## General Aptitude (GA)

**Q.1 – Q.5 Carry ONE mark Each**

| Q.1 | If '→' denotes increasing order of intensity, then the meaning of the words [simmer → seethe → smolder] is analogous to [break → raze → _____ ]. Which one of the given options is appropriate to fill the blank? |
|---|---|
| | |
| (A) | obfuscate |
| (B) | obliterate |
| (C) | fracture |
| (D) | fissure |
| | |

| Q.2 | In a locality, the houses are numbered in the following way: |
| --- | --- |
| | The house-numbers on one side of a road are consecutive odd integers starting from 301, while the house-numbers on the other side of the road are consecutive even numbers starting from 302. The total number of houses is the same on both sides of the road. |
| | If the difference of the sum of the house-numbers between the two sides of the road is 27, then the number of houses on each side of the road is |
| | |
| (A) | 27 |
| (B) | 52 |
| (C) | 54 |
| (D) | 26 |
| | |
| Q.3 | For positive integers $p$ and $q$, with $\frac{p}{q} \neq 1$ , $\left(\frac{p}{q}\right)^{\frac{p}{q}} = p^{\left(\frac{p}{q}-1\right)}$. Then, |
| | |
| (A) | $q^p = p^q$ |
| (B) | $q^p = p^{2q}$ |
| (C) | $\sqrt{q} = \sqrt{p}$ |
| (D) | $\sqrt[p]{q} = \sqrt[q]{p}$ |
| | |

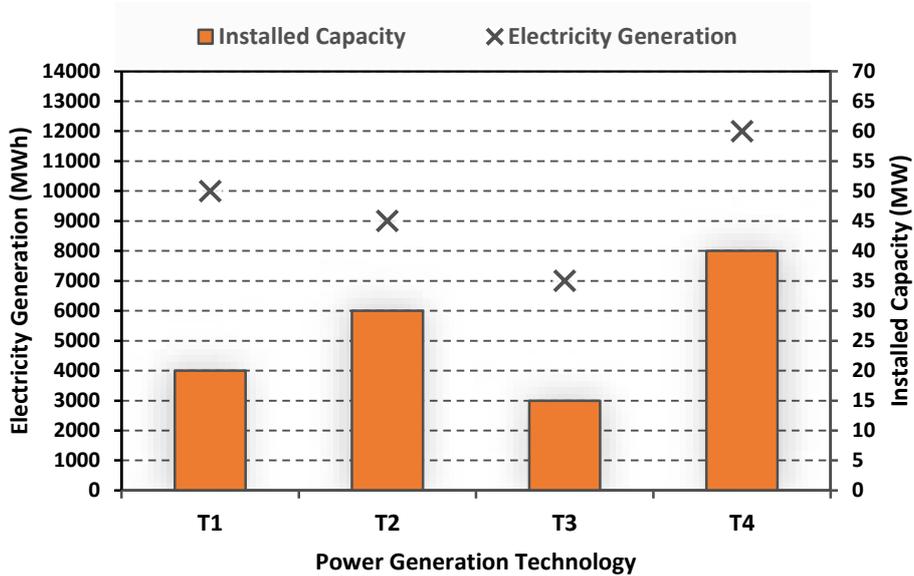| Q.4 | Which one of the given options is a possible value of $x$ in the following sequence? |
|---|---|
| | $3, 7, 15, x, 63, 127, 255$ |
| | |
| (A) | 35 |
| (B) | 40 |
| (C) | 45 |
| (D) | 31 |
| | |
| Q.5 | On a given day, how many times will the second-hand and the minute-hand of a clock cross each other during the clock time 12:05:00 hours to 12:55:00 hours? |
| | |
| (A) | 51 |
| (B) | 49 |
| (C) | 50 |
| (D) | 55 |
| | |

**Q.6 – Q.10 Carry TWO marks Each**

| Q.6 | In the given text, the blanks are numbered (i)−(iv). Select the best match for all the blanks. |
| --- | --- |
| | From the ancient Athenian arena to the modern Olympic stadiums, athletics ____(i)____ the potential for a spectacle. The crowd ____(ii)____ with bated breath as the Olympian artist twists his body, stretching the javelin behind him. Twelve strides in, he begins to cross-step. Six cross-steps ____(iii)____ in an abrupt stop on his left foot. As his body ____(iv)____ like a door turning on a hinge, the javelin is launched skyward at a precise angle. |
| | |
| (A) | (i) hold          (ii) waits          (iii) culminates     (iv) pivot |
| (B) | (i) holds         (ii) wait           (iii) culminates     (iv) pivot |
| (C) | (i) hold          (ii) wait           (iii) culminate      (iv) pivots |
| (D) | (i) holds         (ii) waits          (iii) culminate      (iv) pivots |

| Q.7 | Three distinct sets of indistinguishable twins are to be seated at a circular table that has 8 identical chairs. Unique seating arrangements are defined by the relative positions of the people. |
| --- | --- |
| | How many unique seating arrangements are possible such that each person is sitting next to their twin? |
| | |
| (A) | 12 |
| (B) | 14 |
| (C) | 10 |
| (D) | 28 |
| | |

| Q.8 | The chart given below compares the Installed Capacity (MW) of four power generation technologies, T1, T2, T3, and T4, and their Electricity Generation (MWh) in a time of 1000 hours (h). |
|---|---|
| |  |
| | The Capacity Factor of a power generation technology is: |
| | $$\text{Capacity Factor} = \frac{\text{Electricity Generation (MWh)}}{\text{Installed Capacity (MW)} \times 1000\ (h)}$$ |
| | Which one of the given technologies has the highest Capacity Factor? |
| | |
| (A) | T1 |
| (B) | T2 |
| (C) | T3 |
| (D) | T4 |
| | |

| Q.9 | In the 4 × 4 array shown below, each cell of the first three columns has either a cross (X) or a number, as per the given rule. |
|---|---|
| | <br> 1  1  2  _<br> 2  X  3  _<br> 2  X  4  _<br> 1  2  X  _ <br><br> **Rule:** The number in a cell represents the count of crosses around its immediate neighboring cells (left, right, top, bottom, diagonals). <br><br> As per this rule, the **maximum** number of crosses possible in the empty column is |
| | |
| (A) | 0 |
| (B) | 1 |
| (C) | 2 |
| (D) | 3 |

| Q.10 | During a half-moon phase, the Earth-Moon-Sun form a right triangle. If the Moon-Earth-Sun angle at this half-moon phase is measured to be 89.85°, the ratio of the Earth-Sun and Earth-Moon distances is closest to |
|------|---|
|      |   |
| (A)  | 328 |
| (B)  | 382 |
| (C)  | 238 |
| (D)  | 283 |
|      |   |

# Reasoning and Comprehension (XH-B1)

## XH-B1: Q.11– Q.17 Carry ONE mark Each

| | |
|---|---|
| Q.11 | Amma's tone in the context of the given passage is that of: |
| | For Amma, the difference between men and women was a kind of discrimination and inequality; she felt strongly about women's rights but was not familiar with concepts like gender and patriarchy. She would have dismissed Betty Friedan because she was predominantly dealing with the problems of white middle-class women in the United States. Amma, and women of her generation, could de-link the oppression of women from the wider struggle for the liberation of human beings from class exploitation and imperialism. So Amma continued to play her role as mother and wife, but would often complain: 'I am a doormat on which everyone wipes their emotional dirt off'. |
| (A) | Compromise |
| (B) | Protest |
| (C) | Contentment |
| (D) | Resignation |
| | |

| Q.12 | Fill in the blanks by choosing the correct sequence for the following passage: |
|------|-------------------------------------------------------------------------------|
|      | I am wearing for the first time some (i)_____ that I have never been able to wear for long at a time, as they are horribly tight. I usually put them on just before giving a lecture. The painful pressure they exert on my feet goads my oratorical capacities to their utmost. This sharp and overwhelming pain makes me sing like a nightingale or like one of those Neapolitan singers who also wear (ii)____ that are too tight. The visceral physical longing, the overwhelming torture provoked by my (iii)_____, forces me to extract from words distilled and sublime truths, generalized by the supreme inquisition of the pain my (iv)____ suffer. |
| (A)  | (i) patent-leather belt (ii) belts (iii) patent-leather belt (iv) waist |
| (B)  | (i) patent-leather shoes (ii) bands (iii) patent-leather bands (iv) wrist |
| (C)  | (i) patent-leather shoes (ii) shoes (iii) patent-leather shoes (iv) feet |
| (D)  | (i) patent-leather jacket (ii) jacket (iii) patent-leather jacket (iv) body |
|      |  |

| Q.13 | The appropriate synonym for the word 'ignite' in the following passage will be: |
|------|--------------------------------------------------------------------------------|
|      | Spirituality must be integrated with education. Self-realization is the focus. Each one of us must become aware of our higher self. We are links of a great past to a grand future. We should ignite our dormant inner energy and let it guide our lives. The radiance of such minds embarked on constructive endeavor will bring peace, prosperity and bliss to this nation. |
| (A)  | Encourage |
| (B)  | Simulate |
| (C)  | Dissipate |
| (D)  | Engross |

| Q.14 | Which of the following sentences is punctuated correctly? |
|------|-----------------------------------------------------------|
|      |                                                           |
| (A)  | One day, I'll write a book, 'I said'. Not just a thriller but a real book, about real people. |
| (B)  | 'One day I'll write a book', I said, 'not just a thriller, but a real book, about real people.' |
| (C)  | 'One day I'll write a book', I said. 'Not just a thriller but, a real book, about real people'. |
| (D)  | 'One day I'll write a book', I said, not just a thriller, but a real book, about real people.' |
|      |                                                           |

| Q.15 | Fill in the blanks with the correct combination of tenses for the given sentence: |
|------|-----------------------------------------------------------------------------------|
|      | Darwin's work (i)_____ a related effect that (ii)_____ influenced the development of environmental politics – a 'decentering' of the human being. |
| (A)  | (i) have (ii) had                                                                 |
| (B)  | (i) had (ii) have                                                                 |
| (C)  | (i) had (ii) has                                                                  |
| (D)  | (i) has (ii) have                                                                 |
|      |                                                                                   |

| Q.16 | Which of the following options holds similar relationship as the words, 'Music: Notes'? |
|------|------------------------------------------------------------------------------------------|
|      |                                                                                          |
| (A)  | Water: Cold drink                                                                        |
| (B)  | Paper: Class Notes                                                                       |
| (C)  | House: Bricks                                                                            |
| (D)  | Graphite: Charcoal                                                                        |
|      |                                                                                          |

| Q.17 | In a particular code, if "RAMAN" is written as 52 and "MAP" is written as 33, then how will you code "CLICK"? |
|------|--------------------------------------------------------------------------------------------------------------|
|      |                                                                                                              |
| (A)  | 37                                                                                                           |
| (B)  | 43                                                                                                           |
| (C)  | 51                                                                                                           |
| (D)  | 38                                                                                                           |
|      |                                                                                                              |

**XH-B1: Q.18 – Q26 Carry TWO marks Each**

| Q.18 | On the basis of the statements given below, which valid assumption(s) can be made? |
|---|---|
| | Statements:<br><br>- Life has suffering<br>- Desire is the cause of suffering<br>- The end of desire is the end of suffering<br>- Desire can be reduced by following the noble eightfold path<br><br>Assumptions:<br><br>1.  Suffering is because of wants<br><br>2.  Life is not always full of suffering<br><br>3.  The eightfold path can reduce suffering<br><br>4.  Suffering is caused by life |
| (A) | Only 1, 3 and 4 |
| (B) | Only 1, 2 and 3 |
| (C) | Only 1 and 4 |
| (D) | Only 2 and 3 |
| | |

| Q.19 | If 'KARAMCHAND' is coded as 'ICPCKEFCLF' what should be the code of 'CREATION'? |
|------|------------------------------------------------------------------------------------|
|      |                                                                                    |
| (A)  | ATCCRKMP                                                                            |
| (B)  | ETGCVKQP                                                                            |
| (C)  | APCCRJMP                                                                            |
| (D)  | ETCGKRPM                                                                            |
|      |                                                                                    |

| | |
|---|---|
| Q.20 | Given an input line of numbers and words, a machine rearranges them following a particular rule in each step. Here is an illustration of an input and rearrangement sequence (Step 1 to Step 5): |
| | Input: 61 wb ob 48 45 29 34 sb pb lb |
| | Step 1: lb wb ob 48 45 29 34 sb pb 61 |
| | Step 2: lb ob wb 45 29 34 sb pb 61 48 |
| | Step 3: lb ob pb wb 29 34 sb 61 48 45 |
| | Step 4: lb ob pb sb wb 29 61 48 45 34 |
| | Step 5: lb ob pb sb wb 61 48 45 34 29 |
| | Step 5 is the last step of the above arrangement. |
| | Based on the rules followed in the above steps, answer the following question: |
| | Input: cb kb eb 58 49 23 38 jb nb gb 69 82 |
| | Which of the following represents the position of 58 in the fourth step? (Step-5 is the last step of the arrangement.) |
| | |
| (A) | Second from the left |
| (B) | Fourth from the right |
| (C) | Third from the right |
| (D) | Seventh from the left |
| | |

| Q.21 | In a certain type of code, 'they play cricket together' is written as 'mv kb lb iv'; 'they score maximum points' is written as 'gb lb mb kv'; 'cricket score earned points' is written as 'mb gv kb kv' and 'points are earned together' is written as 'kv mv ob gv.' <br><br> What is the code for 'earned maximum points'? |
|------|------|
| | |
| (A) | gv gb kv |
| (B) | mv kb mb |
| (C) | lb iv ob |
| (D) | ob mb iv |
| | |

| Q.22 | Which of the statement(s) about the passage weaken(s) the argument presented? |
|---|---|
| | Scientists associate large brains with greater intelligence. However, in the evolutionary context it has also been identified that beyond a point, the size of the brain has not increased and yet after a particular period, in spite of no significant change in brain size humans have made significant progress. Certain researchers propose that this is because, while the overall brain size may not have changed, marked structural changes can be noticed in specific structures that run parallel to increase in human intelligence. |
| (A) | Recent studies refute the hypothesis that region-specific brain development is necessarily associated with rapid human progress |
| (B) | Neanderthal people's extinction was probably because of their brain size |
| (C) | Homo Sapiens and its destruction in the future may happen because of its rapid brain development |
| (D) | Recent studies show that Neanderthal people, with relatively smaller brains, were capable of complex language and social activities |
| | |

| Q. 23 | The narrator's use of 'I' in the given passage is/are: |
|---|---|
| | I have never been any good at the more lurid sort of writing. Psychopathic killers, impotent war-heroes, self-tortured film stars, and seedy espionage agents must exist in the world, but strangely enough I do not come across them, and I prefer to write about the people and places I have known and the lives of those whose paths I have crossed. This crossing of paths makes for stories rather than novels, and although I have worked in both mediums, I am happier being a short-story writer than a novelist. |
| (A) | Self-conscious |
| (B) | Apologetic and regretful |
| (C) | Confessional and communicating |
| (D) | Egotistical and vain |
| | |

| Q.24 | Which of the following recommended action(s) seem to be appropriate with the stated problem? |
|---|---|
| | Stated problem : Many students at educational institutes do not attend classes in the post-pandemic scenario. |
| (A) | Disciplinary action against all students should be taken as a warning. |
| (B) | Counselling sessions should be organized to address the issues such students face. |
| (C) | Surveys should be conducted to identify the reasons for their absence. |
| (D) | Course content should immediately be changed. |
| | |

| Q.25 | Read the passage and identify the statement(s) which follow(s) from it: |
|---|---|
| | The purpose of this work is to inform educators about the brain science related to emotion and learning, and, more important, to offer strategies to apply these understandings to their own teaching. Although many of the approaches I describe will be familiar, integrating the lens of emotion and the brain may be a new concept. As an educator I had been trained in how to deliver content and organize my lessons, but I had not been taught how to design learning experiences that support emotions for learning. |
| (A) | The author wishes, through his work, to inform us about brain science and learning. |
| (B) | The author, through his work, wishes to offer strategies to apply our learnings to our teaching. |
| (C) | The author feels that the newness of his approach lies in linking emotion oriented approach to brain. |
| (D) | The author wants to use emotions as a strategy for learning. |
| | |

| Q.26 | If A says that his mother is the daughter of B's mother, then how is B related to A? |
|---|---|
| | |
| (A) | Uncle |
| (B) | Aunt |
| (C) | Father |
| (D) | Brother |
| | |

Organizing Institute: IISc Bengaluru

## Linguistics (XH-C3)

**XH-C3: Q.27– Q.44 Carry ONE mark Each**

| Q.27 | Which one of the following is an error of *grammatical competence*? |
|------|---------------------------------------------------------------------|
| | |
| (A) | Colourful white flags waved the wind. |
| (B) | The snake walked down the stairs. |
| (C) | I gave them a piece of my mind. |
| (D) | The purple sollies were gordly lombing. |
| | |
| Q.28 | Which one of the sentences below does NOT have *syntactic recursion* in it? |
| | |
| (A) | The wolves ran on steadily. |
| (B) | The wolves ran in the night. |
| (C) | The deer avoided the wolves. |
| (D) | The deer quietly stood nearby. |
| | |
| | |
| | |

| Q.29 | The following sentences are examples of Hinglish. What term is used to describe such productions?<br><br>   i.   Yaar, if you don't come now, ticket nahin milega.<br>   ii.  Sahi direction mein utha har kadam…after all life is all about the next step.<br>  iii.  Pepsi- Yeh Dil Maange More! |
|------|---|
| | |
| (A) | Code mixing |
| (B) | Code transference |
| (C) | Code violation |
| (D) | Code breaking |
| | |
| Q.30 | Human beings can talk about their present, past and future. This property of language is called: |
| | |
| (A) | Displacement |
| (B) | Arbitrariness |
| (C) | Duality |
| (D) | Productivity |
| | |

| Q.31 | Which one of the following statements is CORRECT in the context of child language acquisition? |
|---|---|
| | |
| (A) | Young children demonstrate linguistic creativity and productivity by producing grammatical errors which are not found in parental productions. |
| (B) | Young children demonstrate linguistic creativity and productivity by producing grammatical errors which they find in parental productions. |
| (C) | Young children demonstrate linguistic creativity and productivity by deleting all the inflectional morphemes that are needed in complete productions. |
| (D) | Young children demonstrate linguistic creativity and productivity by reproducing nursery rhymes, stories and songs learnt from their caregivers. |
| | |
| Q.32 | Identify the type of 'linguistic deficit' that the patient displays in the interaction shown below: Doctor: "Can you tell me about this picture? What is there or what is happening?" Patient: "I can't say what… I know what it is… But I don't know where it is and I don't know what it is under. This one here, I can't say and that one, also." |
| | |
| (A) | Anomia |
| (B) | Agrammatism |
| (C) | Auditory aphasia |
| (D) | Asphyxia |
| | |

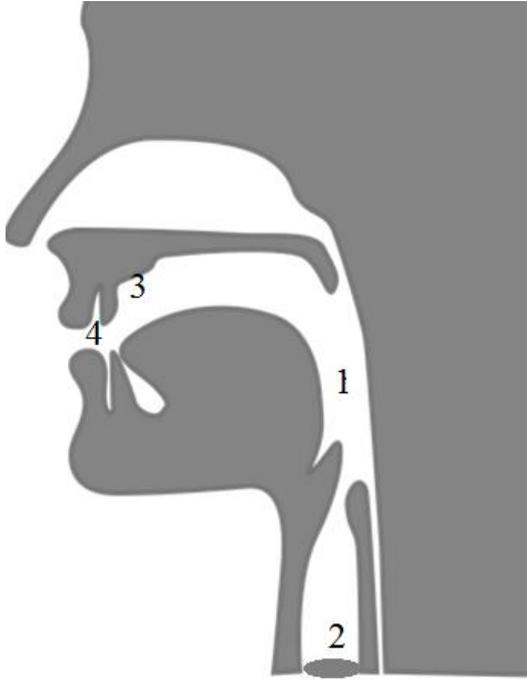| Q.33 | Identify the sentence where the verb is in the third person plural in the simple present tense. |
|------|------------------------------------------------------------------------------------------------|
|      |                                                                                                |
| (A)  | Are they here in school now?                                                                   |
| (B)  | They have walked to school.                                                                    |
| (C)  | Are you not in school yet?                                                                     |
| (D)  | He is here in school now.                                                                      |
|      |                                                                                                |
| Q.34 | In the following conversation, the violation of which Gricean maxim of conversation gives rise to humour? <br><br> Ram: I got a new car for my son. <br> Shyam: That is a great exchange! |
|      |                                                                                                |
| (A)  | Maxim of Relation                                                                              |
| (B)  | Maxim of Quality                                                                               |
| (C)  | Maxim of Quantity                                                                              |
| (D)  | Maxim of Manner                                                                                |
|      |                                                                                                |
|      |                                                                                                |
|      |                                                                                                |

| Q.35 | Examine the following statements and choose the right option. |
|---|---|
| | Statement (I): A spectrogram shows the frequency components in a frequency over time display. |
| | Statement (II): In a spectrogram, high vowels can be identified by a low F1, while a back vowel can be identified by a low F2. |
| | |
| (A) | Both statement (I) and statement (II) are correct |
| (B) | Both statement (I) and statement (II) are incorrect |
| (C) | Statement (I) is correct but statement (II) is incorrect |
| (D) | Statement (I) is incorrect but statement (II) is correct |
| | |
| Q.36 | Which one of the following is NOT a correct statement about pidgins and creoles? |
| | |
| (A) | Pidginisation expands grammatical rules and creolisation reduces them. |
| (B) | Pidgins have little or no grammar. |
| (C) | A stabilised pidgin can lead to the formation of a creole. |
| (D) | Creoles are standardised pidgins. |
| | |
| | |
| | |

| Q.37 | Which word in the options below would be affected by the following phonological rule? |
| --- | --- |
| | **[+alveolar, +nasal] → [+dental] / _____ [+dental, +fricative]** |
| (A) | panther |
| (B) | length |
| (C) | warmth |
| (D) | another |
| | |
| Q.38 | The label 'Compound Verb' applies to |
| | |
| (A) | two verbs with one composite meaning |
| (B) | two verbs used for two different events |
| (C) | one main verb and a modal auxiliary |
| (D) | one noun or an adjective with a verb |
| | |
| | |
| | |
| | |

| | |
|---|---|
| Q.39 | Consider the idiom 'Time flies like an arrow'. Which idiom below is closest in meaning to this one? |
| | |
| (A) | Time and tide wait for no man. |
| (B) | Time is money. |
| (C) | Time is a great healer. |
| (D) | God made time, man made haste. |
| | |
| Q.40 | Which of the following are myths about language? |
| | |
| (A) | There are primitive languages that cannot express complex ideas effectively. |
| (B) | Swearing, texting, slang and colloquialisms degrade a language and its grammar. |
| (C) | There is no difference between languages with and without scripts. |
| (D) | Grammar textbooks prescribe rules and norms of usage in a language. |
| | |
| | |
| | |
| | |

| Q.41 | In which of the following frame or frames would it be appropriate to use a *noun*? |
|---|---|
| | |
| (A) | in_____ of |
| (B) | terrible _____ |
| (C) | have not _____ yet |
| (D) | was slowly _____ |
| | |
| Q.42 | Which of the sentences in the options given are NOT an *entailment* of the sentence below?<br><br>**Simba was a lion in the movie 'The Lion King'.** |
| | |
| (A) | Simba is a big cat. |
| (B) | Simba is a male. |
| (C) | Simba is a king. |
| (D) | Simba is an African name. |
| | |
| | |
| | |

| | |
|---|---|
| Q.43 | A United States House member used malapropisms (inappropriate words used in place of the appropriate ones) as in the following: <br><br> 'peach tree dish' instead of *petri* dish <br> 'gazpacho police' instead of *gestapo* <br> 'fragrantly violated' instead of *flagrantly* violated <br><br> Such malapropisms show which of the following? |
| | |
| (A) | Lexical access uses sound similarity. |
| (B) | Mental lexicon is arranged by sound. |
| (C) | Words are arbitrary pairings of sound and meaning. |
| (D) | Borrowed words are not part of the lexicon. |
| | |
| Q. 44 | Which of the following sets of languages are part of the 8th Schedule of the Constitution of India? |
| | |
| (A) | Assamese, Konkani, Nepali, Sindhi |
| (B) | Malayalam, Maithili, Manipuri, Marathi |
| (C) | Hindi, Sanskrit, English, Awadhi |
| (D) | Tamil, Toda, Telugu, Bhojpuri |

**XH-C3: Q.45 – Q.65 Carry TWO marks Each**

| Q.45 | Consider the following sentence: |
|---|---|
| | **The historian will put the paintings in his house on the wall in the museum.** |
| | Which interpretation is NOT possible among the following? |
| | |
| (A) | The paintings were on the museum wall. |
| (B) | The wall was in the museum. |
| (C) | The paintings were in his house. |
| (D) | The historian will put the paintings on the wall. |

| Q.46 | Match the numbered parts of the vocal tract (in the diagram given below) with the correct label from those given in the box and choose the appropriate option. |
|------|---------------------------------------------------------------------------------------------------------------------------------------|
| |  **LABELS** a. Labial cavity b. Pharyngeal cavity c. Alveolar ridge d. Laryngeal cavity |
| (A) | 1-b; 2-d; 3-c; 4-a |
| (B) | 1-d; 2-b; 3-a; 4-c |
| (C) | 1-d; 2-c; 3-b; 4-a |
| (D) | 1-b; 2-d; 3-a; 4-c |
| | |
| | |
| | |
| | |
| | |

| Q.47 | Consider the predicate calculus expression, $\forall x P(x) \rightarrow \exists x P(x)$. |
|---|---|
| | Which of the following English sentences with respect to a club called Sunshine is/are equivalent to this predicate calculus expression? |
| | |
| (A) | If somebody in Sunshine plays cricket, then everybody in Sunshine plays cricket. |
| (B) | Even though nobody plays billiards in Sunshine, somebody in Sunshine sometimes plays billiards. |
| (C) | If everybody plays hockey in Sunshine, then somebody plays hockey in Sunshine. |
| (D) | Nobody plays football in Sunshine, while all play cricket in Sunshine. |
| Q.48 | Match each of the word formation processes given in Column X with an example that is given in Column Y and select the correctly matched sequence. |

| Column X | Column Y |
|---|---|
| P. calque | i. braille |
| Q. eponym | ii. instagram |
| R. blend | iii. karaoke |
| S. coinage | iv. worldview |
| T. borrowing | v. google |

| | |
|---|---|
| (A) | P-iv; Q-i; R-ii; S-v; T-iii |
| (B) | P-iii; Q-v; R-iv; S-i; T-ii |
| (C) | P-v; Q-iv; R-iii; S-ii; T-i |
| (D) | P-i; Q-ii; R-iii; S-v; T-iv |

| Q.49 | Two sentences are given below: |
|---|---|
| | I.       I was in Boston last winter, and I found it really cold **there**. <br> II.     **Here**, have some tea! |
| | Pick the CORRECT option with respect to the underlined **adverbs**. |
| | |
| (A) | In sentence I, the adverb has an endophoric reference, while in sentence II the adverb has an exophoric reference. |
| (B) | In both sentences I and II, the adverbs have endophoric references. |
| (C) | In sentence I, the adverb has exophoric reference, while in sentence II the adverb has an endophoric reference. |
| (D) | In both sentences I and II, the adverbs have exophoric references. |
| | |
| Q.50 | Which of the following observations can be accounted for by <br> B.F. Skinner's theory of language development? |
| | |
| (A) | Children produce errors that adults around them never produce. |
| (B) | Children acquire language without negative evidence. |
| (C) | Children acquire grammatical features not present in the input. |
| (D) | Children learn language by imitating the adults around them. |
| | |
| | |

| Q.51 | Many English words at one time had meanings that were quite different from their current ones. Match each of the semantic changes in Column X to an example given in Column Y and select the appropriate sequence. |
|---|---|
| | Note: The *older* meanings of the words of Column Y are provided in the corresponding row in Column Z. |

| Column X | Column Y | Column Z |
|---|---|---|
| P. narrowing | i. silly | 'happy, prosperous' |
| Q. broadening | ii. pretty | 'tricky, sly, cunning' |
| R. amelioration | iii. bead | 'prayer' |
| S. pejoration | iv. aunt | 'father's sister' |

| (A) | P-iii; Q-iv; R-ii; S-i |
|---|---|
| (B) | P-iv; Q-ii; R-i; S-iii |
| (C) | P-ii; Q-iv; R-iii; S-i |
| (D) | P-i; Q-iii; R-iv; S-ii |

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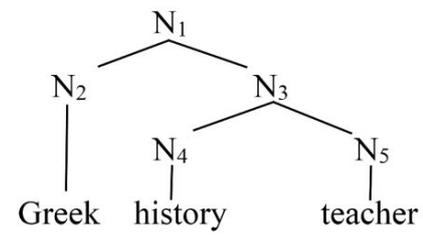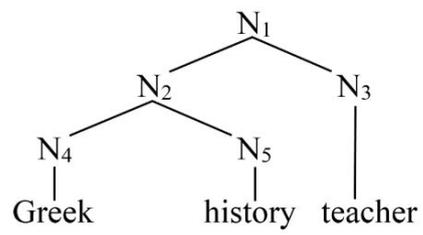| Q.52 | Choose from the options given, the word(s) that give rise to (or trigger) *presuppositions* when reading the following lines:<br><br>A Jewish physicist, Robert Oppenheimer, directed the development of a new kind of bomb in a project called Trinity. He regretted the building of the bomb because of the cost to mankind. After the war, he was suspected of having communist sympathies and he quickly lost popular support. |
|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|      |                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| (A)  | regretted                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| (B)  | Oppenheimer                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| (C)  | after                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| (D)  | directed                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|      |                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Q.53 | One, a sign language user with Broca's aphasia has difficulty producing signs. But the same signer has no difficulty in drawing pictures or picking up an object.<br><br>Two, a hearing person becomes paralysed in an accident and loses all motor ability, but is able to speak fluently.<br><br>What conclusions can we draw from these two cases about how language is represented in the brain? |
|      |                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| (A)  | The motor control required for language is independent of general motor skills.                                                                                                                                                                                                                                                                                                                                                               |
| (B)  | Broca's aphasia causes loss of fluency for signers.                                                                                                                                                                                                                                                                                                                                                                                           |
| (C)  | Language localisation in the brain is different for signers and speakers.                                                                                                                                                                                                                                                                                                                                                                     |
| (D)  | The pathways for vocal tract movement and gesturing are the same.                                                                                                                                                                                                                                                                                                                                                                             |

| Q.54 | With reference to the tree diagram given below for the sentence '**John wants him to be a doctor'**, which of the following statements are CORRECT? |
|---|---|
| |  |
| (A) | T of TP$^1$ assigns case to NP$^1$ in the Specifier position of TP$^1$ |
| (B) | T of TP$^2$ assigns case to NP$^2$ in the Specifier position of TP$^2$ |
| (C) | V of VP$^1$ assigns case to NP$^2$ in the Specifier position of TP$^2$ |
| (D) | V of VP$^2$ assigns case to NP$^2$ in the Specifier position of TP$^2$ |
| | |
| | |
| | |
| | |
| | |

| Q.55 | A study on the use of the sounds in a language L was carried out in three geographical regions across both adult speakers and children below the age of 6 years. The palatal glide [**j**] and the retroflex lateral [**l**] are variants (or allophones) of the standard sound [**ɻ**], a retroflex glide. The table below describes usage of the *three* sounds across the three regions and the two populations. Which of the following conclusions are valid given the results of the study? |
|---|---|

| Sounds in L | Region 1 | | Region 2 | | Region 3 | |
|---|---|---|---|---|---|---|
| | Adults | Children | Adults | Children | Adults | Children |
| [**j**] | 1 % | 75 % | 28 % | 80 % | 25 % | 78 % |
| [**l**] | 11 % | 23 % | 45 % | 18 % | 74 % | 22 % |
| [**ɻ**] | 88 % | 2 % | 27 % | 2 % | 1 % | 0 % |

| (A) | Children across all three regions prefer to substitute [**j**] and [**l**] for [**ɻ**]. |
|---|---|

| (B) | As we move from Region 1 to Region 2 to Region 3, there is a dialect shift with a progressive loss of [**ɻ**]. |
|---|---|

| (C) | Children diverge from the adult patterns in all three regions and choose [**j**] preferentially. |
|---|---|

| (D) | Children's choice of a variant can be directly correlated to the dominant variant that the adults of each dialect use. |
|---|---|

| Q.56 | The following data from Sinhala contains TWO pairs of sentences, 1 and 2. Each member of the pair is marked A and B and they differ in specific ways from each other. Identify the changes that are observed across each pair. |
|---|---|

| | | A:<br>lamea kataawə ahanəwa<br>child story hear<br>(The) child listens (actively) to the story. | B:<br>lameaṭə kataawə æhenəwa<br>child story hear<br>(The) child hears the story (despite himself). |
|---|---|---|---|
| 1. | | | |
| 2. | | A:<br>malli nitərəmə aňḍənəwa<br>brother always cries<br>Brother always cries. | B:<br>malliṭə nitərəmə æňḍənəwa<br>brother always cries<br>Brother always bursts into tears (despite himself). |

| (A) | The grammatical form of the subject NP changes from A to B. |
|---|---|

| (B) | The thematic grid of the verb changes from A to B. |
|---|---|

| (C) | The verb exhibits change in phonological shape from A to B. |
|---|---|

| (D) | The valency of the verb changes from A to B. |
|---|---|

| Q.57 | For the sentence |
| | **Li knows [CP₁ that you believe [CP₂ that Mo thinks [CP₃ that Jo likes Kai]]]** |
| | which of the following statements can be held to apply? |
| | |
| (A) | CP$_3$ is embedded within CP$_2$ and CP$_2$ is embedded within CP$_1$. |
| (B) | The sentence demonstrates the use of CP-recursion. |
| (C) | In this complex sentence, the matrix verb takes CP$_1$ as an object. |
| (D) | CP$_3$ is the object of the embedded verb *think* but CP$_2$ is not an object. |

| Q.58 | Consider the **<u>underlined</u>** NPs in the following three sentences. |
|---|---|
| | i.    **<u>John</u>** broke the window |
| | ii.    **<u>The window</u>** broke |
| | iii.    **<u>The stone</u>** broke the window |
| | Choose the correct values for the grammatical roles ($X_{1-3}$) and for the semantic roles ($Y_{1-3}$) of these NPs from the options given below. |

| Sentence No. | Syntactic Roles | Semantic Roles |
|---|---|---|
| i. | $X_1$ | $Y_1$ |
| ii. | $X_2$ | $Y_2$ |
| iii. | $X_3$ | $Y_3$ |

| (A) | $X_1$: subject, $Y_1$: agent |
|---|---|

| (B) | $X_2$: subject, $Y_2$: object |
|---|---|

| (C) | $X_3$: subject, $Y_3$: instrument |
|---|---|

| (D) | $X_2$: object, $Y_2$: agent |
|---|---|

| Q.59 | Consider the following sentence: |
|---|---|
| | **King Puru of the Pauravas, the lion, fought Alexander the emperor in the battlefield of Jhelum (Hydaspes).** |
| | Identify all the CORRECT lexico-semantic relations that appear in the given sentence from the options provided. |
| (A) | Metonymy: King Puru - Lion |
| (B) | Hypernymy: Emperor - Alexander |
| (C) | Meronymy: Battlefield - Jhelum |
| (D) | Holonymy: Lion - King Puru |
| | |
| Q.60 | A logician proves that (P ∧ Q) → (P ∨ Q) is a tautology in the following steps: |
| |     i.        (P ∧ Q) → (P ∨ Q) <br>     ii.      \<X\> \<OP\> (P ∨ Q) <br>     iii.    (~P ∨ P ∨ Q ∨ ~Q) <br>     iv.    T |
| | where the last expression T stands for TRUE. |
| | Other symbols are standard logic operators: |
| | ~ stands for NEGATION; ∧ for AND; ∨ for OR; and → for IMPLIES |
| | Which of the following is/are the set of correct values of X and OP? |
| | |
| (A) | ~P ∨ ~Q and ∨ |
| (B) | ~(P ∧ Q) and ∨ |
| (C) | ~(P ∧ Q) and ∧ |
| (D) | ~P ∨ ~Q and ∧ |

| Q.61 | Examine the following data from Swahili, a Bantu language, and choose the correct statements. |
|------|-----------------------------------------------------------------------------------------------|
|      | <table><tr><th>Swahili</th><th>Meaning</th></tr><tr><td>ni-na-soma</td><td>I am reading</td></tr><tr><td>a-na-soma</td><td>She/he is reading</td></tr><tr><td>tu-na-soma</td><td>We are reading</td></tr><tr><td>ni-li-soma</td><td>I read [past]</td></tr><tr><td>a-li-soma</td><td>She/he read [past]</td></tr><tr><td>ni-ta-soma</td><td>I will read</td></tr><tr><td>tu-ta-soma</td><td>We will read</td></tr></table> |

Swahili data table:

| Swahili | Meaning |
|---------|---------|
| ni-na-soma | I am reading |
| a-na-soma | She/he is reading |
| tu-na-soma | We are reading |
| ni-li-soma | I read [past] |
| a-li-soma | She/he read [past] |
| ni-ta-soma | I will read |
| tu-ta-soma | We will read |

| (A) | The Swahili third person pronoun is gender neutral. |
|-----|------------------------------------------------------|
| (B) | Swahili has different markers for past, present and future. |
| (C) | Swahili pronouns are not marked for number (singular/plural). |
| (D) | In Swahili, *tu-li-soma* would mean 'We read [past]'. |

| Q.62 | The structures below represent two interpretations of the compound noun 'Greek history teacher'. Which of the following statements is/are CORRECT? |
|---|---|
| | $N_1$       $N_1$<br>$N_2$    $N_3$       $N_2$    $N_3$<br>   $N_4$    $N_5$     $N_4$    $N_5$<br>Greek   history   teacher     Greek   history   teacher<br>**DIAGRAM I**       **DIAGRAM II** |
| (A) | In diagram (I), 'teacher' is the head of both $N_1$ and $N_3$. |
| (B) | In diagram (II), 'history' is the head of $N_2$, and 'teacher' is the head of $N_1$. |
| (C) | In diagram (I), 'Greek' is the head of $N_1$, and 'teacher' is the head of $N_3$. |
| (D) | In diagram (II), 'teacher' is the head of both $N_1$ and $N_2$. |
| | |
| Q.63 | Consider the following sentence:<br><br>**Guna found Jiya in the park with the children from her neighbourhood**.<br><br>Identify the descriptions that apply to this sentence. |
| | |
| (A) | This sentence has 1 determiner. |
| (B) | This sentence has 1 VP and 5 NPs. |
| (C) | This sentence has 1 subject, 1 object, and 3 adjuncts. |
| (D) | This sentence has 3 PPs used as 3 adjuncts. |

| Q.64 | Consider the following four ungrammatical sentences. Pay attention to the co-indexation. |
|---|---|
|  | i.       *Gopal$_i$ gifted him$_i$ a piano. |
|  | ii.      *Himself$_i$ likes Gopal$_i$. |
|  | iii.     *Gopal$_i$ thinks that Radha will marry himself$_i$. |
|  | iv.     *Radha$_i$'s mother$_i$ loves herself$_i$. |
|  | Which of the following statements are CORRECT with reference to Principles A, B and C of the Binding Theory? |
|  |  |
| (A) | The sentence in (i) violates Principle-B of the Binding Theory. |
| (B) | The sentence in (ii) violates Principle-A of the Binding Theory. |
| (C) | The sentences in (iii) and (iv) violate the requirement that the antecedent and the anaphor must be contained in the same binding domain. |
| (D) | The sentences in (i) and (iii) both violate Principle-C of the Binding Theory. |
|  |  |
| Q. 65 | A linguist was asked to develop a syllabic writing system for a toy language *Hadada* with ONLY the following words (given in phonetic transcription). |
|  | [hɑ], [hə], [dɑ], [hrɔ], [dru], [hu], [dru.hu], [hə.dɑ], [duk], [hɑ.dɑ.dɑ], [ɑ.dɑ] |
|  | The number of separate symbols that the linguist needs to create in order to write all the words of this toy language is _____ . |

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