ACCENTURE 2023 QUESTION PAPER 1

English (17 questions)

Question Number:	**1.**
Language	ENGLISH
Topic	Prepositions
Subtopic	
Type	MCQ
Question	If you will step _____, I will not take you inside again.
Option 1	In
Option 2	for
Option 3	on
Option 4	None of the above
KEY	**None of the above**
Explanation	Here the second sentence is representing is inside, so none of the above option is correct.
Difficulty	Medium

Question Number:	**2.**
Language	ENGLISH
Topic	Prepositions

Subtopic	
Type	MCQ
Question	Keep the drawer clean, there were rats_____ the drawer last night.
Option 1	Outside
Option 2	inside
Option 3	above
Option 4	None of the above
KEY	**inside**
Explanation	Here, the sentence is indicating that something happened into the drawer, so ‘inside’ will be used.
Difficulty	Medium

Question Number:	**3.**
Language	ENGLISH
Topic	Grammar
Subtopic	
Type	MCQ
Question	**Fill in the blanks by choosing correct option :** Sam ---- part-time to meet his daily expenses.
Option 1	works

Option 2	worked
Option 3	working
Option 4	Was working
KEY	**works**
Explanation	Since the sentence is the present simple tense, hence work will be used, as it acts as a base for the verb.
Difficulty	Medium

Question Number:	**4.**
Language	ENGLISH
Topic	Grammar
Subtopic	
Type	MCQ
Question	Nancy ------- the church, before she appeared for the exam.
Option 1	Had visited
Option 2	Visit
Option 3	Was visiting
Option 4	Will visit
KEY	**Had visited**
Explanation	Since the sentence is in past perfect tense, hence had visited will be used, as other options like visit (present), was visiting and

	will visit (form of future tense) doesn't suit the sentence frame.
Difficulty	Medium

Question Number:	**5.**
Language	ENGLISH
Topic	Synonym and Antonym
Subtopic	
Type	MCQ
Question	Identify which among the following words is the synonym of the word 'ATROCIOUS.'
Option 1	Beautiful
Option 2	Horrible
Option 3	Hardworking
Option 4	Lazy
KEY	**Horrible**
Explanation	Explanation: The word Atrocious means very bad. Beautiful is the antonym of the word atrocious. Hardworking and lazy are not similar to the word bad. Therefore, horrible is the same word for atrocious.
Difficulty	Medium

Question Number:	**6.**
Language	ENGLISH
Topic	Synonym and Antonym
Subtopic	
Type	MCQ
Question	Identify which among the following words is the antonym of the word ‘AWHILE.
Option 1	Everlastingly
Option 2	For a short period
Option 3	Bit
Option 4	Little
KEY	**Everlastingly**
Explanation	**Explanation:** Awhile means for a moment so the opposite will be for a long time. Everlastingly means forever or for a long period of time. For a short period, bit, and little are similar words for AWHILE.
Difficulty	Medium

Question Number:	**7.**
Language	ENGLISH
Topic	Idioms and Phrases

Subtopic	
Type	MCQ
Question	After Reina's break-up with her boyfriend, she was **at a loss state** for few months.
Option 1	At a relation loss state
Option 2	Blank state
Option 3	Business loss state
Option 4	None of the above
KEY	**Blank state**
Explanation	The above phrase means a blank or confused state, not knowing what to do next.
Difficulty	Medium

Question Number:	**8.**
Language	ENGLISH
Topic	**Idioms and Phrases**
Subtopic	
Type	MCQ
Question	Both the brothers were **at loggerheads** for a girl.
Option 1	People with big heads
Option 2	People with hates

Option 3	To be at conflict
Option 4	None of the above
KEY	**To be at conflict**
Explanation	The above phrase means, to have a conflict or fight, etc.
Difficulty	Medium

Question Number:	**9.**
Language	ENGLISH
Topic	Speech and Tenses
Subtopic	
Type	MCQ
Question	Choose the correct speech sentence from the following given options: He said, “He takes exercise session everyday.”
Option 1	He said that he took exercise session every day
Option 2	He said that he would take excerise session every day.
Option 3	He said that he has taken execise session every day
Option 4	None of the above
KEY	**He said that he took exercise session every day**
Explanation	Explanation: The reporting speech, ‘he said’ is in the past tense, so when we will change the sentence in indirect speech, the reported verb, “he takes the exercise session every day” will be changed into the past tense.

Difficulty	Medium

Question Number:	**10.**
Language	ENGLISH
Topic	Speech and tenses
Subtopic	
Type	MCQ
Question	They said, “They are taking the salsa classes everyday.”
Option 1	They said that they will take salse classes every day.
Option 2	They said that they were taking the salsa classes every day.
Option 3	They said that they will be taking the salsa classes every day.
Option 4	None of the above
KEY	**They said that they were taking the salsa classes every day.**
Explanation	Explanation: The reported speech, “they are taking the salsa classes’ is in the present continuous tense, so when we will change the sentence in indirect speech, it will be changed into past continuous tense.
Difficulty	Medium

Question Number:	**11.**
Language	ENGLISH

Topic	Article
Subtopic	
Type	MCQ
Question	_____ nail was so sharp and big, that it damaged my bicycle wheel.
Option 1	The
Option 2	A
Option 3	An
Option 4	None of the above
KEY	**The**
Explanation	Nails mentioned in the sentence is defined correctly and direct, so we will use, ‘the’ as an article in the sentence.
Difficulty	Medium

Question Number:	**12.**
Language	ENGLISH
Topic	Article
Subtopic	
Type	MCQ
Question	Today, I gave _____ advertisement in the newspaper for a new roommate.
Option 1	The

Option 2	A
Option 3	an
Option 4	None of the above
KEY	**An**
Explanation	Here the sentence is giving a general idea of advertisement and the word, ‘advertisement’ starts with a vowel sound that is, a, e, I, o, u. So indefinite article, ‘an’ will be used.
Difficulty	Medium

Question Number:	**13.**
Language	ENGLISH
Topic	Sentence selection
Subtopic	
Type	MCQ
Question	Little of our time was lost sitting idle during our holiday as it was raining since morning.
Option 1	Plenty of our time was lost sitting idle during our holiday as it was raining since morning
Option 2	Lots of our time was lost sitting idle during our holiday as it was raining since morning
Option 3	Some of our time was lost sitting idle during our holiday as it was raining since morning

Option 4	None of the above
KEY	**Plenty of our time was lost sitting idle during our holiday as it was raining since morning**
Explanation	The correct quantifier will be, ‘plenty’ as other options are idiomatically wrong.
Difficulty	Medium

Question Number:	**14.**
Language	ENGLISH
Topic	Sentence selection
Subtopic	
Type	MCQ
Question	The staff is trying hard at getting what is still remaining dues to them.
Option 1	The staff is trying hard on getting what is still remaining dues to them
Option 2	The staff is trying hard for getting what is still remaining dues to them
Option 3	The staff is trying hard upon getting what is still remaining dues to them
Option 4	None of the above
KEY	**The staff is trying hard upon getting what is still remaining dues to them**

Explanation	Explanation Here the sentence is stating that the staff is trying hard, which is not static, it is in motion, so, ‘upon’ will be used, as it is giving a meaning to the sentence. So option III is correct.
Difficulty	Medium

Question Number:	**15.**
Language	ENGLISH
Topic	Spotting error
Subtopic	
Type	MCQ
Question	Which tie is the best from the three that shopkeeper has shown you?
Option 1	Which tie is the best from
Option 2	The three that shopkeeper
Option 3	Has shown you
Option 4	No error
KEY	**Which tie is the best from**
Explanation	Explanation: Whenever we compare things an adjective should be used, instead of superlative, so we will write, ‘which tie is better from.’
Difficulty	Medium

Question Number:	**16.**
Language	ENGLISH
Topic	Spotting error
Subtopic	
Type	MCQ
Question	The groom had found out that the bride has been afraid and not sure about the noises coming from outside.
Option 1	The groom had found out
Option 2	And not sure about the noises coming from outside
Option 3	That the bride has been afraid
Option 4	No error
KEY	That the bride has been afraid
Explanation	Explanation: We have used past perfect tense in the first clause of the sentence, so, ‘has been’ would not be used in the other clause, we will use, ‘was’ before afraid
Difficulty	Medium

Question Number:	**17.**
Language	ENGLISH
Topic	Sentence arrangement
Subtopic	
Type	MCQ

Question	**Arrange the given sentence in correct series to form meaningful sentence :** A) To the actual cost of the service B) In rational proportion C) Marketing cost is now D) No longer
Option 1	CDBA
Option 2	DBAC
Option 3	CADB
Option 4	None of the above
KEY	**CDBA**
Explanation	‘Marketing cost are now’ is the subject which is the start of the sentence followed by the, ‘no longer’ which is making sense in the sentence and then ‘b’ and ‘a’ which is verb and adverb. Marketing cost is no longer in rational proportion to the actual cost of the service.
Difficulty	Medium

2. critical reasoning (18 questions)

Question Number:	**1.**
Language	

Topic	Critical reasoning
Subtopic	Arrangements
Type	MCQ
Question	Ques 1. Seven Balls A, B, C, D, E, F, G are bought at a different costs between Rs.10 and Rs.20 but not necessarily in the same order. The Cost of ball C is five less than that of ball E. The Cost of Ball A is a prime number. The cost of Ball F is two more than that of Ball A. The cost of Ball F is more than that of Ball E. The cost of Ball D is an odd number. The cost of Ball G is three more than cost of Ball D. None of the Ball cost is Rs.14. The cost of Ball B is an even number. Question- Calculate the cost of Ball E.
Option 1	Rs.16
Option 2	Rs.15
Option 3	Rs.18
Option 4	Connot be detarmained
KEY	**Rs.16**
Explanation	Balls Costs A 17 B 12 C 11 D 15 E 16 F 19 G 18
Difficulty	Medium

Question Number:	**2.**
Language	
Topic	Critical reasoning
Subtopic	Arrangements
Type	MCQ
Question	Seven Balls A, B, C, D, E, F, G are bought at a different costs between Rs.10 and Rs.20 but not necessarily in the same order. The Cost of ball C is five less than that of ball E. The Cost of Ball A is a prime number. The cost of Ball F is two more than that of Ball A. The cost of Ball F is more than that of Ball E. The cost of Ball D is an odd number. The cost of Ball G is three more than cost of Ball D. None of the Ball cost is Rs.14. The cost of Ball B is an even number. Question- How many Balls are cheaper than Ball D?
Option 1	4
Option 2	2
Option 3	3
Option 4	1
KEY	**2**
Explanation	2
Difficulty	Medium

Question Number:	**3.**
Language	
Topic	Critical reasoning
Subtopic	Blood relations
Type	MCQ
Question	**Read the following information carefully and answer the questions that are given below it:** A family has six people P, Q, R, S, T, and U. These are Plumber, Mechanic, Professor, Cook, Painter, and Driver. There are two married couples in the family. S, the Cook is married to the lady professor. The mechanic is married to the Plumber. U, the driver is the son of Q and brother of T. R the Plumber is the daughter in law of P. T is an unmarried painter. P is the grandmother of U. What is the profession of P?
Option 1	Professor
Option 2	Cook
Option 3	Painter
Option 4	Driver
KEY	**Professor**
Explanation	U is the son of Q. Hence, Q is R's husband. But R, the plumber is married to the mechanic, hence Q is the mechanic. U, the accountant will be the son of Q and R. T is an unmarried painter, hence the other married couple can be that of the grandmother of U, i.e., P and S. But S is a cook and is married to lady professor. Hence, S the cook is the grandfather of U, the lady professor who is a grandmother of U.

	P is a Professor.
Difficulty	Medium

Question Number:	**4.**
Language	
Topic	Critical reasoning
Subtopic	Blood relations
Type	MCQ
Question	**Read the following information carefully and answer the questions that are given below it:** A family has six people P, Q, R, S, T, and U. These are Plumber, Mechanic, Professor, Cook, Painter, and Driver. There are two married couples in the family. S, the Cook is married to the lady professor. The mechanic is married to the Plumber. U, the driver is the son of Q and brother of T. R the Plumber is the daughter in law of P. T is an unmarried painter. P is the grandmother of U. Which of the following is a couple?
Option 1	U and S
Option 2	S and Q
Option 3	T and P
Option 4	None of the above
KEY	**None of the above**

Explanation	None of the above given options is a couple.
Difficulty	Medium

Question Number:	**5.**
Language	
Topic	Critical reasoning
Subtopic	Statement and conclusion
Type	MCQ
Question	Given below are three statements followed by three conclusions. Take the given statements to be accurate, even if they contradict commonly known proofs, and conclude the conclusions that reasonably follows from the statements. **Statements:** ● Some guardians are like parents. ● Some relatives can be considered as guardians ● Both relatives and guardians are like parents **Conclusions:**

	1. Some guardians are relatives. 2. Some guardians are parents. 3. Relatives and guardians are not considered as parents.
Option 1	Only conclusion I and conclusion II follow
Option 2	Only conclusion I and conclusion III follow
Option 3	Only conclusion I follow
Option 4	None follow
KEY	**Only conclusion I and conclusion II follow**
Explanation	According to statements above, some guardians are like parents, and some are considered as relatives. Legal Guardians are parents and relatives can also be guardians. Hence, only conclusion I and II follow. As conclusion III states, that guardians cannot be parents which is false, they can be considered as guardians.
Difficulty	Medium

Question Number:	**6.**
Language	

Topic	Critical reasoning
Subtopic	Statement and conclusion
Type	MCQ
Question	A question is given followed by two statements 1 and 2. The statements may or may not be correct according to the given question. You have to decide if these statements are sufficient to answer the question. **Question:** What is the age of D? **Statement(s):** 1. C's age is 12 years. 2. D is four years younger than C
Option 1	Each statement alone is sufficient to answer the question
Option 2	Either statement I or statement II follow
Option 3	Neither statement I nor II are sufficient to answer the questions
Option 4	Both statements I and II together are sufficient to answer the question
KEY	**Both statements I and II together are sufficient to answer the question**
Explanation	If C is 12 years than D is four years younger than C, which means D is eight years old
Difficulty	Medium

Question Number:	**7.**
Language	

Topic	Critical reasoning
Subtopic	Coding decoding
Type	MCQ
Question	If OKLAHOMA is coded as PLMBJQOC, what will be BLANCHARD coded as?
Option 1	GFHFJDHY
Option 2	FHFULMSE
Option 3	CMBOEJCTF
Option 4	JGJFYRBCVF
KEY	**CMBOEJCTF**
Explanation	In the given code, the first four letters of the word are replaced by their next alphabets in the series. The next four alphabets are replaced by adding one to the immediate alphabet. Hence the coded word for BLANCHARD will be CMBOEJCTF.
Difficulty	Medium

Question Number:	**8.**
Language	
Topic	Critical reasoning
Subtopic	Coding decoding
Type	MCQ
Question	.In a certain code language FASTER is coded as ZUGHIV. Find the code for SLOWER.

Option 1	HOLDVI
Option 2	OHDLIV
Option 3	OHLDVI
Option 4	OHDLVI
KEY	**OHDLIV**
Explanation	A=1 B=2 C=3 D=4 E=5 F=6 G=7 H=8 I=9 J=10 K=11 L=12 M=13 N=14 O=15 P=16 Q=17 R=18 S=19 T=20 U=21 V=22 W=23 X=24 Y=25 Z=26 A=26 B=25 C=24 D=23 E=22 F=21 G=20 H=19 I=18 J=17 K=16 L=15 M=14 N=13 O=12 P=11 Q=10 R=9 S=8 T=7 U=6 V=5 W=4 X=3 Y=2 Z=1 The alphabets in the primary word are replaced by the alphabets in the reverse series. Also. The pair of alphabets are swapped in the end.
Difficulty	Medium

Question Number:	**9.**
Language	

Topic	Critical reasoning
Subtopic	Agree Disagree Psychometric
Type	MCQ
Question	Companies that provides better customer services are likely to see growth and increase in the revenue.
Option 1	Strongly agree
Option 2	Agree
Option 3	Neutral
Option 4	disagree
KEY	Strongly agree
Explanation	Customer services plays vital role in company’s success. It's the leading indicator for measuring customer loyalty
Difficulty	Medium

Question Number:	**10.**
Language	
Topic	Critical reasoning
Subtopic	**Agree Disagree Psychometric**
Type	MCQ
Question	There should be friendly relationship between top management and employees of the company.
Option 1	Strongly agree

Option 2	Agree
Option 3	Neutral
Option 4	Disagree
KEY	**Strongly agree**
Explanation	If top management and employees have healthy relationship than company can reach its goals easily.
Difficulty	Medium

Question Number:	**11.**
Language	
Topic	Critical reasoning
Subtopic	Analogies
Type	MCQ
Question	Find a pair that is similar to the given pair of numbers
Option 1	270:30
Option 2	140:70
Option 3	180:60
Option 4	330:10
KEY	**180:60**
Explanation	Explanation The relationship here is 3x : x.
Difficulty	Medium

Question Number:	**12.**
Language	
Topic	Critical reasoning
Subtopic	Analogies
Type	MCQ
Question	BDFH: ACEG: PRTV:
Option 1	QSUW
Option 2	OQSU
Option 3	SUWY
Option 4	MOQS
KEY	**OQSU**
Explanation	Option(B) Explanation Each letter of the second term is one letter backward of the first term
Difficulty	Medium

Question Number:	**13.**
Language	
Topic	Critical reasoning
Subtopic	Inferred meaning
Type	MCQ

Question	Direction- Based on the given passage find out which of the statement can be inferred from the passage. In the 16th century, an age of great marine and terrestrial exploration, Ferdinand Magellan led the first expedition to sail around the world. As a young Portuguese noble, he served the king of Portugal, but he became involved in the quagmire of political intrigue at court and lost the king's favor. After he was dismissed from service by the king of Portugal, he offered to serve the future Emperor Charles V of Spain. Ferdinand Magellan got involved in the quagmire of political intrigue and lost king's _____.
Option 1	Consideration
Option 2	Predicament
Option 3	Termination
Option 4	Cessation
KEY	**Consideration**
Explanation	Explanation Favor means attention and respect. No options here means attention or respect other than the word consideration.
Difficulty	Medium

Question Number:	**14.**
Language	
Topic	Critical reasoning
Subtopic	Inferred meaning
Type	MCQ

Question	Direction- Magellan became involved in an insular conflict in the Philippines and was killed in a tribal battle. Only one ship and 17 sailors under the command of the Basque navigator Elcano survived to complete the westward journey to Spain and thus prove once and for all that the world is round, with no precipice at the edge. Magellan got killed in a tribal battle in Philippines after involving in a _____.
Option 1	Parochial battle
Option 2	Unbiased war
Option 3	Unprejudiced conflict
Option 4	Unconventional concord
KEY	**Parochial battle**
Explanation	Explanation insular conflict is an isolated or a narrow minded war. Parochial battle is the synonym of insular conflict. Other are the opposites.
Difficulty	Medium

Question Number:	**15.**
Language	
Topic	Critical reasoning
Subtopic	Logical sequences
Type	MCQ
Question	Arrange the following words in a meaningful sequence. 1.India 2. Imphal 3. World 4. Manipur 5.Universe

Option 1	4,2,5,3,1
Option 2	1,5,3,4,3
Option 3	1,3,2,4,5
Option 4	2,4,1,3,5
KEY	**2,4,1,3,5**
Explanation	Explanation Imphal, Manipur, India, World, Universe
Difficulty	Medium

Question Number:	**16.**
Language	
Topic	Critical reasoning
Subtopic	Logical sequences
Type	MCQ
Question	Arrange the following words in a meaningful sequence. 1. Interval 2. Assembly 3. Class lecture 4. Homework 5. Punch out
Option 1	2,1,5,3,4
Option 2	2,3,1,5,4
Option 3	2,1,3,4,5
Option 4	2,4,1,3,5

KEY	**2,3,1,5,4**
Explanation	Assembly, Class lecture, Interval, Punch out, Homework
Difficulty	Medium

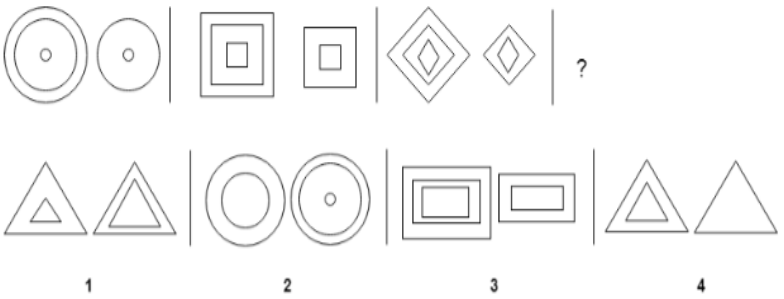
Question Number:	**17.**
Language	
Topic	Critical reasoning
Subtopic	
Type	MCQ
Question	Arrange the following words in a meaningful sequence. 1. Tea pot 2. Kettle 3. Milk and water 4. Boil 5. Tea leaves
Option 1	2,3,5,4,1
Option 2	2,3,1,5,4
Option 3	2,1,3,4,5
Option 4	2,4,1,3,5
KEY	**2,3,5,4,1**
Explanation	Kettle, Milk and water, Tea leaves, Boil, Tea pot
Difficulty	Medium

Question Number:	**18.**

Language	
Topic	Critical reasoning
Subtopic	Logical sequense
Type	MCQ
Question	Arrange the following words in a meaningful sequence. 1. Folder 2. File 3.My computer 4. Drive 5. Data
Option 1	3,5,2,4,1
Option 2	3,4,1,2,5
Option 3	3,1,2,4,5
Option 4	3,4,2,1,5
KEY	**3,4,1,2,5**
Explanation	Explanation My computer, Drive, Folder, File, Data
Difficulty	Medium

ABSTRACT REASONING 15q

Question Number:	**1.**
Language	
Topic	Abstract reasoning
Subtopic	Visual reasoning
Type	MCQ

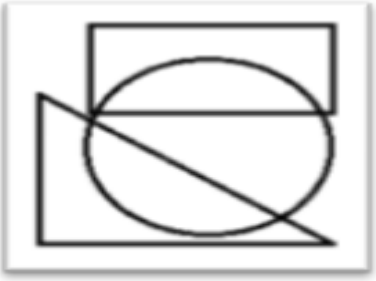
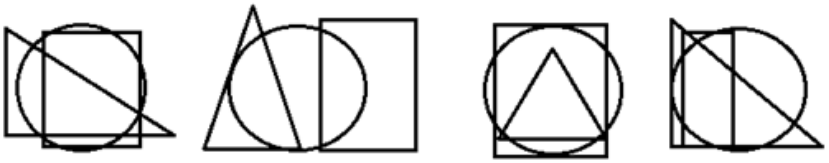
Question	Identify among the given options, which option completes the series? 
Option 1	1
Option 2	2
Option 3	3
Option 4	4
KEY	**3**
Explanation	In the first segment, first 3 circles and then 2 circle. In second segment first 3 squares then 2 squares. In third segment, first three rhombus then 2. Therefore, the fourth segment will also be same. So, option 3 is correct.
Difficulty	Medium

Question Number:	**2.**
Language	
Topic	Abstract reasoning
Subtopic	Visual reasoning

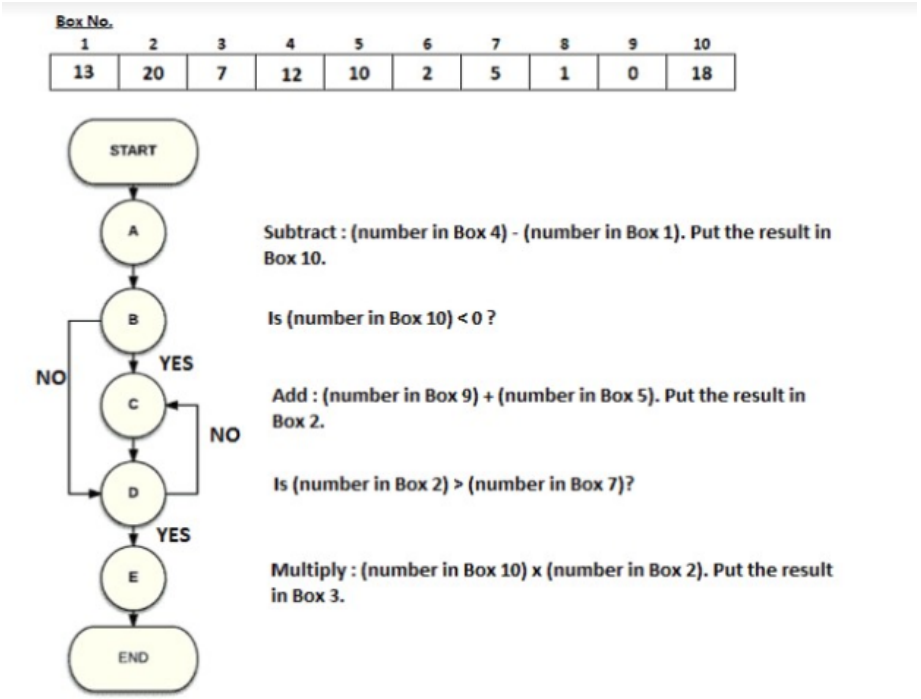
Type	MCQ
Question	Look at the sequence given below and identify from the options which pattern would complete the series?
Option 1	1
Option 2	2
Option 3	3
Option 4	4
KEY	**4**
Explanation	In each sections first the half part is covered than one-fourth and again half. So in the third section the half part is covered. Therefore, the other two would be one-fourth and half. Thus, option 4 is correct.
Difficulty	Medium

Question Number:	**3.**
Language	
Topic	Abstract reasoning

Subtopic	Visual reasoning
Type	MCQ
Question	Identify among the given options, which option completes the series? (1) (2) (3) (4)
Option 1	1
Option 2	2
Option 3	3
Option 4	4
KEY	**3**
Explanation	Explanation: In the first segment 2 letters face right side and other two face left side. In second segment first letter face left side and other three face right side. In third segment first letter face right side and then three face left side. Therefore, in fourth segment the first two letter face left side then the other two will face right side.
Difficulty	Medium

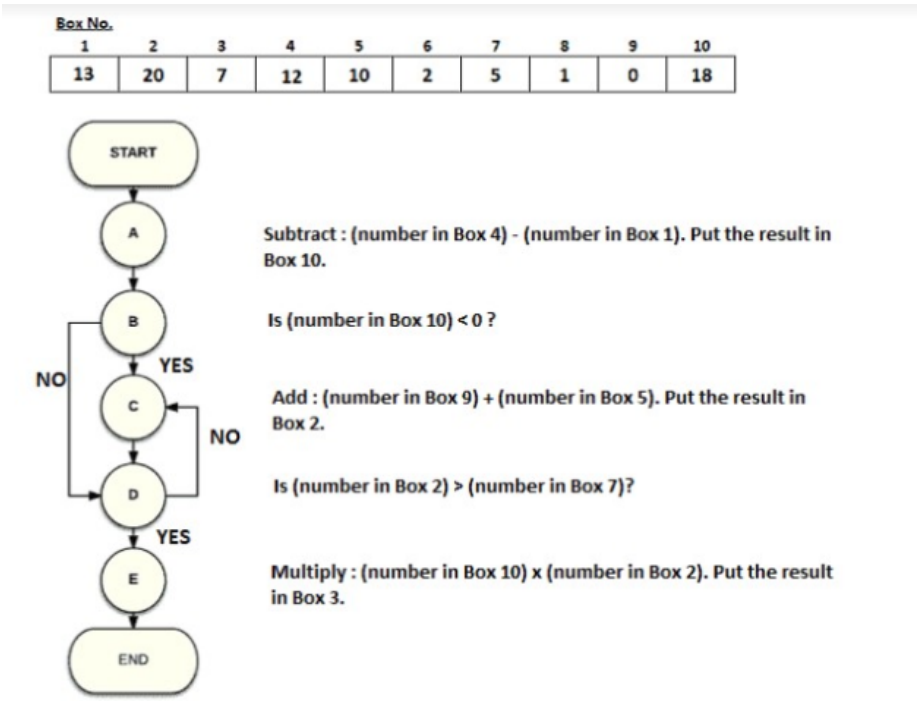
Question Number:	**4.**
Language	
Topic	Abstract reasoning
Subtopic	Visual reasoning
Type	MCQ
Question	From the four options given in figure 2, identify which option satisfies figure 1?  Figure 1  1 2 3 4
Option 1	1
Option 2	2
Option 3	3
Option 4	4
KEY	**2**

Explanation	In figure 1 a triangle and rectangle is half inscribed in a circle. Similarly, in option 2 a circle is half inscribed by a triangle and a rectangle.
Difficulty	Medium

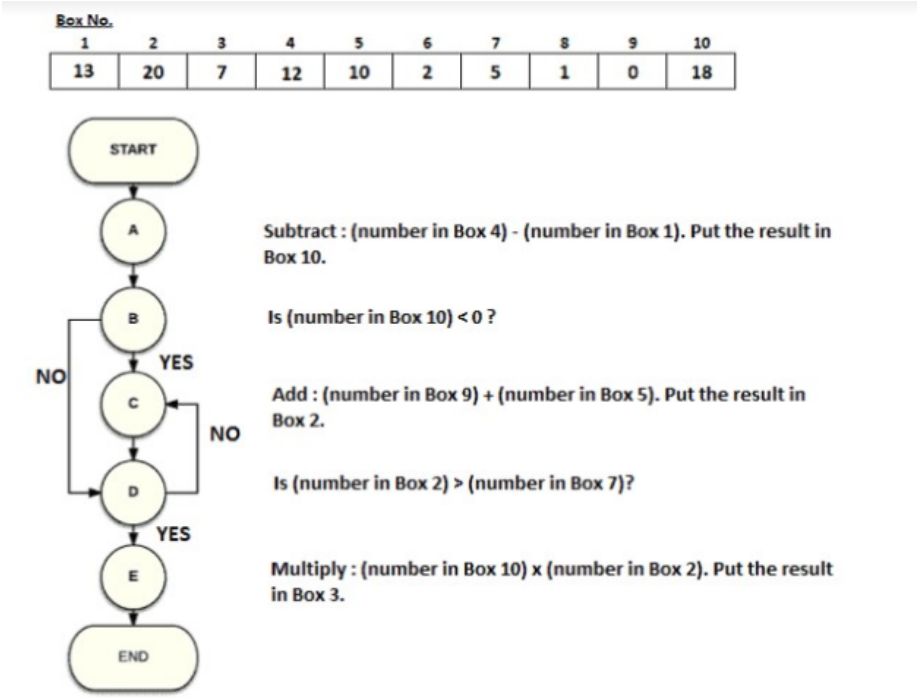
Question Number:	**5.**
Language	
Topic	Abstract reasoning
Subtopic	Flowchart
Type	MCQ
Question	Study the flow chart and answer the questions. 

	The value of which box will change at the end of the flow chart?
Option 1	7
Option 2	8
Option 3	10
Option 4	1
KEY	**10**
Explanation	Explanation Clearly we have given in the instruction 1 that subtract the value of box 4 with box 1 and place the value in box 10. Therefore, it is clear that the value in box 10 will change at the end of the flowchart.
Difficulty	Medium

Question Number:	**6.**
Language	
Topic	Abstract reasoning
Subtopic	Flowchart
Type	MCQ
Question	Study the flow chart and answer the questions.

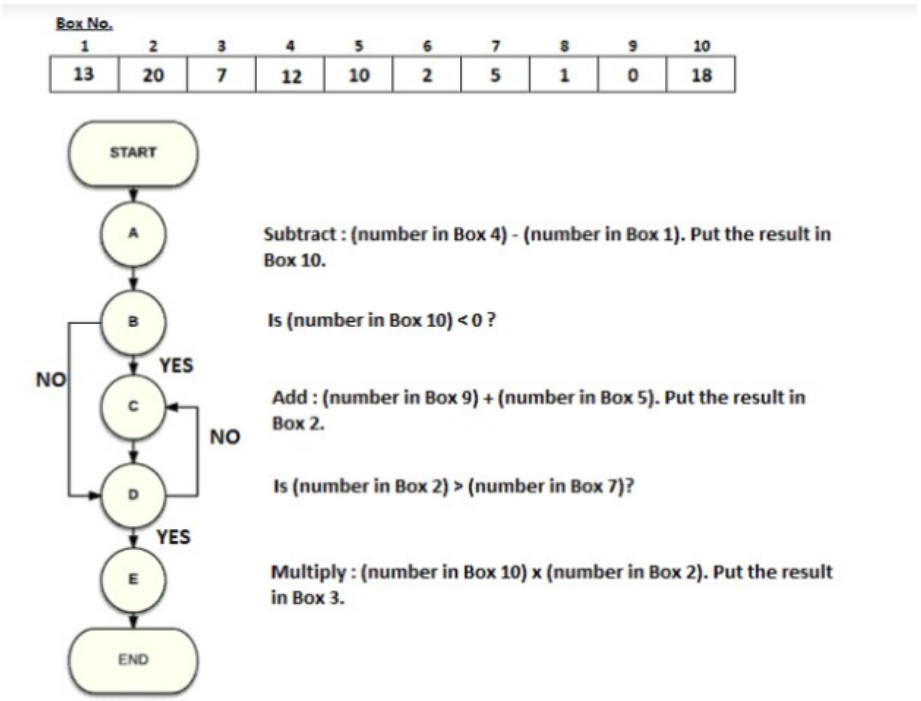
	 At the end of the flowchart what will be the value in box 3?
Option 1	360
Option 2	7
Option 3	-20
Option 4	-10
KEY	**-10**
Explanation	Explanation In instruction 1 it is mentioned to subtract the value of box 4 with box 1 and place the value in box 10. Therefore, value in box 4 is 12 and value in box 1 is 13. 12-13 = -1(new value in box 10) In instruction 3, it is given that add the value of box 5 and box 9. Value of box 5 is 10 and value of box 9 is 0. 10 + 0 = 10(new value in box 2) In instruction 5, it is given that multiply the value of box 10 and box 2. New value of box 10 is -1 and new value of box 2 is 10. 10 * -1 = -10 Value of box 3 at the end of the flowchart is -10.

Difficulty	Medium

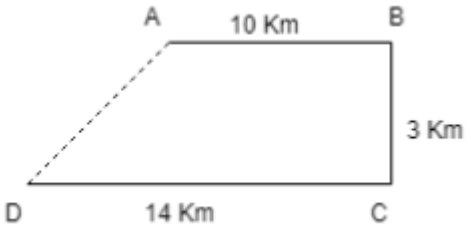
Question Number:	**7.**
Language	
Topic	Abstract reasoning
Subtopic	Flowchart
Type	MCQ
Question	Study the flow chart and answer the questions.  Is the statement given below true or false? After updating the condition 1 in box 10, the value of box 10 is greater than 0.
Option 1	true

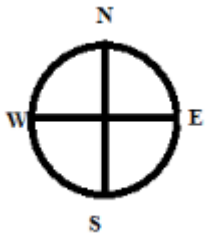
Option 2	False
Option 3	Connot be determined
Option 4	
KEY	**False**
Explanation	Explanation the condition 1 is to subtract the value of box 4 with box 1 and place the value inbox 10. Therefore, value in box 4 is 12 and value in box 1 is 13. 12-13 = -1 -1 is not greater than 1. Thus, the statement above is false.
Difficulty	Medium

Question Number:	**8.**
Language	
Topic	Abstract reasoning
Subtopic	Flowchart
Type	MCQ
Question	Study the flow chart and answer the questions.

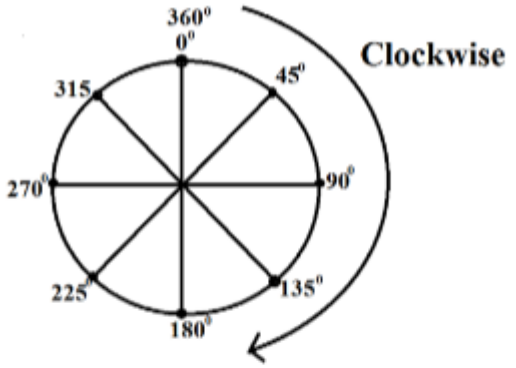
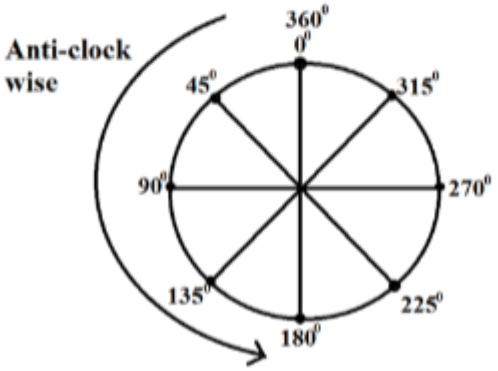
	 Is the statement given below true or false? After updating the condition 1 st and 3 rd , the value in box 7 is smaller than the value in box 2.
Option 1	True
Option 2	False
Option 3	Connot be determined
Option 4	
KEY	**True**
Explanation	Explanation In instruction 1 it is given that, subtract the value of box 4 with box 1 and place the value in box 10. Therefore, value in box 4 is 12 and value in box 1 is 13. 12-13 = -1(new value in box 10) In instruction 3, it is given that, add the value of box 5 and box 9. Value of box 5 is 10 and value of box 9 is 0. 10 + 0 = 10(new value in box 2) After updating the value in box 10 and 2, the new values are -1 and 10. The value in box 7 is 5 and the value in box 2 is 10. Therefore, value in box 7 is smaller than value in box 2.

Difficulty	Medium

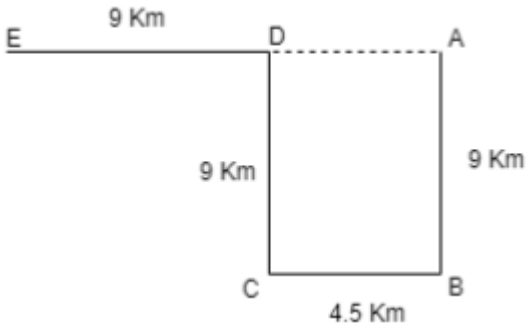
Question Number:	**9.**
Language	
Topic	Abstract reasoning
Subtopic	Directional sence
Type	MCQ
Question	Anita walked 10 Km in the east direction. She then turned right and walked for 3 Km. Again, she took a right turn and walked for 14 Km. How far is she from the point she started?
Option 1	6km
Option 2	8km
Option 3	4km
Option 4	5km
KEY	**5km**
Explanation	 According to the figure, Anita starts her walk from A and ends at D. the distance from A to D is: ?(14-10)²+(3)² ?(4)²+(3)² ?16+9 ?25 = 5 km
Difficulty	Medium

Question Number:	**10.**
Language	
Topic	Abstract reasoning
Subtopic	Directional sence
Type	MCQ
Question	Vikram is showing a stunt by head down and legs up. His face is towards the west direction. In which direction his right hand is?
Option 1	North
Option 2	South
Option 3	East
Option 4	West
KEY	**South**
Explanation	 If his face is in West direction, then his right hand will be in South direction.
Difficulty	Medium

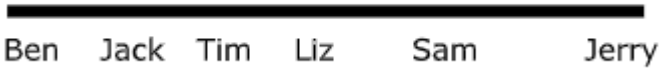
Question Number:	**11.**
Language	
Topic	Abstract reasoning
Subtopic	Directional sence
Type	MCQ
Question	A boy facing North direction rotates 100 degree clockwise first and then 190 degree anticlockwise. Identify what is her current direction?
Option 1	West
Option 2	North -west
Option 3	North -east
Option 4	East
KEY	**West**

Explanation	  If he turns 100 degree clockwise, then he will be in East direction. Then if he turns 190 degree anti clock wise he will be in West direction.
Difficulty	Medium

Question Number:	**12.**
Language	
Topic	Abstract reasoning
Subtopic	Directional sence
Type	MCQ
Question	Mohan cycled 9 Km southwards from his home. He then turned right and cycled for 4.5 Km and took a right turn and

	cycled for 9 Km and then he took a left turn and cycled for more 9 Km. Now how many Km he has to cycled to reach the point from where he started?
Option 1	12.5
Option 2	13.5
Option 3	14
Option 4	13
KEY	**13.5**
Explanation	 According to the diagram above, Mohan is currently at E point and he have to go back to A. Therefore, he has to cycle for 13.5 km to reach his home.
Difficulty	Medium

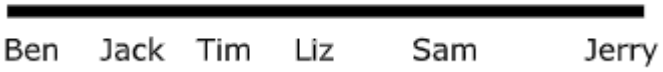
Question Number:	**13.**
Language	
Topic	Abstract reasoning
Subtopic	Seating arrangements
Type	MCQ

Question	Sam, Tim, Liz, Ben, Jack, and Jerry are sitting in a row. Tim and Liz are sitting in the center. Ben and Jerry are sitting at the extreme ends. Jack is sitting to the right of Ben. Who is sitting to the left of Jerry?
Option 1	Tim
Option 2	Sam
Option 3	Liz
Option 4	Jack
KEY	**Sam**
Explanation	 Form the above mentioned diagram it is clear that Sam is sitting to the left of Jerry. Hence Option B is the correct one.
Difficulty	Medium

Question Number:	**14.**
Language	
Topic	Abstract reasoning
Subtopic	Seating arrangement
Type	MCQ
Question	Sam, Tim, Liz, Ben, Jack, and Jerry are sitting in a row. Tim and Liz are sitting in the center. Ben and Jerry are sitting at the extreme ends. Jack is sitting to the right of Ben.

	Who is sitting to the left of Tim?
Option 1	Jack
Option 2	Ben
Option 3	Sam
Option 4	Jerry
KEY	**Jack**
Explanation	Explanation By looking at the below-mentioned diagram, it is evident that Jack is sitting to the left of Tim. Hence Option A is the correct one.
Difficulty	Medium

Question Number:	**15.**
Language	
Topic	Abstract reasoning
Subtopic	Seating arrangement
Type	MCQ
Question	Sam, Tim, Liz, Ben, Jack, and Jerry are sitting in a row. Tim and Liz are sitting in the center. Ben and Jerry are sitting at the extreme ends. Jack is sitting to the right of Ben. Who is sitting between Liz and Jerry?

Option 1	Jack
Option 2	Sam
Option 3	Tim
Option 4	None of these
KEY	**Sam**
Explanation	 Sam is sitting between Liz and Jerry. Hence B is the correct option.
Difficulty	Medium

Common applications and ms office

Question Number:	**1.**
Language	
Topic	Common applications and ms office
Subtopic	
Type	MCQ

Question	**What was Photo Editor renamed to while using Microsoft Office, 2003? :**
Option 1	Photo manager
Option 2	Picture manager
Option 3	Photo editor
Option 4	Paint editor
KEY	**Picture manager**
Explanation	Microsoft Office Picture Manager (formerly Microsoft Picture Library) is a raster graphics editor introduced in Microsoft Office 2003 and included up to Office 2010. It is the replacement to Microsoft Photo Editor introduced in Office 97 and included up to Office XP.
Difficulty	Medium

Question Number:	**2.**
Language	
Topic	Common applications and ms office
Subtopic	
Type	MCQ
Question	**Which of the following was the HTML editor associated with Microsoft Office until 2003?**
Option 1	Front page
Option 2	Explorer

Option 3	Web page
Option 4	Dream weaver
KEY	**Front page**
Explanation	Microsoft FrontPage (full name Microsoft Office FrontPage) is a discontinued WYSIWYG HTML editor and website administration tool from Microsoft for the Microsoft Windows line of operating systems. It was branded as part of the Microsoft Office suite from 1997 to 2003.
Difficulty	Medium

Question Number:	**3.**
Language	
Topic	Common applications and ms office
Subtopic	
Type	MCQ
Question	Which of these functions is used to land into a specific location of a document?
Option 1	Table of contents
Option 2	Hyper text
Option 3	Bookmark
Option 4	Macro
KEY	**Bookmark**
Explanation	

	As you know bookmarks are use to mark (save) a specific location of a document so that in future you can refer to that location. Cross reference are inserted in document to enable readers to jump to the referred location.
Difficulty	Medium

Question Number:	**4.**
Language	
Topic	Common applications and ms office
Subtopic	
Type	MCQ
Question	Which if these can we type in the Run dialogue box to start MS Office?
Option 1	Winword.exe
Option 2	Word.exe
Option 3	Msword.exe
Option 4	Docs.exe
KEY	**Winword.exe**
Explanation	**Five Ways to Open Microsoft Word** 1.Click the Start button. Type "word" without quotation marks into the search box. Click "Microsoft Word 2010" in the list that appears.

	2.Click the Start button. Hover the mouse pointer over "All Programs." Scroll down to the Microsoft Office folder and click it. Select "Microsoft Word 2010." **3.Press the Windows key and "R" on the keyboard at the same time to bring up the Run dialogue. Type "WinWord.exe" without quotation marks into the box.** 4.Right-click on an empty area of the Windows 7 desktop. Hover the mouse pointer over "New" in the menu that appears. Click "Shortcut." Type or copy and paste "C:\Program Files\Microsoft Office\Office14\WINWORD.EXE" into the box. Click "Next." Type "Word" into the box and click "Finish." Double-click the Word shortcut that appears on the desktop to launch Word. 5.Open an MS Word file on your computer by double-clicking it. If you are asked to choose an application to open the file with, select "Microsoft Word." You may close the file you have opened if you do not want to use it now and open another one instead.
Difficulty	Medium

Question Number:	**5.**
Language	
Topic	Common applications and ms office
Subtopic	
Type	MCQ

Question	Choose a shortcut to open dialogue box:
Option 1	F12
Option 2	Shift+F12
Option 3	Alt+F12
Option 4	Ctrl+F12
KEY	**Ctrl+F12**
Explanation	Ctrl+F12 help to open dialogue box. Which is used to open saved file from the computer.
Difficulty	Medium

Question Number:	**6.**
Language	
Topic	Common applications and ms office
Subtopic	
Type	MCQ
Question	Which option will you choose if you want to copy the formatting of a document that is Bold, Red in Color with Green Background to another paragraph in one go?
Option 1	Format button
Option 2	Format menu
Option 3	Format painter

Option 4	Format macro
KEY	**Format painter**
Explanation	**The option used will be format painter.** ● The format painter allows the client to duplicate the entirety of the designing starting with one object and apply it then onto the next one. ● When the icon of format painter is clicked in an application, the arrow converts into a paintbrush symbol. ● The brush can be then used to cover up a choice of text or illustrations to apply the design. The user can then use various color options for text as well as background.
Difficulty	Medium

Question Number:	**7.**
Language	
Topic	Common applications and ms office
Subtopic	

Type	MCQ
Question	Which of these terms is used to denote a letter and number in the intersecting column and row
Option 1	Cell location
Option 2	Cell position
Option 3	Cell address
Option 4	Cell cordinates
KEY	**Cell cordinates**
Explanation	The correct answer is cell coordinates. It really the letter and number of the intersecting column and row. You can relate it to math, like for eg in 2D motion we refer x axis and y axis.
Difficulty	Medium

Question Number:	**8.**
Language	
Topic	Common applications and ms office
Subtopic	
Type	MCQ
Question	Which of the following can be termed as a collection of information saved as unit.
Option 1	Folder
Option 2	File

Option 3	Path
Option 4	File extension
KEY	**File**
Explanation	Collection of information saved as a unit and that unit is called a file. In the folder the file is organised so the folder is medium to organized the files. In the file, the information is stored, and this information in paper form is known as a document.
Difficulty	Medium

Question Number:	**9.**
Language	
Topic	Common applications and ms office
Subtopic	
Type	MCQ
Question	You can relate Microsoft Office to which of these examples?
Option 1	Closed source software
Option 2	Open source software
Option 3	Horizontal market software
Option 4	Vertical market software
KEY	**Horizontal market software**
Explanation	Microsoft Office is an example of a Horizontal market software. In computers, software is a collection of programs

	which performs a task. Horizontal market software is an application software that is useful in a wide range of industries. Horizontal market software is also known as "productivity software."
Difficulty	Medium

Question Number:	**10.**
Language	
Topic	Common applications and ms office
Subtopic	
Type	MCQ
Question	Which command do you use to save an existing file in different location?
Option 1	Save
Option 2	Save and replace
Option 3	Save as
Option 4	New file
KEY	**Save as**
Explanation	The Save As dialog box enables you to save existing files to different locations or in different formats. Often, you want to make changes in the way you save a file. In particular, you may want to save a file to a different location on your computer or on your network. Or you may want to save it in a different file format so that people who run software other than Word can use it. In each case, you use the **Save As** dialog box

Difficulty	Medium

Question Number:	**11.**
Language	
Topic	Common applications and ms office
Subtopic	
Type	MCQ
Question	Which of the following attributes of text box control allow to limit the maximum character?
Option 1	Len
Option 2	Size
Option 3	maxlength
Option 4	None
KEY	**maxlength**
Explanation	The maxlength attribute defines the maximum number of characters. This must be an integer value 0 or higher. If no maxlength is specified, or an invalid value is specified, the input or textarea has no maximum length.
Difficulty	Medium

Question Number:	**12.**
Language	

Topic	Common applications and ms office
Subtopic	
Type	MCQ
Question	Which of the following is not the Networking Devices?
Option 1	Firewalls
Option 2	Linux
Option 3	Gateways
Option 4	Routers
KEY	**Linux**
Explanation	
Difficulty	Medium

PSEUDOCODE

Question Number:	**1.**
Language	
Topic	pseudocode

Subtopic	
Type	MCQ

Question	What will be the value of s, if n=127?
	Read n
	i=0,s=0
	Function Sample(int n)
	while(n>0)
	r=n%10
	p=8^i
	s=s+p*r
	i++
	n=n/10
	End While
	Return s;
	End Function

Option 1	27
Option 2	187
Option 3	87
Option 4	120
KEY	**87**
Explanation	The above code is converting an octal number into its decimal representation. Here we are treating 127 as an octal input and converting it into its decimal representation, that is 87. So, answer will be 87.
Difficulty	Medium

Question Number:	**2.**
Language	
Topic	pseudocode
Subtopic	
Type	MCQ

Question	What will be the value of s if N=20?
	Read N
	Function sample👎
	s = 0
	f = 1
	i = 1
	while i <= N:
	f = f * i
	s = s +(i / f)
	i+=1
	End while
	return(s);
	End Function

Option 1	3.789456
Option 2	Infinite loop
Option 3	2.7182818284590455
Option 4	80.36741
KEY	**2.7182818284590455**

Explanation	Loop will end up giving output as 2.7182818284590455 as value of f is initialized to 1 and then following BODMAS rule the next step "s = s +(i / f)" will be followed and i is incremented.
Difficulty	Medium

Question Number:	**3.**
Language	
Topic	pseudocode
Subtopic	
Type	MCQ

Question	What will be the output if limit = 6?
	Read limit
	n1 = 0, n2= 1, n3=1, count = 1;
	while count <= limit
	count=count+1
	print n3
	n3 = n1 + n2
	n1 = n2
	n2 = n3
	End While

Option 1	112358
Option 2	12358
Option 3	23581321

Option 4	12352132
KEY	**112358**
Explanation	First iteration of while loop: count <= limit. 1<=6. So, we will enter while loop. count=2, Now we will print n3. So value of n3 is 1. **1** will be printed. n3=n1+n2. So, n3=1,n1=1,n2=1 Second iteration: Count=3, Print n3. So **1** will be printed , n3=2, n1=1, n2=2 Third iteration: Count=4, Print n3. So **2** will be printed , n3=3, n1=2, n2=3 Fourth iteration: Count=5 , Print **3**, n3=5, n1=3, n2=5 Fifth iteration: Count=6, Print **5**, n3=8, n1=5, n2=8 Sixth iteration: Count=7, Print **8,** n3=13, n1=8, n2=13 Hence output will be **112358**
Difficulty	Medium

Question Number:	**4.**
Language	
Topic	pseudocode
Subtopic	
Type	MCQ
Question	What will be the value of even_counter if number = 2630? Read number

	Function divisible(number)
	even_counter = 0, num_remainder = number;
	while (num_remainder)
	digit = num_remainder % 10;
	if digit != 0 AND number % digit == 0
	even_counter= even_counter+1
	End If
	num_remainder= num_remainder / 10;
	End While
	return even_counter;

Option 1	3
Option 2	4
Option 3	2
Option 4	1
KEY	**1**
Explanation	First iteration: Digit: 0, Num_remainder: 263 second iteration: Digit: 3, Num_remainder: 26 Third iteration: Digit: 6, Num_remainder: 2 Fourth iteration: Digit: 2, We will enter if. Even_counter: 1, Num_remainder: 0 Exit while loop Even counter=1. So, 1 will be printed
Difficulty	Medium

Question Number:	**5.**
Language	
Topic	pseudocode
Subtopic	
Type	MCQ

Question	What will be the value of t if a = 56 , b = 876?
	Read a,b
	Function mul(a, b)
	t = 0
	while (b != 0)
	t = t + a
	b=b-1
	End While
	return t;
	End Function

Option 1	490563
Option 2	49056
Option 3	490561
Option 4	None of the mentioned
KEY	**49056**
Explanation	First iteration of while loop: t=t+a=0+56=56 b=b-1=876-1=875

	Similarly we will do further iterations. At the end **49056** will be printed as output.
Difficulty	Medium

Question Number:	**6.**
Language	
Topic	pseudocode
Subtopic	
Type	MCQ

Question	Code to sort given array in ascending order:
	Read size
	
	Read a[1],a[2],…a[size]
	
	i=0
	
	While(i<size)
	
	j=i+1
	
	While(j<size)
	
	If a[i] < a[j] then

	t= a[i];
	
	a[i] = a[j];
	
	a[j] = t;
	
	End If
	
	j=j+1
	
	End While
	
	i=i+1
	
	End While
	
	i=0
	
	While (i<size)
	
	print a[i]
	
	i=i+1
	
	End While

Option 1	Line 4
Option 2	Line 6
Option 3	Line 7
Option 4	No error
KEY	**Line 7**
Explanation	Error in line 7. The code is to sort the given array in ascending order. But in line 7 , we are checking if second value is greater than first value. If true then we need to swap. But if second value is greater than first , that means the two numbers are in ascending order, and we need to do anything. The correct code for line 7 will be: **If a[i] > a[j] then** If the above condition holds true than we need to swap the elements.
Difficulty	Medium

Question Number:	**7.**
Language	
Topic	pseudocode
Subtopic	
Type	MCQ
Question	What will be the output of the following pseudocode for a = 9, b = 7?

	Integer funn(Integer a, Integer b) Integer c Set c = 2 b = b mod c a = a mod c return a + b End function funn()
Option 1	17
Option 2	5
Option 3	2
Option 4	-5
KEY	**2**
Explanation	a=9 b=7 c=2 b = b mod c =7 mod 2=1 a = a mod c= 9 mod 2=1

	a+b=1+1=2 So, 2 will be returned by the function
Difficulty	Medium

Question Number:	**8.**
Language	
Topic	pseudocode
Subtopic	
Type	MCQ
Question	What will be the output of the following pseudocode for input a Integer a, b, c, sum Read a, b, c Set sum = a + b + c if ((sum EQUALS 180) and (a NOT EQUALS 0) and (b NOT EQUALS 0) and (c NOT EQUALS 0)) Print " Success" Otherwise Print "Fail"

	End if
Option 1	Success
Option 2	Fail
Option 3	Compilation error
Option 4	None of the mentioned
KEY	**success**
Explanation	a = 30, b = 60, C = 90 sum=180 ((sum EQUALS 180) and (a NOT EQUALS 0) and (b NOT EQUALS 0) and (c NOT EQUALS 0)) So, (true) and (true) and (true) and (true) So, output will be "success"
Difficulty	Medium

Question Number:	**9.**
Language	
Topic	pseudocode
Subtopic	
Type	MCQ

Question	What will be the output of the following pseudo code?
	integer i
	
	set i=3
	
	do
	
	print i+3
	
	i=i-1
	
	while(i not equals 0)
	
	end while

Option 1	6 6 6
Option 2	6 5 6
Option 3	5 5 5
Option 4	6 5 4
KEY	**6 6 6**
Explanation	Step 1: It will print i+3, here i value is 3. So i+3 is 6. On the next line, i will be decremented by 1. Then checking the conditions in do-while() i!=0. Here updated i value is 2 (2!=0),so condition is true. The loop continues. Step 2:

	It will print i+3, here updated i value is 2. So i+3 is 5. On the next line i will be decremented by 1. Then checking the conditions in do-while() i!=0. Here updated i value is 1 (1!=0),so condition gets true. The loop continues Step 3: It will print i+3, here updated i value is 1. So i+3 is 4. On the next line i will be decremented by 1. Then checking the condition in do while() i!=0. Here updated i value is 0 (0!=0),so condition gets false. Thus the loop gets terminated!
Difficulty	Medium

Question Number:	**10.**
Language	
Topic	pseudocode
Subtopic	
Type	MCQ

Question	How many times the following loop will be executed?
	main()
	
	{
	
	ch = ‘b’;
	
	while(ch >= ‘a’ && ch <= ‘z’)
	
	ch++;

	}
Option 1	Compilation error
Option 2	25
Option 3	26
Option 4	1
KEY	**25**
Explanation	the loop will execute for 25 time. First iteration : b lie between a to z. Then ch=c; Second iteration : c lie between a to z. Then ch=d; similarly it will run till ch=z
Difficulty	Medium

Question Number:	**11.**
Language	
Topic	pseudocode
Subtopic	
Type	MCQ
Question	Consider the following piece of code. What will be the space required for this code?

	int sum (int A[], int n)
	
	{
	
	int sum = 0, i;
	
	for (i = 0; i < n; i++)
	
	sum = sum + A[i];
	
	return sum;
	
	}// sizeof(int) = 2 bytes

Option 1	2n+8
Option 2	2n+4
Option 3	2n+2
Option 4	2n
KEY	**2n+8**
Explanation	The code will acquire a space of 2n+8. There are n elements in the array and the int data type acquires 2 bytes, so there will be 2n bytes acquired. The int array occupies 4 bytes. The sum variable will occupy 2 bytes. The i variable will occupy 2 bytes. so total=2n+4+2+2=2n+8 bytes
Difficulty	Medium

Question Number:	**12.**
Language	
Topic	pseudocode
Subtopic	
Type	MCQ

Question	What will be the output of the following pseudo code?
	For input a = 8 & b = 9.
	
	function (input a, input b)
	
	If (a < b)
	
	return function (b, a)
	
	elseif (b != 0)
	
	return (a + function (a, b - 1))
	
	else
	
	return 0

Option 1	56

Option 2	88
Option 3	72
Option 4	65
KEY	**72**
Explanation	function(8,9) will return function(9,8) function(9,8) will return 9+function(9,7) function(9,7) will return 9+9+function(9,6) function(9,6) will return 9+9+9+function(9,5) function(9,5) will return 9+9+9+9+function(9,4) function(9,4) will return 9+9+9+9+9+function(9,3) function(9,3) will return 9+9+9+9+9+9+function(9,2) function(9,2) will return 9+9+9+9+9+9+9+function(9,1) function(9,1) will return 9+9+9+9+9+9+9+9+function(9,0) function(9,0) will return 9+9+9+9+9+9+9+9+0 So the result is 72.
Difficulty	Medium

Question Number:	**13.**
Language	
Topic	pseudocode
Subtopic	
Type	MCQ
Question	What will be the output of the following pseudo code? Input m = 9, n = 6;

	m = m + 1 ;
	
	n = n - 1 ;
	
	m = m + n
	
	if (m > n)
	
	print m
	
	else
	
	print n

Option 1	6
Option 2	5
Option 3	10
Option 4	15
KEY	**15**
Explanation	m = m + 1, so m=9+1=10 n = n - 1, so n=6-1=5 m = m + n, so m=10+5=15 Hence the output is 15
Difficulty	Medium

Question Number:	**14.**
Language	
Topic	pseudocode
Subtopic	
Type	MCQ

Question	What will be the output of the following pseudo-code?
	Input f = 6, g = 9 and set sum = 0
	
	Integer n
	
	if (g > f)
	
	for (n = f; n < g; n = n + 1)
	
	sum = sum + n
	
	End for loop
	
	print sum
	
	else
	
	print error message

Option 1	21
Option 2	15
Option 3	9
Option 4	6
KEY	**21**
Explanation	In this pseudo code, the for loop operates from n = 6 until n < 9. In the first iteration we have the value of n = 6, sum = 0 + 6 = 6. In the next iteration we have the value of n = 7, sum = 6 + 7 = 13. In the third iteration we have the value of n = 8, sum = 13 + 8 = 21. The next iteration wouldn't be executed since the condition of the loop n < 9 becomes false. And thus the loop terminates. So the final answer we get is 21.
Difficulty	Medium

Question Number:	**15.**
Language	
Topic	pseudocode

Subtopic	
Type	MCQ

Question	What would be the output of the following pseudocode?
	Integer i, j, k
	
	Set k = 8
	
	for(each i from 1 to 1)
	
	for(each j from the value of i to 1)
	
	print k+1
	
	end for
	
	end for

Option 1	9
Option 2	89
Option 3	4
Option 4	3
KEY	**9**
Explanation	There are three variables i, j, and k declared. Value initialized for k is 8, In this code, we are moving with nested for loop.

	Here I value is 1, for loop will check the condition i<=1 condition gets true. Now, moving with inner for loop j value will be 1 condition gets true j<=1.so, it prints K+1. Then j value will be incremented by 1(2<+1) inner for loop condition gets false. On the next iteration, i value will be incremented by 1, here the updated i value is 2 (2<=1) condition get false. So the answer is 9.
Difficulty	Medium

Question Number:	**16.**
Language	
Topic	pseudocode
Subtopic	
Type	MCQ
Question	What will be the output of the following pseudocode for a =1, b =2? Integer funn(Integer a, Integer b) if(a<3 && b<4) return funn(a +1, b + 1)

	Else
	
	Return a + b
	
	End if
	
	End function funn()
	
	[Note: &&: Logical AND operator - the logical AND operator (&&) returns the Boolean value true (true () if both are true]

Option 1	7
Option 2	8
Option 3	-7
Option 4	19
KEY	**7**
Explanation	if(1<3 && 2<4): Since this is true. So, return funn(2,3) . funn (2,3) will return funn(3,4) funn (3,4) will return a+b=3+4=7 Hence, 7 will be the output
Difficulty	Medium

Question Number:	**17.**
Language	
Topic	pseudocode
Subtopic	
Type	MCQ

Question	What will be the output of the following pseudocode for a = 2,
	Integer funn(Integer a, Integer b)
	
	if(a > 0)
	
	if(b > 0)
	
	return a + b + funn(a + 1, 0) + funn(a + 2, 0) + funn(a + 3, 0)
	
	End if
	
	End if
	
	return a + b
	
	End function funn()

Option 1	21
Option 2	17

Option 3	20
Option 4	8
KEY	**20**
Explanation	a=2,b=6 Since both a,b is greater than 0. Hence funn will return 2+6+funn(3,0)+funn(4,0)+funn(5,0) funn(3,0) will return a+b=3+0 funn(4,0) will return a+b=4+0 funn(5,0) will return a+b=5+0 So, 2+6+3+4+5=20 hence output will be 20
Difficulty	Medium

Question Number:	**18.**
Language	
Topic	pseudocode
Subtopic	
Type	MCQ
Question	What will be the output of the following pseudocode? Integer count for (each count from 0 to 9)

	print "#"
	
	if (count > 6)
	
	CONTINUE
	
	print count
	
	End for

Option 1	0#1#2#3#4#5#6##
Option 2	#0#1#2#3#4#5#6##
Option 3	#0#1#2#3#4#5##7#8#9#10
Option 4	#0#1#2#3#4#5#
KEY	#0#1#2#3#4#5#6##
Explanation	For loop will iterate from count=0 to count=8 Count=0: print "#", print count, so 0 will be printed Count=1: print "#", print count, so 1 will be printed Count=2: print "#", print count, so 2 will be printed Count=3: print "#", print count, so 3 will be printed Count=4: print "#", print count, so 4 will be printed Count=5: print "#", print count, so 5 will be printed

	Count=6 :print "#", print count, so 6 will be printed Count =7: print"#", then if condition will become true, hence now next iteration will work. Count=8: print"#", then if condition will become true, hence now next iteration will work. Count=9: Condition will become become false. Now exit from for loop.
Difficulty	Medium

Network security and cloud

Question Number:	**1.**
Language	
Topic	Network security and cloud
Subtopic	
Type	MCQ
Question	Which is not an objective of network security?
Option 1	Identification
Option 2	Authentication
Option 3	Lock
Option 4	Access control
KEY	**lock**
Explanation	The Identification, Authentication and Access control are the objectives of network security. There is no such thing called lock.
Difficulty	Medium

Question Number:	**2.**
Language	

Topic	Network security and cloud
Subtopic	
Type	MCQ
Question	An algorithm in encryption is called __
Option 1	Algorithm
Option 2	Procedure
Option 3	Cipher
Option 4	Module
KEY	Cipher
Explanation	An algorithm used in encryption is referred to as a cipher. cipher is an algorithm for performing encryption or decryption Ciphers, also called encryption algorithms, are **systems for encrypting and decrypting data**. A cipher converts the original message, called plaintext, into ciphertext using a key to determine how it is done.
Difficulty	Medium

Question Number:	**3.**
Language	
Topic	Network security and cloud
Subtopic	

Type	MCQ
Question	What is ransomware?
Option 1	A nickname for the types of spyware that require a password on boot
Option 2	Software that steals files from your computer and is used by blockmailers
Option 3	A software that hijacks your computer and asks you to pay in order for it to be removed
Option 4	Viruses that infect files and wont let you open then unless you know a certain pass code
KEY	A software that hijacks your computer and asks you to pay in order for it to be removed
Explanation	A software that hijacks your computer and asks you to pay in order for it to be removed. Ransomware is malware that employs encryption to hold a victim's information at ransom. A user or organization's critical data is encrypted so that they cannot access files, databases, or applications. A ransom is then demanded to provide access. Ransomware is often designed to spread across a network and target database and file servers, and can thus quickly paralyze an entire organization.
Difficulty	Medium

Question Number:	**4.**
Language	
Topic	Network security and cloud

Subtopic	
Type	MCQ
Question	Which of the following has network reliability issues?
Option 1	Frequency of failures
Option 2	Recovery time after failure
Option 3	Catastrophe
Option 4	All of the above
KEY	**All of the above**
Explanation	frequency of failures, recovery time after failure, catastrophe all are network reliability issues.
Difficulty	Medium

Question Number:	**5.**
Language	
Topic	Network security and cloud
Subtopic	
Type	MCQ
Question	A digital signature scheme consists of which of the following typical algorithms?
Option 1	Key generation, signing and signature verifying algoritms

Option 2	Signature verifying algorithms
Option 3	Key generation algorithm
Option 4	Signing algorithm
KEY	Key generation, signing and signature verifying algoritms
Explanation	**Key generation**:- Key generation is **the process of generating keys for cryptography**. The key is used to encrypt and decrypt data whatever the data is being encrypted or decrypted **Signing and Signature** :- To create a digital signature, signing algorithms like email programs create a one-way **hash** of the electronic data which is to be signed. The signing algorithm then encrypts the hash value using the private key (signature key) **Verifying Algorithm**:- A verification algorithm is **a two-argument algorithm A**, where one argument is an ordinary input string x, and the other argument is a binary string y called a certificate
Difficulty	Medium

Question Number:	**6.**
Language	
Topic	Network security and cloud
Subtopic	
Type	MCQ

Question	The type of encoding in which manipulation of bit streams without regard to what the bits mean is .....
Option 1	Destination coding
Option 2	Entropy encoding
Option 3	Source encoding
Option 4	Differential encoding
KEY	**Entropy encoding**
Explanation	Entropy encoding is a term referring to **lossless coding technique that replaces data elements with coded representations**. Entropy encoding in combination with the transformation and quantization results in significantly reduced data size.
Difficulty	Medium

Question Number:	**7.**
Language	
Topic	Network security and cloud
Subtopic	
Type	MCQ
Question	The protocol used to provide security to e-mails?
Option 1	POP

Option 2	PGP
Option 3	SNMP
Option 4	HTTP
KEY	**PGP**
Explanation	PGP is a protocol **used for encrypting, decrypting and signing messages or files using a key pair**. PGP is primarily used for encrypting communications at the Application layer, typically used for one-on-one encrypted messaging.
Difficulty	Medium

Question Number:	**8.**
Language	
Topic	Network security and cloud
Subtopic	
Type	MCQ
Question	The ..... portion of LAN management software restricts access, records user activities and audit data etc
Option 1	Configuration management
Option 2	Security management
Option 3	Performance management
Option 4	None of the above

KEY	Security management
Explanation	The Security management portion of LAN management software restricts access, records user activities and audit data etc.
Difficulty	Medium

Question Number:	**9.**
Language	
Topic	Network security and cloud
Subtopic	
Type	MCQ
Question	Caesar cipher with key 3, is represented as ....
Option 1	C=(p+3)mod3
Option 2	C=(p+26)mod3
Option 3	C=(p*3)mod26
Option 4	C=(p+3)mod26
KEY	C=(p+3)mod26
Explanation	The Caesar Cipher is a type of shift cipher. Shift Ciphers work by using the modulo operator to encrypt and decrypt messages. The Shift Cipher has a key K, which is an integer from 0 to 25. We will only share this key with people that we want to see our message.

	For every letter in the message **M** : **1.** Convert the letter into the number that matches its order in the alphabet starting from 0, and call this number **X**. (A=0, B=1, C=2, ...,Y=24, Z=25) **2.** Calculate: **Y** = **(X + K)** mod **26** **3.** Convert the number **Y** into a letter that matches its order in the alphabet starting from 0. (A=0, B=1, C=2, ...,Y=24, Z=25)
Difficulty	Medium

Question Number:	**10.**
Language	
Topic	Network security and cloud
Subtopic	
Type	MCQ
Question	Number of rounds in Data Encryption Standard algorithm?
Option 1	8 rounds
Option 2	12 rounds
Option 3	16 rounds
Option 4	24 rounds
KEY	16 rounds
Explanation	Data Encryption Standard (DES) is **a block cipher algorithm** that takes the plain text in blocks of 64 bits and converts them to ciphertext using keys of 48 bits. It is a symmetric key algorithm, which means that the same key is used for encrypting and decrypting data. Encryption and decryption using the DES algorithm, There is a total 16 Number of rounds in the Data Encryption Standard algorithm
Difficulty	Medium

CODING QUESTIONS 2023 (2 QUESTIONS)

Question Number	**1.**
Language	JAVA
Topic	Methods
Subtopic	Methods
Type	Coding
Question	**Problem Description :** The function accepts two positive integers ‘r’ and ‘unit’ and a positive integer array ‘arr’ of size ‘n’ as its argument ‘r’ represents the number of rats present in an area, ‘unit’ is the amount of food each rat consumes and each ith element of array ‘arr’ represents the amount of food present in ‘i+1’ house number, where 0 <= i **Note:** ● Return -1 if the array is null ● Return 0 if the total amount of food from all houses is not sufficient for all the rats. ● Computed values lie within the integer range.

Solution	import java.util.*;
	class Main
	{
	public static int solve (int r, int unit, int arr[], int n)
	{
	if (arr == null)

```
return -1;
int res = r * unit;
int sum = 0;
int count = 0;
for (int i = 0; i < n; i++)
{
sum = sum + arr[i];
count++;
if (sum >= res)
break;
}
if(sum<res)
return 0;
return count;
}
public static void main (String[]args)
{
Scanner sc = new Scanner (System.in);
int r = sc.nextInt ();
int unit = sc.nextInt ();
int n = sc.nextInt ();
int arr[] = new int[n];

for (int i = 0; i < n; i++)
arr[i] = sc.nextInt ();
System.out.println (solve (r, unit, arr, n));
}
}
```

Input 1	• r: 7 • unit: 2 • n: 8 • arr: 2 8 3 5 7 4 1 2
Output 1	4
Difficulty	Medium
Explanation	Total amount of food required for all rats = r * unit = 7 * 2 = 14. The amount of food in 1st houses = 2+8+3+5 = 18. Since, amount of food in 1st 4 houses is sufficient for all the rats. Thus, output is 4.

Question Number	**2.**
Language	JAVA
Topic	Methods
Subtopic	Methods
Type	Coding
Question	**Problem Description :**

	The Binary number system only uses two digits, 0 and 1 and number system can be called binary string. You are required to implement the following function: int OperationsBinaryString(char* str); The function accepts a string str as its argument. The string str consists of binary digits eparated with an alphabet as follows: ● – A denotes AND operation ● – B denotes OR operation ● – C denotes XOR Operation You are required to calculate the result of the string str, scanning the string to right taking one opearation at a time, and return the same. **Note:** ● No order of priorities of operations is required ● Length of str is odd ● If str is NULL or None (in case of Python), return -1

Solution	import java.util.*;
	class Main
	{
	public static int operationsBinaryString (String str)
	{
	if(str==null)
	return -1;
	int res = str.charAt (0) - '0';
	for (int i = 1; i < str.length ();)
	{
	char prev = str.charAt (i);

	i++;
	if (prev == 'A')
	res = res & (str.charAt (i) - '0');
	else if (prev == 'B')
	res = res | (str.charAt (i) - '0');
	else
	res = res ^ (str.charAt (i) - '0');
	i++;
	}
	return res;
	}
	
	public static void main (String[]args)
	{
	Scanner sc = new Scanner (System.in);
	String str =sc.next();
	System.out.println (operationsBinaryString (str));
	}
	}

Input 1	1C0C1C1A0B1
Output 1	1
Difficulty	Medium

Explanation	The alphabets in str when expanded becomes “1 XOR 0 XOR 1 XOR 1 AND 0 OR 1”, result of the expression becomes 1, hence 1 is returned.