 If SPANK is coded as PSNAK, then THROW is coded as (A) HTWOR (B) HTWRO (C) HTROW (D) HTORW If ANCIENT is coded as 2516859 and NATURE is coded as 529048, then TRAIN will be coded as (A) 94285 (B) 92456 (C) 94265 (D) 94168 If BLUE is written as EUBL, then BULB is written as (A) BLUB (B) BBUL (C) BBLU (D) BLBU 40% of 1620 + 30% of 960 = ? % of 5200 (A) 12 (B) 24 (C) 16 (D) 18 	Directions : In question nos. 8 to 13, find the related word/number from the given alternatives. 8. Video: Cassette :: Computer : ? (A) Files (B) Floppy (C) Bits (D) Adit 9. Glucometer : Blood Sugar ;: Sphygmomanometer : ? (A) Earthquake (B) Blood Pressure (C) Atmospheric Pressure (D) Specific Gravity 10. Behaviour : Psychology :: Plant : ? (A) Plant (B) Botany (C) Zoology (D) Physiology 11. Mitochondria : Energy :: DNA : ?
 5. Which of the following interchange of signs would make the given equation correct? 2 × 3 + 6 - 12 ÷ 4 = 17 (A) × and + (B) + and - (C) + and ÷ (D) - and ÷. 6. 'B' stands for addition, 'G' stands for subtraction, 'E' stands for multiplication, 'C' stands for division, 'D' stands for equal to 'A' stands 	 (A) Inheritance (B) Reproduction (C) Locomotion (D) Immunity 12. Desert : Mirage :: Ocean : ? (A) El-Nino (B) Whale (C) Blizard (D) Hail 13. 525 : 25 :: 315 : ? (A) I0 (B) 15 (C) 5 (D) 25 Directions : In question nos. 14 to 19, find the odd word/number/letters/number pair from the given
 for greater than, 'F' stands for less than. In each of the four alternatives, only one expression is correct according to the letter symbol. Identify that expression. (A) 15 C 3 B 2 A 6 E 2 (B) 15 B 2 G 5 A 4 G 4 (C) 15 C 3 B 2 D 6 B 1 (D) 15 B 3 D 4 E 6 7. Identify the symbols to be inserted to make the 	alternatives. 14. (A) $\frac{3}{7}$ (B) $\frac{7}{2}$ (C) $\frac{4}{13}$ (D) $\frac{13}{16}$ 15. (A) Marine (B) Ocean (C) Navigation (D) Sea 16. (A) ZYX (B) FED (C) NML (D) GHI 17. (A) XZY (B) MON
expression correct. $24 \Delta 4 \Delta 5 \Delta 4$ (A) × + × (B) = × + (C) × + = (D) + = ×	(C) PRQ (D) EAC 18. (A) $1-5$ (B) $4-20$ (C) $5-65$ (D) $7-35$ 19. (A) $46-10$ (B) $42-33$ (C) $20-38$ (D) $91-12$

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2 4 3 Directions : In question nos. 20 and 21, arrange the 27. ? given words a meaningful and ascending order and 24 39 20 30 40 select the option indicating the correct order. 2. Earth 3. Mars (C) 50 (B) 49 (D) 56 20. 1. Venus (A) 44 4. Mercury 5. Jupiter (A) 4, 2, 1, 3, 5 (B) 4, 2, 1, 5, 3 2 28. 7 3 (D) 4, 1, 2, 5, 3 9 (C) 4, 1, 2, 3, 5 6 4 2 1 5 21. 1. Pages2. Book rack3. Library4. Books5. Catalogue 39 65 ? (A) 2, 5, 4, 3, 1 (B) 1, 5, 4, 3, 2 (D) 104 (C) 56 (A) 91 (B) 68 (D) 1, 2, 4, 5, 3 (C) 1, 4, 2, 5, 3 29. x goes 15 metres North, then turns right and 22. Which one set of letters when sequentially walks 20 metres, then again turns right and placed at the gaps in the given letter series shall walks 10 metres then again turns right and complete it? walks 20 metres. How many metres is he from ab _ babc _ ab _ b _ bcb _ b his original position ? (A) cbcaa (B) cabac (A) 5 m (B) 10 m (D) acaca (C) abcba (C) 15 m (D) 20 m 23. A series is given, with one term missing. Choose the correct alternative from the given 30. A watch reads 7.30. If the minute hand points ones. West, then in which direction will the hour ABEF, IJMN, ? hand point? (B) QRUV (A) QRVU (B) North East (A) North (C) QRVW (D) QSVU (D) South East (C) North West Directions : In question nos. 24 to 28, find the missing number from the given responses. Directions : In question nos. 31 to 33, from the given alternative words, select the word which cannot be 24. 0, 6, 24, 60, ?, 210 formed using the letters of the given word : (A) 117 (B) 119 (D) 153 (C) 120 **31. PENULTIMATE** 25. 49 81 64 (A) PEANUT (B) MINUTE 4 49 9 (D) LIME-TEA (C) ELIMINATE 25 16 36 ? 11 10 **32. PROCRASTINATE** (D) 16 (A) 6 (B) 4 (C) 9 (A) PATTERN (B) TRACTOR (D) PAINTER (C) PRINTED 21 28 26. 2 14 28 35 3 21 33. ADOLESCENT ? 35 4 ? (A) ENCLOSE (B) DONATE (B) 28 and 42 (A) 35 and 49 (C) SECRET (D) LEAST (C) 21 and 42 (D) 49 and 28

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निर्देश': प्रश्न संख्या 20 और 21 में, दिए गए शब्दों को सार्थक	27. 2 3 4
एवं आरोही क्रम में व्यवस्थित करें और सही क्रम दशति हुए विकल्प चुनें।	24 39 ?
	20 30 40
20. 1. शुक्र 2. पृथ्वी 3. मंगल 4. बुध 5. बृहस्पति	(A) 44 (B) 49 (C) 50 (D) 56
	28. 7 3 2
(A) 4, 2, 1, 3, 5 (B) 4, 2, 1, 5, 3 (C) 4, 1, 2, 2, 5 (D) 4, 1, 5, 3	4 9 6
(C) 4, 1, 2, 3, 5 (D) 4, 1, 2, 5, 3	2 1 5
21. 1. पृष्ठ 2. पुस्तकअल्मारी 3. पुस्तकालय	39 65 ?
4. पुस्तकें 5. पुस्तकसूची	(A) 91 (B) 68 (C) 56 (D) 104
(A) 2, 5, 4, 3, 1 (B) 1, 5, 4, 3, 2 (C) 1, 4, 2, 5, 2 (D) 1, 5, 4, 3, 2	29. x 15 मीटर उत्तर में जाता है तब दाए मुड़कर 20 मीटर
(C) 1, 4, 2, 5, 3 (D) 1, 2, 4, 5, 3	चलता है, उसके बाद फिर दांए मुड़कर 10 मीटर चलता
22. अक्षरों का कौन-सा समूह खाली स्थानों पर क्रमवार रखने	
से दी गई अक्षर शृंखला को पूरा करेगा ?	है। उसके बाद फिर से दांए मुड़कर 20 मीटर चलता है।
ab _ babc _ ab _ b _ bcb _ b (A) c b c a a (B) c a b a c	वह अपनी प्रारंभिक स्थिति से कितने मीटर पर है ?
(C) abcba (D) acaca	(A) 5 मी. (B) 10 मी.
	(C) 15 मी. (D) 20 मी.
23. एक अनुक्रम दिया है, जिसमें एक पद लुम्न है। दिए गए विकल्पों में से वह सही विकल्प चुनिए।	30. घड़ी 7·30 बजे दिखा रही है । यदि मिनट की सुई पश्चिम
ABEF, IJMN, ?	दिशा को दिखा रही है, तो घंटे की सुई किस दिशा को
(A) QRVU (B) ORUV	दिखाएगी ?
(C) QRVW (D) QSVU	
निर्देश : प्रश्न संख्या 24 से 28 तक में दिए गए विकल्पों में से	(A) उत्तर (B) उत्तर पूर्व
लुप्त संख्या ज्ञात कीजिए।	(C) उत्तर पश्चिम (D) दक्षिण पूर्व
24. 0, 6, 24, 60, ?, 210	निर्देश : प्रश्न संख्या 31 से 33 में, निम्नलिखित विकल्पों में से
(A) 117 (B) 119	वह शब्द चुनिए जो दिए गए शब्द के अक्षरों का प्रयोग करके
(C) 120 (D) 153	नहीं बनाया जा सकता :
25. 49 81 64	
4 49 9	31. PENULTIMATE
25 16 36	(A) PEANUT (B) MINUTE (C) ELIMINATE (D) LIME-TEA
10 ? 11	
(A) 6 (B) 4 (C) 9 (D) 16	32. PROCRASTINATE
26. 2 14 21 28	(A) PATTERN (B) TRACTOR
3 21 28 35	(C) PRINTED (D) PAINTER
4 ? 35 ?	33. ADOLESCENT
(A) 35 एव 49 (B) 28 एव 42	(A) ENCLOSE (B) DONATE
(C) 21 एवं 42 (D) 49 एवं 28	(C) SECRET (D) LEAST

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34. 6 boys A, B, C, D, E, F are sitting in a row 38. Statements : I. Ravi has five pens. facing West. D is between A and C. B is just II. No one else in the class has right of C but left of F. E is not at the right end. five pens. Who is at the right end ? Conclusions : (A) C (B) F (C) D (D) B I. All students in the class have pens. II. All students in the class have five pens 35. Y is in the East of X which is in the North of Z. each. If P is in the South of Z, then in which direction III. Some of the students have more than five of Y is P? pens. IV. Only one student in the class has exactly (A) North (B) East five pens. (C) South-East (D) South-West (A) Only conclusion I follows. 36. Kate walks 4 km towards South. She then turns (B) Only conclusion III follows. towards her left and walks 8 km more. After that (C) Only conclusion II follows. (D) Only conclusion IV follows. she turns left again and walks another 8 km. Here, she meets her friend coming from the 39. Three positions of a dice are given. Find out opposite direction and they both stop here. which number is found opposite the number 2 Which direction would she be facing ? in the given cube. (A) North (B) South (C) East (D) West Directions : In question nos. 37 and 38, two statements are given followed by two/four conclusions I, II, III and IV. You have to consider the two (A) 6 (B) 5 (C) 3 (D) 1 statements to be true even if they seem to be at variance from commonly known facts. You have to 40. In the following figure O represents harddecide which of the given conclusions, if any, follow working, Δ represents sincere and \square represents from the given statements. intelligent. Find out the hardworking who are 37. Statements : I. Some birds are clouds. intelligent but not sincere. II. Horse is a bird. Conclusions : I. Some clouds are birds. II. Horse is not a cloud. (A) Conclusion I follows. (B) Conclusion II follows. (C) Either conclusion I or II follows. (D) Neither conclusion I nor II follows. (A) 1 (B) 2 (C) 3 (D) 4 SPACE FOR ROUGH WORK

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49. How many triangles are there in the given 46. From the given answer figures, select the one in which the question figure is hidden/embedded. figure ? Question figure Answer figures (D) 9 (A) 7 (B) 10 (C) 8 (B) (A) (C) 50. A word is represented by only one set of 47. A piece of paper is folded and cut as shown numbers as given in any one of the alternatives. below in the question figures. From the given The sets of numbers given in the alternatives answer figures, indicate how it will appear are represented by two classes of alphabets as when opened. in two matrices given below. The columns and Question figures rows of Matrix I are numbered from 0 to 4 and that of Matrix II are numbered from 5 to 9. A letter from these matrices can be represented first by its row and next by its column, e.g., 'A' can be represented by 00, 12 etc. and 'P' can Answer figures be represented by 56, 76 etc. Similarly, you have to identify the set for the word 'PARROT'. MATRIX I MATRIX II (A) (B) (C) 48. From the answer figures, find out the figure which is the exact mirror image of the question E C A B D A E B D C figure, when the mirror is place on the line 'MN' ? TQR Question figure 4 A D C B E 900 (A) 56, 00, 77, 88, 86, 99 Answer figures (B) 85, 20, 58, 77, 87, 79 (C) 65, 30, 77, 98, 90, 99 17 15-(D) 66, 40, 76, 77, 86, 99 (A) (B) (C) (D) SPACE FOR ROUGH WORK H - AB 2013 10

FOR VISUALLY HANDICA	TED CARDIDATES ONDI
 Directions : In question nos. 39 to 41, find the related word/number/letters from the given alternatives. 39. Man : Mammal :: Snake : ? (A) Insect (B) Reptile (C) Poison (D) Creeper 40. BDF : HJL :: NPR : ? (A) CEG (B) VYZ (C) TVX (D) TWY 41. 12 : 39 :: 15 : ? (A) 45 (B) 46 (C) 47 (D) 48 Directions : In question nos. 42 and 43, find the odd number/letters from the given alternatives. 42. (A) AEBF (B) CGDH (C) JLIK (D) MQNR 43. (A) 121 (B) 133 (C) 153 (D) 177 44. Which one of the given responses would be a meaningful order of the following words in ascending order ? Production Processing and Exploitation Collection (A) 3, 6, 5, 1, 2, 4 (B) 6, 3, 1, 2, 4, 5 (C) 3, 6, 2, 1, 5, 4 (D) 3, 6, 4, 2, 1, 5 Directions : In question nos. 45 to 47, find the missing letter/number of the series from the given responses.	 46. 8, 24, 48, 80, ? (A) 160 (B) 152 (C) 128 (D) 120 47. 6:8::7:11::8:? (A) 10 (B) 13 (C) 16 (D) 6 48. From the given alternative words, select the word which cannot be formed using the letters of the given word: EXAMINATION' (A) EXAMINE (B) NATION (C) EXAM (D) MINE 49. Arrange the following words as per order in the dictionary. STATION STANDARD (A) 2, 3, 5, 4, 1 (B) 2, 4, 3, 5, 1 (C) 2, 4, 5, 3, 1 (D) 4, 2, 3, 5, 1 50. Two statements I and II are given followed by two conclusions I and II. You have to consider the two statements to be true even if they seem to be at variance from commonly known facts. You have to decide which of the given conclusions, if any, follow from the given statements. Statements : I. All E.C.G. machines are computerised. B. Computerised machines are generally accurate. Conclusions : I. All E.C.G. machines are accurate. I. Some of the E.C.G. machines are accurate.
45. EDCBA, JIHGF, ONMLK, ? (A) UVWXY (B) BGLQV (C) TSRQP (D) DINSX	(B) The conclusion II is right.(C) Both conclusions are right(D) Both conclusions are wrong.
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	PART – B : GENE	RAI	AWARENESS	
	Ice glacier's melting is a common phenomenon linked to the rise in seawater level. The glaciers are predominantly present in (A) Greenland (B) Antarctica (C) Himalayas (D) Arctic		Panchayati Raj System was implemented first in the pair of states (A) Andhra Pradesh and Rajasthan (B) Assam and Bihar (C) Arunachal Pradesh and Uttar Pradesh (D) Punjab and Chandigarh	
52.	Who is known for establishing the "Anand Van" ? (A) Jubilant Buddha (B) H. N. Bahuguna (C) Baba Amte (D) Motilal Nehru		Human Environment Conference - 1972 was held at(A) Stockholm(B) Paris(C) Geneva(D) Australia	
53.	The civilian Airport of highest altitude is in (A) Tibet (B) Nepal		 'Gold' is mainly related to (A) Local market (B) National market (C) International market (D) Regional market 	
54.	 (C) India (D) China Genomic (DNA) studies in camel have been completed recently by the scientists of (A) South Africa (B) India 	66.	Bilateral monopoly refers to the market situation of (A) two sellers, two buyers (B) one seller and two buyers (C) two sellers and one buyer (D) one seller and one buyer	
55.	(C) China (D) Pakistan International Simon Bolivar Prize was recently awarded to Aung San Suu Kyi by the government of (A) Mauritius (B) China (C) Mauritius (C) Contact		The economist who believed that unemployment is impossible and that market mechanism has a built in regulatory system to meet any ups and downs (A) J. M. Keynes (B) Ohlin (C) J. B. Say (D) Galbraith	
56.	 (C) Venezuela (D) Cuba BCCI conferred "Col. C. K. Naydu Lifetime Achievement Award" during 2012 to (A) Sachin Tendulkar (B) M. S. Dhoni 		Constituent Assembly of India was formulated on the recommendation of (A) Wavel Plan (B) Cripps Mission (C) August Offer (D) Cabinet Mission Which of the following is an essential element of	
57.	 (C) VVS Laxman (D) Sunil Gavaskar Air quality depicting PM 2.5 is more hazardous to (A) Archaeological Monuments (B) National Parks 		the state ? (A) Sovereignty (B) Government (C) Territory (D) All these Which has become a legal right under 44th	
50	 (C) Botanical Gardens (D) Old Men and Women 		Amendment ? (A) Right to Education (B) Right to Property (C) Right to Judicial Remedies	
20.	 Which of the following is not a fundamental right as per the Indian Constitution ? (A) Right to Education (B) Right to Information (C) Right to Speech (D) Right to Life 		(D) Right to Work By which Constitution Amendment Act, Right to Property ceased to remain a fundamental right ? (A) 44th (B) 42nd (C) 43rd (D) 45th Who said "Truth is the ultimate reality and it is	
59.	 Who is custodian of the Indian Constitution ? (A) President of India (B) Chief Justice of India (C) Prime Minister of India (D) Chairman of Rajya Sabha 		 (A) Swamy Vivekananda (B) Rabindra Nath Tagore (C) M. K. Gandhi (D) Radhakrishnan (D) Which of the following tribes is associated with the 	
60.	Piped Natural Gas (PNG) is used for (A) Mining (B) Welding (C) Anaesthesia (D) Cooking		"Tana Bhagat" movement ? (A) Uraon (B) Munda (C) Santhal (D) Konda dora Who founded the Naujawan Bharat Sabha ?	
61.	Greenpark Stadium is in (A) Bengaluru (B) Dehradun (C) Chandigarh (D) Kanpur		 (A) B. C. Pal (B) G. Subramania Iyer (C) Sardar Bagat Singh (D) Rukmani Lakshmipath 	
62.	Rowlatt Act 1919 was enacted during the period of(A) Lord Chelmsford(B) Lord William(C) Lord Minto(D) Lord Bentinck	75.	The Narendra Mandal or Chamber of Princes was inaugurated in 1921 by (A) Lord Curzon (B) Lord Wellesley (C) Duke of Cannaught (D) Duke of Wellingdon	
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76. Buddha, Dhamma and Sangha together are known	90. Solids which conduct electricity at higher tempera-
as	ture but not at lower temperature are called
(A) Triratna (B) Trivarga	(A) super-conductor (B) metallic-conductor (C) semi-conductor (D) insulator
(C) Trisarga (D) Trimurti 77. Who was called Lichchavi Dauhitra ?	
(A) Chandragupta I (B) Skandagupta	91. Which one of the following has greatest mass ? (A) electron (B) proton
(C) Kumaragupta (D) Samudragupta	(C) neutron (D) hydrogen nucleus
78. Which hill station is called as the 'Queen of the	92. A television channel is characterised by
(A) Pachmarhi (B) Nilgiri	(A) frequency of transmitted signal
(C) Mahenderagiri (D) Cardamom	(B) velocity of transmitted signal
79. Which national highway connects Delhi and	 (C) physical dimension of television screen (D) size of picture tube
Kolkata via Mathura and Varanasi ? (A) NH 4 (B) NH 2	93. The first computer mouse was built by
(C) NH 10 (D) NH 6	(A) Douglas Engelbart (B) William English
80. The country where drip irrigation is more	(C) Oaniel Coogher (D) Robert Zawacki
efficiently used is	94. An organization's profitability depends on
(A) India (B) Israel (C) Sri Lanka (D) England	(A) Quality of data processed (B) Quantity of data processed
81. Which of the following is an endangered species ?	(C) Speed of processing the data
(A) Black buck (B) Blue sheep	(D) Both (A) and (C)
(C) Gangetic dolphin (D) Mithun	95. The density of water is 1 g/cc. This is strictly valid
82. Of the following man-made disasters, which is socially induced ?	at (A) 0°C (B) 4°C
(A) Debris Avalanche	(C) 25°C (D) 100°C
(B) Salt Water Intrusion	96. The process of photosynthesis involves conversion
(C) Arson (D) Ozone depletion	of
83. Which one of the following endocrine gland is	 (A) chemical energy into radiant energy (B) chemical energy into machanical energy
situated in the neck ?	 (B) chemical energy into mechanical energy (C) solar energy into chemical energy
 (A) Pancreas - (B) Thyroid (C) Pituitary (D) Adrenals 	(D) mechanical energy into solar energy
84. The seat of intelligence is situated in the	97. A colloidal system in which a liquid is dispersed in
(A) cerebrum (B) cerebellum	a liquid is called (A) gel (B) emulsion
(C) medulla (D) thalamus	(A) gel (B) emulsion (C) sol (D) precipitate
85. What is the Normal Blood Volume in human adult ? (A) One litre (B) Three litres	98. The antiseptic compound present in dettol is
(C) Five litres (D) Seven litres	(A) Iodine (B) Enloroxylenol
86. The fasting blood glucose level in adults in	(C) Biothional (D) Cresol
mg/100 ml is (A) 200 (B) 160	99. As per the TRIPS Agreement-1994, a good
(C) 100 (D) 60	originating from a region with specific character/ quality/reputation is covered/to be protected under
87. Entomology is the study of	the IPR as
(A) Birds (B) Insects (C) Fossils (D) Fungi	(A) Patent
88. Exobiology is a science that deals with	(B) Trademark (C) Trade secret
(A) extinct forms	(D) GI (Geographical Indicator)
(B) life in other planets(C) life in the outer space	100. Which of the following crop cultivation is banned
(D) life in marine habitat	by the Hon'ble Supreme Court of India ?
89. In radio-communication, the signals emitted by	(A) Lathyrus (Khesari)(B) Genetically modified brinjal
transmitting antenna are reflected on (A) stratosphere (B) ozonosphere	(C) Bt cotton for export
(A) stratesphere (D) troposphere	(D) Bi cotton for local use
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101. A policeman goes after a thief who has 100 metres' start, if the policeman runs a kilometre in 8 min, and the thief a km in 10 min, the distance covered by thief before he is over-powered is (A) 350 m (B) 400 m (C) 320 m (D) 420 m 102. A man borrows ₹ 21000 at 10% compound interest. How much he has to pay equally at the end of each year, to settle his loan in two years ? (A) ₹ 12000 (B) ₹ 12100 (C) ₹ 12200 (D) ₹ 12300 103. If $\frac{4+3\sqrt{3}}{\sqrt{7+4\sqrt{3}}} = A + \sqrt{B}$, then $B - A$ is (A) -13 (B) $2\sqrt{13}$ (C) 13 (D) $3\sqrt{3} - \sqrt{7}$ 104. If the expression $x^2 + x + 1$ is written in the form $(x + \frac{1}{2})^2 + q^2$, then the possible values of q are (A) $\pm \frac{1}{3}$ (B) $\pm \frac{\sqrt{3}}{2}$ (C) $\pm \frac{2}{\sqrt{3}}$ (D) $\pm \frac{1}{2}$ 105. If $a^2 - 4a - 1 = 0$, then value of $a^2 + \frac{1}{a^2} + 3a - \frac{3}{a}$ is (A) 25 (B) 30 (C) 35 (D) 40 106. If $x = \sqrt[3]{a + \sqrt{a^2 + b^3}} + \sqrt[3]{a - \sqrt{a^2 + b^3}}$, then $x^3 + 3bx$ is equal to (A) 0 (B) a (C) 2a (D) 1	TITATIVE APTITUDE 108. If $\frac{1}{\sqrt[3]{4} + \sqrt[3]{2} + 1} = a^{\sqrt[3]{4}} + b^{\sqrt[3]{2}} + c$ and a, b, c are rational numbers, then $a + b + c$ is equal to (A) 0 (B) 1 (C) 2 (D) 3 109. $\frac{1}{1 + 2^{a-b}} + \frac{1}{1 + 2^{b-a}}$ is (A) $a - b$ (B) $b - a$ (C) 1 (D) 0 110. If $\frac{a}{b} = \frac{4}{5}$ and $\frac{b}{c} = \frac{15}{16}$, then $\frac{18c^2 - 7a^2}{45c^2 + 20a^2}$ is equal to (A) $\frac{1}{3}$ (B) $\frac{2}{5}$ (C) $\frac{3}{4}$ (D) $\frac{1}{4}$ 111. Two circles with centres P and Q intersect at B and C. A. D are points on the circles with centres P and $\angle BQD = x^{\circ}$ then the value of x is (A) 65 (B) 130 (C) 195 (D) 135 112. C_1 and C_2 are two concentric circles with centres at 0. Their radii are 12 cm. and 3 cm. respectively. B and C are the points of contact of two tangents drawn to C_2 from a point A lying on the circle C_1 . Then the area of the quadrilateral ABOC is (A) $\frac{9\sqrt{15}}{2}$ sq. cm. (B) $12\sqrt{15}$ sq. cm. (C) $9\sqrt{15}$ sq. cm. (D) $6\sqrt{15}$ sq. cm. 113. I and O are respectively the in-centre and circumcentre of a triangle ABC. The line AI produced intersects the circumcircle of $\triangle ABC$ at the point D. If $\angle ABC = x^{\circ}$, $\angle BID = y^{\circ}$ and the point D. If $\angle ABC = x^{\circ}$, $\angle BID = y^{\circ}$ and the point D. If $\angle ABC = x^{\circ}$, $\angle BID = y^{\circ}$ and the point D. If $\angle ABC = x^{\circ}$, $\angle BID = y^{\circ}$ and the point D. If $\angle ABC = x^{\circ}$, $\angle BID = y^{\circ}$ and the point D. If $\angle ABC = x^{\circ}$, $\angle BID = y^{\circ}$ and the point D. If $\angle ABC = x^{\circ}$, $\angle BID = y^{\circ}$ and the point D. If $\angle ABC = x^{\circ}$, $\angle BID = y^{\circ}$ and the point D. If $\angle ABC = x^{\circ}$, $\angle BID = y^{\circ}$ and the point D. If $\angle ABC = x^{\circ}$, $\angle BID = y^{\circ}$ and the point D. If $\angle ABC = x^{\circ}$, $\angle BID = y^{\circ}$ and the point D. If $\angle ABC = x^{\circ}$, $\angle BID = y^{\circ}$ and the point D. If $\angle ABC = x^{\circ}$, $\angle BID = y^{\circ}$ and the point D. If $\angle ABC = x^{\circ}$, $\angle BID = y^{\circ}$ and the point D. If $\angle ABC = x^{\circ}$, $\angle BID = y^{\circ}$ and the point D. If $\angle ABC = x^{\circ}$, $\angle BID = y^{\circ}$ and the point D. If $\angle ABC = x^{\circ}$, $\angle BID = y^{\circ}$ and the point D. If
107. If $x^2 - y^2 = 80$ and $x - y = 8$, then the average of x and y is (A) 2 (B) 3 (C) 4 (D) 5	$\angle BOD = z^{\circ}$, then $\frac{z+x}{y} =$ (A) 3 (B) 1 (C) 2 (D) 4
SPACE FOR F	ROUGH WORK
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(B) area (ΔBCP) > area (ΔDPQ) (C) area (ΔBCP) < area (ΔDPQ) (D) area (ΔBCP) + area (ΔDPQ) = area ($ABCD$) (D) area (ΔBCP) + area (ΔDPQ) = area ($ABCD$) (D) area (ΔBCP) + area (ΔDPQ) = area ($ABCD$) (D) area (ΔBCP) + area (ΔDPQ) = area ($ABCD$) (D) area (ΔBCP) + area (ΔDPQ) = area ($ABCD$) (D) area (ΔBCP) + area (ΔDPQ) = area ($ABCD$) (D) area (ΔBCP) + area (ΔDPQ) = area ($ABCD$) (D) area (ΔBCP) + area (ΔDPQ) = area ($ABCD$) (A) 12 (B) $\angle ACB = \angle DFF$ (C) $\angle ACB = \angle DFF$ (D) $\angle ABC = \angle DFF$ (C) $\angle ACB = \angle DFF$ (D) $\angle ABC = \angle DFF$ (C) $\angle ACB = \angle DFF$ (D) $\angle ABC = \angle DFF$ (C) $\angle ACB = \angle DFF$ (D) $\angle ABC = \angle DFF$ (A) 12 (B) 24 (C) 36 (D) 48 (A) 412 (B) 24 (C) 36 (D) 48 (A) 45° (B) 47° (A) 45° (B) 47° (B) 47° (C) 16 days (D) 12 days (D) 12 days (D) 12 days (D) 12 days (D) 12 days	114.	Rana drove 8 miles due west, then 6 miles due north, then 3 miles due east and then 6 more miles due north. The distance between his initial and final position is	120. The difference of a number consisting of two digits from the number formed by interchanging the digits is always divisible by (A) 10 (B) 9 (C) 11 (D) 6
such that $BC = CQ$. Then (A) area (ΔBCP) = area (ΔDPQ) (B) area (ΔBCP) > area (ΔDPQ) (C) area (ΔBCP) > area (ΔDPQ) (D) area (ΔBCP) + area (ΔDPQ) = area ($ABCD$) (D) area (ΔBCP) + area (ΔDPQ) = area ($ABCD$) (D) area (ΔBCP) + area (ΔDPQ) = area ($ABCD$) (116. In ΔABC and ΔDEF , $AB = DE$ and $BC = EF$. Then one can infer that $\Delta ABC \cong \Delta DEF$, when (A) $\angle BAC = \angle EDF$ (B) $\angle ACB = \angle EDF$ (C) $\angle ACB = \angle DFF$ (D) $\angle ABC = \angle EDF$ (C) $\angle ACB = \angle DFF$ (D) $\angle ABC = \angle DEF$ 117. The length of the common chord of two circles of radii 30 cm and 40 cm whose centres are 50 cm apart, is (in cm) (A) 12 (B) 24 (C) 36 (D) 48 118. Two chords AB , CD of a circle with centre O intersect each other at P . $\angle ADP = 23^{\circ}$ and $\angle APC = 70^{\circ}$, then the $\angle BCD$ is (A) 45° (B) 47° (C) 57° (D) 67° 119. If the interior angles of a five-sided polygon are in the ratio of 2 : 3 : 3 : 5 : 5, then the measure of the smallest angle is (A) 20° (B) 30° (C) 60° (D) 90° (D) None of the above			(A) three prime factors
(B) area (ΔBCP) > area (ΔDPQ) (C) area (ΔBCP) < area (ΔDPQ) (D) area (ΔBCP) + area (ΔDPQ) = area ($ABCD$) (D) area (ΔBCP) + area (ΔDPQ) = area ($ABCD$) 116. In ΔABC and ΔDEF , $AB = DE$ and $BC = EF$. Then one can infer that $\Delta ABC \cong \Delta DEF$, when (A) $\angle BAC = \angle EDF$ (B) $\angle AACB = \angle EDF$ (C) $\angle ACB = \angle DFE$ (D) $\angle ABC = \angle DEF$ 117. The length of the common chord of two circles of radii 30 cm and 40 cm whose centres are 50 cm apart, is (in cm) (A) 12 (B) 24 (C) 36 (D) 48 118. Two chords AB , CD of a circle with centre O intersect each other at P . $\angle ADP = 23^{\circ}$ and $\angle APC = 70^{\circ}$, then the $\angle BCD$ is (A) 45° (B) 47° (C) 57° (D) 67° 119. If the interior angles of a five-sided polygon are in the ratio of 2: 3: 3: 5: 5, then the measure of the smallest angle is (A) 20° (B) 30° (C) 60° (D) 90° 119. None of the above	115.	the second se	A STATE OF A STAT
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116. In $\triangle ABC$ and $\triangle DEF$, $AB = DE$ and $BC = EF$. Then one can infer that $\triangle ABC \cong \triangle DEF$, when (A) $\angle BAC = \angle DFF$ (B) $\angle ACB = \angle EDF$ (C) $\angle ACB = \angle DFE$ (D) $\angle ABC = \angle DFF$ (C) $\angle ACB = \angle DFE$ (D) $\angle ABC = \angle DFF$ (A) $5\frac{1}{3}$ (B) $6\frac{1}{3}$ (C) $8\frac{1}{3}$ (D) $7\frac{1}{3}$ 117. The length of the common chord of two circles of radii 30 cm and 40 cm whose centres are 50 cm apart, is (in cm) (A) 12 (B) 24 (C) 36 (D) 48 118. Two chords AB , CD of a circle with centre O intersect each other at P . $\angle ADP = 23^{\circ}$ and $\angle APC = 70^{\circ}$, then the $\angle BCD$ is (A) 45° (B) 47° (C) 57° (D) 67° 119. If the interior angles of a five-sided polygon are in the ratio of $2:3:3:5:5$, then the measure of the smallest angle is (A) 20° (B) 30° (C) 60° (D) 90° 117. The length of the common chord of two circles of radii 30 cm and 40 cm whose centres are 50 cm apart, is (in cm) (A) 12 (B) 24 (C) 36 (D) 48 118. Two chords AB , CD of a circle with centre O intersect each other at P . $\angle ADP = 23^{\circ}$ and $\angle APC = 70^{\circ}$, then the $\angle BCD$ is (A) 48° (B) 47° (C) 57° (D) 67° 119. If the interior angles of a five-sided polygon are in the ratio of $2:3:3:5:5$, then the measure of the smallest angle is (A) 20° (B) 30° (C) 60° (D) 90° 119. None of the above			
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(C) $\angle ACB = \angle DFE$ (D) $\angle ABC = \angle DEF$ 117. The length of the common chord of two circles of radii 30 cm and 40 cm whose centres are 50 cm apart, is (in cm) (A) 12 (B) 24 (C) 36 (D) 48 118. Two chords <i>AB</i> , <i>CD</i> of a circle with centre <i>O</i> intersect each other at <i>P</i> . $\angle ADP = 23^{\circ}$ and $\angle APC = 70^{\circ}$, then the $\angle BCD$ is (A) 45° (B) 47° (C) 57° (D) 67° 119. If the interior angles of a five-sided polygon are in the ratio of $2:3:3:5:5$, then the measure of the smallest angle is (A) 20° (B) 30° (C) 60° (D) 90° (C) 60° (D) 90° (A) $5\frac{1}{3}$ (B) $6\frac{1}{3}$ (C) $8\frac{1}{3}$ (D) $7\frac{1}{3}$ 124. <i>A</i> and <i>B</i> together can do a piece of work 12 days which <i>B</i> and <i>C</i> together can do 16 days. After <i>A</i> has been working at it f 5 days and <i>B</i> for 7 days, <i>C</i> finishes it in 13 day In how many days <i>B</i> could finish the work ? (A) 48 days (B) 24 days (C) 16 days (D) 12 days 125. Three circles of radius <i>a</i> , <i>b</i> , <i>c</i> touch each other externally. The area of the triangle formed joining their centres is (A) $\sqrt{(a+b+c)abc}$ (B) $(a+b+c)\sqrt{ab+bc+ca}$ (C) $ab+bc+ca$ (D) None of the above		(A) $\angle BAC = \angle EDF$ (B) $\angle ACB = \angle EDF$	
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$ \angle APC = 70^{\circ}, \text{ then the } \angle BCD \text{ is } (A) 45^{\circ} (B) 47^{\circ} (C) 57^{\circ} (D) 67^{\circ} (D) 67^{$	118.	(A) 12 (B) 24 (C) 36 (D) 48 Two chords AB, CD of a circle with centre O	12 days which B and C together can do i 16 days. After A has been working at it fo 5 days and B for 7 days, C finishes it in 13 days In how many days B could finish the work ?
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(C) 60° (D) 90° (D) None of the above			(B) $(a+b+c)\sqrt{ab+bc+ca}$
		(A) 20° (B) 30°	
SPACE FOR ROUGH WORK		(C) 60° (D) 90°	(D) None of the above
		SPACE FOR	ROUGH WORK
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126. If a metallic cone of radius 30 cm and height 132. A man invested $\frac{1}{3}$ of his capital at 7%, $\frac{1}{4}$ at 8% 45 cm is melted and recast into metallic spheres and the remainder at 10%. If his annual income of radius 5 cm, find the number of spheres. is ₹ 561, the capital is (B) 41 (C) 80 (D) 40 (A) 81 (A) ₹ 5400 (B) ₹ 6000 127. Chords AB and CD of a circle intersect at E and (C) ₹ 6600 (D) ₹ 7200 are perpendicular to each other. Segments AE, 133. The average age of Ram and his two children is EB and ED are of lengths 2 cm, 6 cm and 3 cm 17 years and the average age of Ram's wife and respectively. Then the length of the diameter of the same children is 16 years. If the age of Ram the circle in cm is is 33 years, the age of his wife is (in years) : (B) $\frac{1}{2}\sqrt{65}$ (A) . √65 (A) 31 (B) 32 (C) 35 (D) 30 (C) 65 (D) 65 134. A man's pension on retirement from service is equal to half the average salary during last 128. For every set of 19 kites sold, a vendor gives 3 years of his service. His salary from 1-1-1983 1 kite extra, free of cost. In order to give a is \mathbf{T} 380 per month with increment of \mathbf{T} 40 due discount of 10%, the number of extra kites he should give in a sale of 27 kites to the nearest on 1-10-83, 1-10-84 and 1-10-85. If he retires integer is on 1-1-86, what pension does he draw ? (A) 3 (B) 6 (C) 7 (D) 8 (A) ₹ 205 (B) ₹ 215 129. A ruby stone was bought for ₹ 1600 at Jaipur. (C) ₹ 225 (D) ₹ 230 A sum of ₹ 2400 was spent on making a ring 135. A person bought 76 cows and sold 20 cows at with the ruby stone. It was advertised for sale at 15% profit, 40 cows at 19% profit and Bombay for ₹ 7800. If a discount of 10% was remaining 16 cows at 25% profit and got a given, then the % profit made was (A) 55% (C) 75.5% (B) 68.5% profit of ₹ 6570 as a whole. The cost price of (D) 80% each cow is 130. A shopkeeper buys an article for ₹ 450. He (A) ₹ 450 (B) ₹ 425 marks it at 20% above the cost price. Find the (D) ₹ 400 (C) ₹ 420 percentage discount given by him if he sells the article for ₹ 496.80. 136. One side of a square is increased by 30%. To maintain the same area, the other side will have (A) 8% (B) 9% (C) 10% (D) 12% to be decreased by 131. The area of a circle is proportional to the square (A) $23\frac{1}{13}\%$ (B) 76¹²/₁₃% of its radius. A small circle of radius 3 cm is drawn within a larger circle of radius (C) 30% (D) 15% 5 cm. Find the ratio of the area of the annular 137. Ram travelled 1200 km by air which formed zone to the area of the larger circle. (Area of the $\left(\frac{2}{5}\right)$ of his trip. He travelled one-third of the trip annular zone is the difference between the area of the larger circle and that of the smaller by car and the rest by train. The distance circle). (in km) travelled by train was (A) 9:16 (B) 9:25 (A) 480 (B) 800 (D) 16:27 (C) 1600 (D) 1800 (C) 16:25 SPACE FOR ROUGH WORK H - AB 2013 22





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 e four alternatives, choose the one which best presses the meaning of the given word and mark it the Answer Sheet. 51. Garrulous (A) talkative (B) sedative (C) vocative (D) positive 52. Tinsel (A) tinkle (B) decoration (C) tin (D) colourful 53. Labyrinth (A) meandering (B) rotating (C) pacing (D) wriggling <i>irrections</i>: In question nos. 154 to 156, choose the ord opposite in meaning to the given word and mark in the Answer Sheet. 54. Cordial (A) fast (B) heartfelt (C) inferent (D) inborn 54. Venial (A) minate (B) rational (C) inherent (D) inborn 55. Instinctive (A) minate (B) rational (C) inherent (D) inborn 56. Venial (A) minate (B) rational (C) unpardonable (D) clean 56. Venial (A) minor (B) pardonable (C) unpardonable (D) clean 57. Hard work pays in the long run. (A) always (B) over a period of time (C) indefinitely (D) never 58. I flet a fish out of water among the lawyers. (A) special (B) happy (C) unconfortable (D) proud 59. The Cauvery water issue led to apple of discord between the two Governments. (A) cause of anger (B) cause of anger (C) cause of anger (D) cause of anger (A) cause of anger (B) cause of hatted 	PART – D : ENGLIS	SH COMPREHENSION
(D) cause of animosity (D) No improvement	Directions : In question nos. 151 to 153, out of he four alternatives, choose the one which best xpresses the meaning of the given word and mark it in the Answer Sheet. 151. Garrulous (A) talkative (B) sedative (C) vocative (D) positive 152. Tinsel (A) tinkle (B) decoration (C) tin (D) colourful 153. Labyrinth (A) meandering (B) rotating (C) pacing (D) wriggling Directions : In question nos. 154 to 156, choose the word opposite in meaning to the given word and mark t in the Answer Sheet. 154. Cordial (A) fast (B) heartfelt (C) ritendly (D) hostile 155. Instinctive (A) minor (B) pardonable (C) unpardonable (D) clean Directions : In question nos. 157 to 161, four alternatives are given for the Idiom/Phrase underlined in the sentence. Choose the alternative which best expresses the meaning of the Idiom/Phrase and mark t in the Answer Sheet. 157. Hard work pays in the long run. (A) always (B) over a period of time (C) indefinitely (D) never 158. I felt a fish out of water among the lawyers. (A) special (B) happy (C) uncomfortable (D) proud <!--</th--><th> 160. The construction remains unfinished and the workers have let the grass grow under their feet. (A) grown grass all over the lawn (B) gone on a luxury tour (C) delayed doing the work (D) demanded more benefits 161. The police smelt the rat behind the death of the girl. (A) got very much confused (B) identified the cause of death (C) suspected that something is fishy (D) jumped to the conclusion Directions : In question nos. 162 to 171, a sentence/part of the sentence is underlined. Below are given alternatives to the underlined sentence/part of the sentence is underlined. Below are given alternatives to the underlined sentence/part of the sentence. Choose the correct alternative. In case no improvement is needed, your answer is (D). 162. The disparity of the GDP between the rich and the poor has broadened in the last some decades. (C) have widened in the last few decades (D) No improvement 163. How, is beyond my understanding, the boy could fall into the ditch is beyond my understanding. (B) Beyond my understanding is how the boy could fall into the ditch is beyond my understanding. (D) No improvement 164. The pioneer spacecraft went beyond Pluto. (A) made its way past (B) went across (C) went after (D) No improvement 165. The firm buys frozen seafood in bulk, packs it into smaller pouches and then they sell them to the local grocery stores. (A) it sells them (B) sell them (C) they sell the pouches (D) No improvement </th>	 160. The construction remains unfinished and the workers have let the grass grow under their feet. (A) grown grass all over the lawn (B) gone on a luxury tour (C) delayed doing the work (D) demanded more benefits 161. The police smelt the rat behind the death of the girl. (A) got very much confused (B) identified the cause of death (C) suspected that something is fishy (D) jumped to the conclusion Directions : In question nos. 162 to 171, a sentence/part of the sentence is underlined. Below are given alternatives to the underlined sentence/part of the sentence is underlined. Below are given alternatives to the underlined sentence/part of the sentence. Choose the correct alternative. In case no improvement is needed, your answer is (D). 162. The disparity of the GDP between the rich and the poor has broadened in the last some decades. (C) have widened in the last few decades (D) No improvement 163. How, is beyond my understanding, the boy could fall into the ditch is beyond my understanding. (B) Beyond my understanding is how the boy could fall into the ditch is beyond my understanding. (D) No improvement 164. The pioneer spacecraft went beyond Pluto. (A) made its way past (B) went across (C) went after (D) No improvement 165. The firm buys frozen seafood in bulk, packs it into smaller pouches and then they sell them to the local grocery stores. (A) it sells them (B) sell them (C) they sell the pouches (D) No improvement

66. The learners are intended to read the sources at	Directions : In question non 172 + 170
home.	<i>Directions</i> : In question nos. 172 to 178 , out of the four alternatives, choose the one which can be substi-
(A) are meant (B) are suggested	tuted for the given words/sentence and indicate it by
(C) are expected (D) No improvement	blackening the appropriate oval [•] in the Answer Sheet.
67. Fuji's invention of supercomputer will be	172. One who is unaffected or indifferent to joy, pain,
enable to make Japan supercede America in	pleasure or grief
computer technology.	(A) Tolerant (B) Resigned
(A) will make Japan	(C) Passive (D) Stoic
(B) will enable Japan	173. A person who is greatly served to
(C) can make Japan	173. A person who is greatly respected because of wisdom
(D) No improvement	(A) veracious (B) vulnerable
the state of the state of the state of the	(C) venerable (D) verger
58. I could never repay the debt I owe to my	
place of study.	174. An excessively morbid desire to steal (A) stealomania (B) kleptomania
(A) Alma Mater (B) Motherland	
(C) Place of worship (D) No improvement	(=) nepromana
0 01	175. Prohibited by law or treaty from being imported
9. She cries all the time.	or exported
(A) mostly everytime	(A) contraband (B) smuggled
(B) Day in and day out	(C) counterfeit (D) forged
(C) pretty frequently	176. Intentional destruction of racial groups
(D) No improvement	(A) regicide (B) genocide
	(C) homicide (D) fratricide
0. For a week last month, the team's 20 players were stranded because the <u>Government-issued</u> passport is not up to international standards.	177. A person in a vehicle or on horseback escorting another vehicle
	(A) Navigator (B) Escort
(A) Government-issued passports were not up to international standards	(C) Outrider (D) Security
(B) Government-issued passports are not up to international standards	178. A person specially interested in the study of coins and medals.
(C) The passports issued by the government were not up to international standards	(A) medallist (B) coinist (C) numismatist (D) numerist
(D) No improvement	Directions : In question nos. 179 and 180, there are four different words out of which one is correctly
Since July 2008, our customers will be able to use the ATM network of BBY Bank, the bank that was acquired by us during that year.	spelt. Find the correctly spelt word and indicate it by blackening the appropriate oval [•] in the Answer Sheet.
(A) have been able to use	179. (A) humorous (B) humourous
(B) were using	(C) humorus (D) humourus
(C) will have been able to use	(e) numberes
(D) No improvement	180. (A) narcisism (B) narcissism (C) narcisim (D) narsisism

Directions : In question nos. **181** to **190**, you have two brief passages with 5 questions in each passage. Read the passages carefully and choose the best answer to each question out of the four alternatives and mark it by blackening the appropriate oval [.] in the Answer Sheet.

PASSAGE I

(Question Nos. 181 to 185)

Pidgins are languages that are not, acquired as mother tongues and that are used for a restricted set of communicative functions. They are formed from a mixture of languages and have a limited vocabulary and a simplified grammar. Pidgins serve as a means of communication between speakers of mutually unintelligible languages and may become essential, in multilingual areas. A creole develops from a pidgin when the pidgin becomes the mother tongue of the community. To cope with the consequent expansion of communicative functions the vocabulary is increased and the grammar becomes more complex. Where a creole and the standard variety of English coexist, as in the Carribbean, there is a continuum from the most extreme form of creole to the form that is closest to the standard language. Linguists mark off the relative positions on the creole continuum as the 'basilect' (the furthest from the standard language), the 'mesolect', and the 'acrolet'. In such situations, most creole speakers can vary their speech along the continuum and many are also competent in the standard English of their country.

181. A pidgin develops in a situation when

- (A) Different and mutually unintelligible languages exist side by side
- (B) A creole becomes the mother tongue of a linguistic community
- (C) A language with restricted vocabulary undergoes an expansion in grammar and vocabulary
- (D) Two similar languages are mixed to create a new language
- 182. According to the given passage a pidgin becomes a creole when
 - (A) It ceases to be a means of communication(B) It becomes the mother tongue for a new generation of speakers
 - (C) Its vocabulary undergoes some kind of change
 - (D) Two or more languages are mixed with an existing pidgin

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183. According to the passage, a creole continuum is(A) A linguistic term for the mixture of more

- than two languages(B) A scale which measures the linguistic
- competence of the speaker (C) A scale in which the proximity of the
- creole to the standard language is measured
- (D) A record of the continuous history of a creole
- 184. According to the passage 'basilect' means
 - (A) An impure form of a creole
 - (B) A form of creole which is furthest from the standard language
 - (C) A form of creole which has an extended vocabulary
 - (D) A form of creole which is very close to the standard language

185. Find out a word in the passage which is opposite in meaning to the word – 'Simplified'

(A)	Complex	(B)	Expansion
(C)	Restricted	(D)	Consequent

PASSAGE II

(Question Nos. 186 to 190)

There were four of us – George, and William Samuel Harris, and myself, and Montmorency. We were sitting in my room, smoking and talking about how bad we were – bad from a medical point of view I mean, of course.

We were all feeling seedy, and we were getting quite nervous about it. Harris said he felt such extraordinary fits of giddiness come over him at' times, that he hardly knew what he was doing; and then George said that he had fits of giddiness too; and hardly knew what he was doing. With me, it was my liver that was out of order. I knew it was my liver that was out of order, because I had just been reading a patent liver-pill circular, in which were detailed the various symptoms by which a man could tell when his liver was out of order. I had them all.

It is a most extraordinary thing, but I never read a patent medicine advertisement without being impelled to the conclusion that I am suffering from the particular disease therein dealt with in its most virulent form. The diagnosis seems in every case to correspond exactly with all the sensations that I have ever felt.

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Answer Key

1		F 4	_	404		454	•
1	D	51	D	101	B	151	A
2	С	52	С	102	B	152	В
3	D	53	D	103	С	153	A
4	D	54	С	104	В	154	D
5	A	55	С	105	В	155	В
6	* B C	56	D	106	С	156	С
7	В	57	D	107	D	157	В
8	* B	58	В	108	A	158	С
9	В	59	В	109	С	159	С
10	В	60	D	110	D	160	С
11	A	61	D	111	В	161	С
12	A	62	А	112	С	162	В
13	В	63	А	113	С	163	A
14	В	64	А	114	A	164	Α
15	С	65	С	115	*	165	* A
16	D	66	D	116	D	166	С
17	D	67	А	117	D	167	Α
18	С	68	D	118	В	168	Α
19	D	69	D	119	С	169	* D
20	С	70	В	120	В	170	А
21	С	71	А	121	С	171	А
22	Α	72	С	122	С	172	D
23	В	73	A	123	A	173	С
24	С	74	С	124	Α	174	В
25	A	75	C	125	D	175	Α
26	В	76	A	126	A	176	В
27	D	77	D	127	В	177	С
28	Α	78	А	128	* A	178	C
29	А	79	В	129	С	179	* B
30	С	80	В	130	A	180	В
31	C	81	C	131	С	181	A
32	C	82	C	132	C	182	В
33	C	83	B	133	D	183	C
34	B	84	A	134	B	184	B
35	D	85	C	135	A	185	A
36	A	86	D	136	A	186	C
37	A	87	B	137	В	187	B
38	D	88	C	138	C	188	B
39	A	89	C	139	C	189	A
40	B	90	A	140	B	190	D
41	D	91	C	140	A	191	B
42	C	92	A	142	B	192	B
43	B	93	A	142	C	192	C
44	D	93	D	144	B	193	B
45	A	95	B	145	B	195	B
46	A	95	C	145	B	195	A
47	A	90	B	140	D	190	B
48	C	97	B	147	C	197	C
49	B	98 99	A	140	D	198	A
50	A	99 100	A	149	* B	200	A
	А	100	A	130	Б	200	А