Ans. (d)

Sol. Tapi river does not form a delta, it form an estuary. An estuary is a partially enclosed coastal body of brackish water with one or more rivers or streams flowing into it, and with a free connection to the open sea.

## S88. Ans.(b)



Sol. Bandhavgarh National Park is one of the wild life sanctuaries in the Indian state Madhya Pradesh. Bandhavgarh was declared a national park in 1968. The density of the tiger population at Bandhavgarh is one of the highest known in India.

## S89. Ans.(d)

Sol. Article 62 (2) states that the Ministers shall hold office during the pleasure of the President. That means a Minister will be liable to removal on two grounds. One ground on which he would be liable to dismissal is that he has lost the confidence of the House, and, secondly, that his administration is not pure, because the word used here is 'pleasure'. It would be perfectly open under the particular clause of Article 62 for the President to call for the removal of that particular Minister on the ground that he is guilty of corruption or bribery or maladministration.

## S90. Ans.(a)

Sol. Prime Minister Narendra Modi will inaugurate a 216 -foot statue of Ramanujacharya in a sitting position in Hyderabad on February 5, 2022, to celebrate the 1,000th birth anniversary of the saint. The statue will be called as the 'Statue of Equality'.

## S91. Ans.(a)

Sol. In the Union Territory of Jammu and Kashmir, the administration has declared Jerri settlement in Reasi district as the first 'Milk Village' of the J\&K and sanctioned 57 more dairy farms under the Integrated Dairy Development Scheme (IDDS) for the hamlet.

S92. Ans.(b)
Sol. Union Ministry of Coal launched the "Koyla Darpan" portal, to Key Performance Indicators (KPIs) related to the Coal Sector.
At present, the portal has 9 KPIs including Coal/Lignite Production, Status of Coal Stock in Thermal Power Plants, Infrastructure Projects, Allocation of Blocks, Monitoring of Major Coal Mines and Coal Price.

S93. Ans.(b)
Sol. High Court Justice Ayesha Malik has been appointed as Pakistan's first-ever woman judge of the Supreme Court.
Pakistan President Arif Alvi gave his approval to the elevation of the Judge, who was serving as Lahore High Court Justice since 2012. She will now work as a Supreme Court Judge until her superannuation in June 2031.

## S94. Ans.(a)

Sol. Direct taxes include the taxes that cannot be transferred or shifted to another person, for instance the income tax an individual pays directly to the government.

## S95. Ans.(b)

Sol. The 3rd five year plan laid considerable stress on the agricultural sector. However, with the short lived Sino Indian War of 1962 India diverted its attention to the safety of the country. Again, during the period 1965 to 1966, owing to Green Revolution, once again agriculture attracted attention.

## S96. Ans.(c)

Sol. Reverse Repo rate is the rate at which RBI borrows money from the commercial banks.It is a monetary policy instrument which can be used to control the money supply in the country.

## S97. Ans.(c)

Sol. Khan Abdul Gaffar Khan is also known as Frontier Gandhi.

## S98. Ans.(b)

Sol. C. Rajagopalachari (Rajaji) served as the first and the only Indian governor general of India.

## S99. Ans.(d)

Sol. Chennai Super Kings (CSK) has become the first Indian sports enterprise to gain unicorn status with its market cap surpassing INR 7,600 crore and the share value in the market trading entering INR 210225 price band.

## S100. Ans.(d)

Sol. Spituk Gustor Festival, a two-day annual celebration of Ladakhi culture and traditional heritage celebrated on 30th \& 31st January 2022 in Leh and Ladakh Union Territory (UT).

