

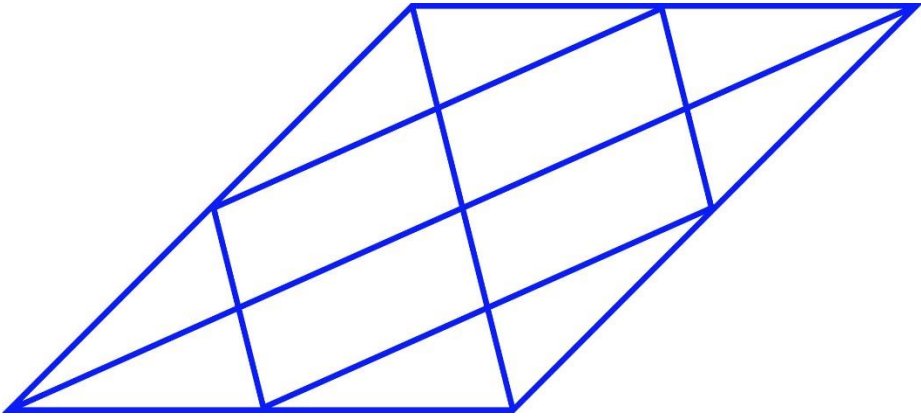
General Aptitude (GA)**Q.1 – Q.5 Carry ONE mark Each**

Q.1	Rafi told Mary, “I am thinking of watching a film this weekend.” The following reports the above statement in indirect speech: Rafi told Mary that he _____ of watching a film that weekend.
(A)	thought
(B)	is thinking
(C)	am thinking
(D)	was thinking

Q.2	Permit : _____ : : Enforce : Relax (By word meaning)
(A)	Allow
(B)	Forbid
(C)	License
(D)	Reinforce

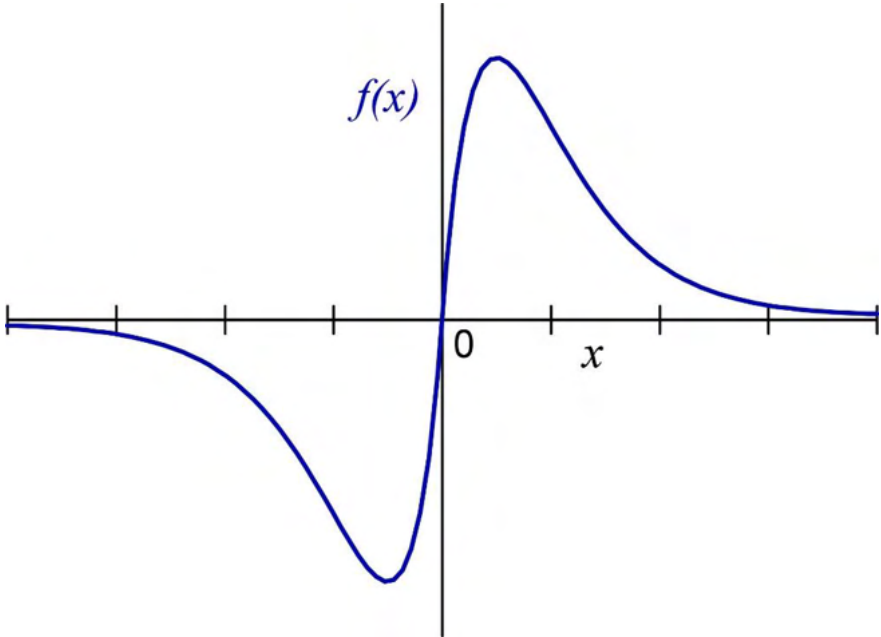
Q.3	Given a fair six-faced dice where the faces are labelled '1', '2', '3', '4', '5', and '6', what is the probability of getting a '1' on the first roll of the dice and a '4' on the second roll?
(A)	$\frac{1}{36}$
(B)	$\frac{1}{6}$
(C)	$\frac{5}{6}$
(D)	$\frac{1}{3}$

Q.4	A recent survey shows that 65% of tobacco users were advised to stop consuming tobacco. The survey also shows that 3 out of 10 tobacco users attempted to stop using tobacco. Based only on the information in the above passage, which one of the following options can be logically inferred with <i>certainty</i>?
(A)	A majority of tobacco users who were advised to stop consuming tobacco made an attempt to do so.
(B)	A majority of tobacco users who were advised to stop consuming tobacco did not attempt to do so.
(C)	Approximately 30% of tobacco users successfully stopped consuming tobacco.
(D)	Approximately 65% of tobacco users successfully stopped consuming tobacco.

Q.5	How many triangles are present in the given figure?
	
(A)	12
(B)	16
(C)	20
(D)	24

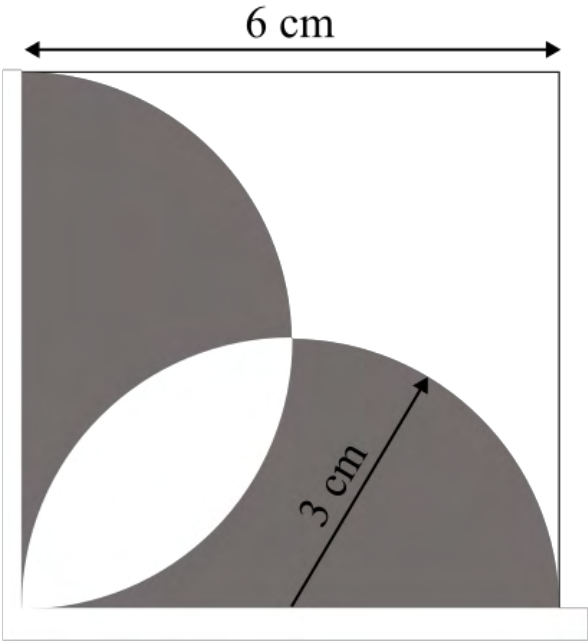
Q.6 – Q.10 Carry TWO marks Each

Q.6	Students of all the departments of a college who have successfully completed the registration process are eligible to vote in the upcoming college elections. However, by the time the due date for registration was over, it was found that suprisingly none of the students from the Department of Human Sciences had completed the registration process. Based only on the information provided above, which one of the following sets of statement(s) can be logically inferred with <i>certainty</i>? (i) All those students who would not be eligible to vote in the college elections would certainly belong to the Department of Human Sciences. (ii) None of the students from departments other than Human Sciences failed to complete the registration process within the due time. (iii) All the eligible voters would certainly be students who are not from the Department of Human Sciences.
(A)	(i) and (ii)
(B)	(i) and (iii)
(C)	only (i)
(D)	only (iii)

Q.7	Which one of the following options represents the given graph?
	
(A)	$f(x) = x^2 2^{- x }$
(B)	$f(x) = x 2^{- x }$
(C)	$f(x) = x 2^{-x}$
(D)	$f(x) = x 2^{-x}$

Q.8	Which one of the options does NOT describe the passage below or follow from it? We tend to think of cancer as a ‘modern’ illness because its metaphors are so modern. It is a disease of overproduction, of sudden growth, a growth that is unstoppable, tipped into the abyss of no control. Modern cell biology encourages us to imagine the cell as a molecular machine. Cancer is that machine unable to quench its initial command (to grow) and thus transform into an indestructible, self-propelled automaton. [Adapted from <i>The Emperor of All Maladies</i> by Siddhartha Mukherjee]
(A)	It is a reflection of why cancer seems so modern to most of us.
(B)	It tells us that modern cell biology uses and promotes metaphors of machinery.
(C)	Modern cell biology encourages metaphors of machinery, and cancer is often imagined as a machine.
(D)	Modern cell biology never uses figurative language, such as metaphors, to describe or explain anything.

Q.9	The digit in the unit's place of the product $3^{999} \times 7^{1000}$ is _____.
(A)	7
(B)	1
(C)	3
(D)	9

Q.10	A square with sides of length 6 cm is given. The boundary of the shaded region is defined by two semi-circles whose diameters are the sides of the square, as shown. The area of the shaded region is _____ cm^2.
	 The diagram shows a square with a side length of 6 cm. Two semi-circles are drawn inside the square. One semi-circle is drawn with its diameter on the left side of the square, and the other is drawn with its diameter on the bottom side. The two semi-circles intersect in the center of the square. The region where the two semi-circles overlap is shaded grey. The two regions of the semi-circles that do not overlap (the outer parts) are also shaded grey. The central overlapping region is white.
(A)	6π
(B)	18
(C)	20
(D)	9π

Reasoning and Comprehension (XH-B1)**XH-B1: Q.11 – Q.17 Carry ONE mark Each**

Q.11	Which word below best describes the idea of being both <i>Spineless</i> and <i>Cowardly</i> ?
(A)	Pusillanimous
(B)	Unctuous
(C)	Obsequious
(D)	Reticent
Q.12	Choose the right preposition to fill up the blank: The whole family got together ____ Diwali
(A)	of
(B)	at
(C)	in
(D)	till

Q.13	Select the correct option to fill in all the blanks to complete the passage: The (i)_____ factor amid this turbulence has been the (ii)_____ of high-octane, action-oriented films such as RRR, K.G.F: Chapter 2 and Pushpa from film industries in the south of the country. Traditionally, films made in the south have done well in their own (iii) _____. But increasingly, their dubbed versions have performed well in the Hindi heartland, with collections (iv)_____ those of their Bollywood counterparts.
(A)	(i) disheartening (ii) failure (iii) channels (iv) matching
(B)	(i) redeeming (ii) outperformance (iii) geographies (iv) eclipsing
(C)	(i) shocking (ii) underperformance (iii) cinemas (iv) below
(D)	(i) humbling (ii) bombing (iii) theatres (iv) falling behind

Q.14	The following passage consists of 6 sentences. The first and sixth sentences of the passage are at their correct positions, while the middle four sentences (represented by 2, 3, 4, and 5) are jumbled up. Choose the correct sequence of the sentences so that they form a coherent paragraph: 1. Most obviously, mobility is taken to be a geographical as well as a social phenomenon. 2. Much of the social mobility literature regarded society as a uniform surface and failed to register the geographical intersections of region, city and place, with the social categories of class, gender and ethnicity. 3. The existing sociology of migration is incidentally far too limited in its concerns to be very useful here. 4. Further, I am concerned with the flows of people within, but especially beyond, the territory of each society, and how these flows may relate to many different desires, for work, housing, leisure, religion, family relationships, criminal gain, asylum seeking and so on. 5. Moreover, not only people are mobile but so too are many ‘objects’. 6. I show that sociology’s recent development of a ‘sociology of objects’ needs to be taken further and that the diverse flows of objects across societal borders and their intersections with the multiple flows of people are hugely significant.
(A)	3, 2, 5, 4
(B)	2, 3, 4, 5
(C)	5, 4, 3, 2
(D)	4, 2, 5, 3

Q.15	The population of a country increased by 5% from 2020 to 2021. Then, the population decreased by 5% from 2021 to 2022. By what percentage did the population change from 2020 to 2022?
(A)	-0.25%
(B)	0%
(C)	2.5%
(D)	10.25%
Q.16	The words Thin: Slim: Slender are related in some way. Identify the correct option(s) that reflect(s) the same relationship:
(A)	Fat: Plump: Voluptuous
(B)	Short: Small: Petite
(C)	Tall: Taller: Tallest
(D)	Fair: Dark: Wheatish

Q.17	A pandemic like situation hit the country last year, resulting in loss of human life and economic depression. To improve the condition of its citizens, the government made a series of emergency medical interventions and increased spending to revive the economy. In both these efforts, district administration authorities were actively involved. Which of the following action(s) are plausible?
(A)	In future, the government can make district administration authorities responsible for protecting health of citizens and reviving the economy.
(B)	The government may set up a task force to review the post pandemic situation and ascertain the effectiveness of the measures taken.
(C)	The government may set up a committee to formulate a pandemic management program to minimize losses to life and economy in future.
(D)	The government may take population control measures to minimize pandemic related losses in future.

XH-B1: Q.18 – Q.26 Carry TWO marks Each

Q.18	Six students, Arif, Balwinder, Chintu, David, Emon and Fulmoni appeared in the GATE-XH exam in 2022. Balwinder scores less than Chintu in XH-B1, but more than Arif in XH-C1. David scores more than Balwinder in XH-C1, and more than Chintu in XH-B1. Emon scores less than David, but more than Fulmoni in XH-B1. Fulmoni scores more than David in XH-C1. Arif scores less than Emon, but more than Fulmoni in XH-B1. Who scores highest in XH-B1?
(A)	Fulmoni
(B)	Emon
(C)	David
(D)	Chintu
Q.19	Select the correct relation between E and F.
	$E = \frac{x}{1+x}$ and $F = \frac{-x}{1-x}$ $x > 1$
(A)	$E > F$
(B)	$E < F$
(C)	$E = F$
(D)	$E < -F$

Q.20	A code language is formulated thus: Vowels in the original word are replaced by the next vowel from the list of vowels, A-E-I-O-U (For example, E is replaced by I and U is replaced by A). Consonants in the original word are replaced by previous consonant (For example, T is replaced by S and V is replaced by T). Then how does the word, GOODMORNING appear in the coded language?
(A)	HUUFNUSPOPH
(B)	FIICLIQMEMF
(C)	FUUCLUQMOMF
(D)	HEEDATTACRH

Q.21	The stranger is by nature no "owner of soil" -- soil not only in the physical, but also in the figurative sense of a life-substance, which is fixed, if not in a point in space, at least in an ideal point of the social environment. Although in more intimate relations, he may develop all kinds of charm and significance, as long as he is considered a stranger in the eyes of the other, he is not an "owner of soil." Restriction to intermediary trade, and often (as though sublimated from it) to pure finance, gives him the specific character of mobility. If mobility takes place within a closed group, it embodies that synthesis of nearness and distance which constitutes the formal position of the stranger. For, the fundamentally mobile person comes in contact, at one time or another, with every individual, but is not organically connected, through established ties of kinship, locality, and occupation, with any single one. What assumptions can be made about the stranger from the passage above?
(A)	The stranger can become an owner of soil through developing all kinds of charm in more intimate relations.
(B)	The stranger cannot become an owner of soil either in the physical or psychological sense.
(C)	The stranger can become an owner of soil through establishing ties of kinship and so on.
(D)	The stranger might become an owner of soil in the physical sense but not in the psychological

Q.22	L is the only son of A and S. S has one sibling, B, who is married to L's aunt, K. B is the only son of D. How are L and D related? Select the possible option(s):
(A)	Grandchild and Paternal Grandfather
(B)	Grandchild and Maternal Grandfather
(C)	Grandchild and Paternal Grandmother
(D)	Grandchild and Maternal Grandmother

Q.23	Five segments of a sentence are given below. The first and fifth segments are at their correct positions, while the middle three segments (represented by 2, 3, and 4) are jumbled up. Choose the correct order of the segments so that they form a coherent sentence: 1. Consumed multitudes are jostling and shoving inside me 2. and guided only by the memory of a large white bedsheet with a roughly circular hole some seven inches in diameter cut into the center, 3. clutching at the dream of that holey, mutilated square of linen, which is my talisman, my open-sesame, 4. I must commence the business of remaking my life from the point at which it really began, 5. some thirty-two years before anything as obvious, as present, as my clock-ridden, crime-stained birth.
(A)	2 – 3 – 4
(B)	3 – 2 – 4
(C)	4 – 2 – 3
(D)	4 – 3 – 2

Q.24	“I told you the truth,” I say yet again, “Memory’s truth, because memory has its own special kind. It selects, eliminates, alters, exaggerates, minimizes, glorifies, and vilifies also; but in the end it creates its own reality, its heterogeneous but usually coherent versions of events; and no sane human being ever trusts someone else’s version more than his own.” What are the different ways in which ‘truth’ can be understood from the passage?
(A)	Truth is what can be verified by hard empirical evidence.
(B)	Truth is based on what can be perceived by the senses.
(C)	Truth is the product of memory that is fallible, selective and slanted.
(D)	Truth is contingent on the observer and can only be partial.
Q.25	A firm needs both skilled labour and unskilled labour for the production of cloth. The wage of skilled labour is Rs. 40,000 per month, and that of unskilled labour is Rs. 15,000 per month. The total wage bill of the firm for the production of cloth is Rs. 23,75,000 in a month for 100 labour. How many skilled labour are employed by the firm (<i>in Integer</i>)?
Q.26	Select the odd word and write the option number as answer: (1) Lek (2) Zloty (3) Diner (4) Drachma (5) Real

Linguistics – C3

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

Q.27	In a writing system, if each unique grapheme represents a unique morpheme/word, the writing system is known as _____.
(A)	Logographic
(B)	Syllabic
(C)	Abugida
(D)	Moraic
Q.28	If an SOV language allows movement to OSV and VSO word orders, the resulting word order will be known as:
(A)	Unmarked
(B)	Marked
(C)	Ungrammatical
(D)	Default

Q.29	The phenomenon where ‘missed hotel’ is pronounced as ‘hissed motel’ is known as _____.
(A)	Agrammatism
(B)	Wernicke’s aphasia
(C)	Spoonerism
(D)	Malapropism
Q.30	When new information is introduced in a communication, such information is classified as _____.
(A)	Focus
(B)	Topic
(C)	Presupposition
(D)	Theme

Q.31	What type of morphological process is involved in the expression ‘English-vinglish’
(A)	Complete reduplication
(B)	Partial reduplication
(C)	Prefixation
(D)	Suffixation
Q.32	Which one of the following is a language isolate?
(A)	Burushashki
(B)	Mundari
(C)	Angami
(D)	Kalasha

Q.33	Which of the following Dravidian language is spoken in Pakistan?
(A)	Konda
(B)	Kuvi
(C)	Toda
(D)	Brahui
Q.34	Which word-order pair is the most common in world's languages?
(A)	SVO-SOV
(B)	SOV-VSO
(C)	VSO-VOS
(D)	SOV-VOS

Q.35	Which type of morphological process is involved in creating <u>catty</u> from <u>cat</u> ?
(A)	Inflection
(B)	Derivation
(C)	Suppletion
(D)	Reduplication
Q.36	Devanagari organizes the consonant graphemes as shown in the image. What is the parameter by which the following two rows differ?
	क ख ग घ ङ /k/ /k^h/ /g/ /g^h/ /ŋ/ प फ ब भ म /p/ /p^h/ /b/ /b^h/ /m/
(A)	Voicing
(B)	Manner of articulation
(C)	Place of articulation
(D)	Aspiration

Q.37	Which option is related to Neo-Whorfism?
(A)	Language, thought, worldview
(B)	Innateness, deep-structure, surface-structure
(C)	Language, methods, analysis
(D)	Signifier, signified, sign
Q.38	Which of the following is/are involved in the comparative method for establishing language families and genetic relationship among languages?
(A)	Reconstruction of the proto language
(B)	Assembling a list of cognates
(C)	Strictly using basic vocabulary lists
(D)	Setting up sound correspondences

Q.39	Aphasia can be caused by
(A)	Open or closed head trauma
(B)	Attention deficit
(C)	Neurodegeneration in advanced age
(D)	Lack of motivation
Q.40	In sociolinguistics, the term ‘anti-language’ refers to the language used for
(A)	Academic purposes by professional criminologists
(B)	Legal proceedings in the court of law
(C)	Communication by small non-mainstream groups
(D)	Communication between caregivers and infants

Q.41	In language policy making, which of the following steps is/are necessary for an erstwhile minority language, spoken by a sizeable population, to be introduced as a medium of instruction in schools?
(A)	Language revival
(B)	Corpus planning
(C)	Status planning
(D)	Language preservation
Q.42	Which of the following research methods involve Reaction Time?
(A)	Behavioral methods
(B)	Experimental methods
(C)	Non-behavioral methods
(D)	Qualitative methods

Q.43	If [p] and [p ^h] are allophones of the same phoneme /p/, which of the following statements is/are true?
(A)	[p] and [p ^h] are in contrastive distribution
(B)	[p] and [p ^h] are in complementary distribution
(C)	[p ^h] has more restrictive occurrence than [p]
(D)	[p] and [p ^h] can be used interchangeably
Q.44	Which of the following show(s) dissociation between cognitive disorder and language abilities?
(A)	Autism spectrum disorder
(B)	Williams syndrome
(C)	Dyslexia
(D)	Specific Language Impairment (SLI)

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

Q.45	Which of the following sound pairs differ from each other in exactly two articulatory parameters?
(A)	[p] vs. [b]
(B)	[t] vs. [s]
(C)	[v] vs. [θ]
(D)	[n] vs. [d]
Q.46	The cover term <u>determiner</u> refers to:
(A)	Articles, demonstratives, and possessors
(B)	Possessors, prepositions, and demonstratives
(C)	Postpositions, articles, and prepositions
(D)	Articles, prepositions, and possessors

Q.47	In 'John seems to have left', the subject <u>John</u> has undergone:
(A)	Subject-to-Subject lowering
(B)	Object-to-Subject raising
(C)	Subject-to-Subject raising
(D)	Object-to-Object lowering
Q.48	The comparative and superlative forms of the adjective 'good' are examples of:
(A)	Alternation
(B)	Syncope
(C)	Ablaut
(D)	Suppletion

[illegible]

Q.50	Match the following historical sound changes in Column X with the processes in Column Y										
	<table> <tr> <th>Column X</th><th>Column Y</th></tr> <tr> <td>P. rupa → rup</td><td>1. Grassman's law</td></tr> <tr> <td>Q. sapta → sa:ta</td><td>2. Apocope</td></tr> <tr> <td>R. b^hod^ha → bod^ha</td><td>3. Assimilation</td></tr> <tr> <td>S. sǣmkǣlǣn → sæŋkǣlǣn</td><td>4. Compensatory lengthening</td></tr> </table>	Column X	Column Y	P. rupa → rup	1. Grassman's law	Q. sapta → sa:ta	2. Apocope	R. b ^h od ^h a → bod ^h a	3. Assimilation	S. sǣmkǣlǣn → sæŋkǣlǣn	4. Compensatory lengthening
Column X	Column Y										
P. rupa → rup	1. Grassman's law										
Q. sapta → sa:ta	2. Apocope										
R. b ^h od ^h a → bod ^h a	3. Assimilation										
S. sǣmkǣlǣn → sæŋkǣlǣn	4. Compensatory lengthening										
(A)	P-2, Q-4, R-1, S-3										
(B)	P-4, Q-2, R-1, S-3										
(C)	P-2, Q-1, R-4, S-3										
(D)	P-2, Q-4, R-3, S-1										

Q.51	Consider the following morphological break-up of <i>pfeifing</i> produced by a simultaneous bilingual child. What phenomenon does this example indicate?
	pfeife + ing → pfeifing whistle (German) + <i>progressive</i> (English) → 'whistling'
(A)	Code-mixing arising out of social bilingualism
(B)	Code-switching based on context of the conversation
(C)	Understanding both languages as part of a single 'system'
(D)	Mixed language arising out of pedagogical preferences
Q.52	Which one of the following is compounding of compounded words?
(A)	Lighthouse tower
(B)	Skating board
(C)	Boyfriend
(D)	Walkman

Q.53	What sociolinguistic phenomenon does the following sentence exemplify?
	la the(fem.) French fam woman French micimine:w she-is-holding-it Cree li the (masc.) French pci little-one French

Q.54	Identify the labels for X and Y in the following tree.
	<pre> graph TD Y --> X Y --> able X --> re X --> use </pre>
(A)	X: Verb, Y: Adjective
(B)	X: Adjective, Y: Adjective
(C)	X: Adjective, Y: Verb
(D)	X: Verb, Y: Verb

[illegible]

Q.56	Look at the adjectives in Column X and match with the types of adjectives in Column Y. Choose the correct option.								
	<table border="1"> <thead> <tr> <th>Column X</th><th>Column Y</th></tr> </thead> <tbody> <tr> <td>P. Blue shirt</td><td>1. Subsective</td></tr> <tr> <td>Q. Fake Picasso</td><td>2. Intersective</td></tr> <tr> <td>R. Big elephant</td><td>3. Anti-intersective</td></tr> </tbody> </table>	Column X	Column Y	P. Blue shirt	1. Subsective	Q. Fake Picasso	2. Intersective	R. Big elephant	3. Anti-intersective
Column X	Column Y								
P. Blue shirt	1. Subsective								
Q. Fake Picasso	2. Intersective								
R. Big elephant	3. Anti-intersective								
(A)	P-2, Q-3, R-1								
(B)	P-2, Q-1, R-3								
(C)	P-1, Q-2, R-3								
(D)	P-1, Q-3, R-2								

Q.57	In a given constraint ranking of *COMPLEX, DEP-IO >> MAX-IO for the input /spun/, which of the following candidates is/are optimal?
(A)	[su.pun]
(B)	[pun]
(C)	[sun]
(D)	[is.pun]
Q.58	Consider the pattern of stress assignment shown below. Which of the given statements is/are true?
	* * * * * (ma . pi) (le . se) <gu>
(A)	Stress assignment is from left to right
(B)	There are/is extrametrical syllable(s)
(C)	Feet are binary
(D)	Stress system is iambic

Q.59	In word processing studies, visual word recognition is affected by:
(A)	Proficiency, word length, neighborhood effect
(B)	Frequency, age of acquisition (AoA), familiarity
(C)	McGurk effect, place and manner of articulation (PoA and MoA)
(D)	Language family, areal features, phoneme inventory size
Q.60	Identify the language(s) that belong(s) to the Balkan Sprachbund.
(A)	Romanian
(B)	Bulgarian
(C)	Norwegian
(D)	Swedish

Q.61	Consider the following tree structure, where A and C are co-referential. Similarly, E and H are co-referential. Identify the <u>incorrect</u> statement(s).
	<pre> graph TD Root[...] --- Ai[A_i] Root --- B[B] B --- Ci[C_i] B --- D[D] D --- Ej[E_j] D --- F[F] F --- G[G] F --- Hj[H_j] </pre>
(A)	A binds C
(B)	C binds E
(C)	E binds D
(D)	A binds H

Q.62	Which of the following statements is/are true for the pair - bird : cuckoo
(A)	Cuckoo is the hyponym of bird
(B)	Bird is the hypernym of cuckoo
(C)	Cuckoo is the hypernym of bird
(D)	Bird is the hyponym of cuckoo
Q.63	In the sentences 1 through 4, in which one(s) a) entails b)?
	1. a) Rama plays a string instrument. 3. a) Fido is a Dalmatian. b) Rama is a violinist. b) Fido is a dog. 2. a) Hutolu sings. 4. a) Students don't study. b) Hutolu is melodious. b) Linguistics students do not study.
(A)	1 a) entails 1 b)
(B)	2 a) entails 2 b)
(C)	3 a) entails 3 b)
(D)	4 a) entails 4 b)

Q.64	The following figure depicts a spectrum of a vowel (dashed line), where $F_0 = 150$ Hz and $F_0 = H_1$. The harmonics are indicated from H_1 to H_{11}. From the figure, the frequency (in Hz) of the second formant (F_2) of this vowel is_____.
Q.65	The number of core arguments associated with the ditransitive verb 'give' is _____.

END OF QUESTION PAPER