51.	The area of crop \ system is 40 liters		when the available	capacity of irrigation
	(A) 40hectares	(8) 36 hectares	(C) 30 hectares	(D) 27 hectares
	Link	ted Answer Question	15 52 & 53	
depth of ste both and	of 500mm. the beau eel in compression. I tension and compres Fe250 respectively.	am is reinforced with The effective cover for sion steel yield. The	m has a width of 300 2200mm ² of steel in r compression steel is grades of concrete an meters (rounded off	tension and 628mm s 50mm. Assume that d steel used are M2
52.	The depth of neutro	a Lavie is		
JE.	(A) 205.30mm	(8) 184.56mm	(C) 160.91mm	(D) 145.30mm
	1010			198
53.	The moment of res	sistance of the section	is	
	(A) 206.00kN-m	(8) 209.20 kN-m	(C) 236.80 kN-m	(D) 251.90kN-m,
	Statemen	t for Linked Answe	er Questions: 54 &	55
	The unconfined co	mpressive strength of	f a saturated clay sam	ple is 54kPa.
54.	The value of cohe	sion for the clay is		
	(A) zero	(8) 13.5kPa	(C) 27kPa	(D)54kPa
55.			resting on the surfac pacity of the footing	
	(A) 1600kPa	(8) 315kPa	(C) 27kPa	(D)54kPh
	(Q. No. 56 - 60 Carry	One Mark Each	
56.	Which of the follow	ing options is closest	in meaning to the wo	ord Circuitous.
	(A) cyclic	(8) indirect	(C) confusing	(D) crooked
57.	The question below	w consists of a pair	of related words follo	wed by four pairs o
J	words. Select the	pair that best expresse	es the relation in the	onginai pair.
J	words. Select the Unemployed: Wo		es the relation in the	onginai pair.
07.			(8) unaware: sle	

58.	Choose the most appropriate word from the options given below to complete the following sentence:						
	If we manage to our natural resources, we would leave a better planet for our children.						
	(A) uphold (B) restrain (C) cherish (D) conserve						
59.	Choose the most appropriate word from the options given below to the complete the following sentence:						
	His rather casual remarks on politics his lack of seriousness about the subject.						
	(A) masked (B) belied (C) betrayed (D)suppressed						
60.	25 persons are in a room. 15 of them play hockey, 17 of them play football and 10 of them play both hockey and football. Then the number of persons playing neither hockey nor football is:						
	(A) 2 (B)17 (C)13 (D)3						
	Q. No. 61 - 65 Carry Two Marks Each						
61.	Hari (H), Gita (G), Irfan (I) and 5aira (5) are siblings (i.e. brothers and sisters). All were born on 1st January. The age difference between any two successive siblings (that is born one after another) is less than 3 years. Given the following facts:						
	i. Hari's age + Gita's age> Irfan's age + 5aira's age						
	 The age difference between Gita and 5aira is 1 year. However Gita is not the oldest and 5aira is not the youngest. 						
	iii. There are no twins,						
	In what order were they born (oldest first)?						
	(A) H51G (8) 5GHI (C) IG5H (D) IH5G						
62.	5 skilled workers can build a wall in 20days: 8 semi-skilled workers can build a wall in 25 days; 10 unskilled workers can build a wall in 30days. If a team has 2 skilled, 6 semi-skilled and 5 unskilled workers, how long will it take to build the wall?						
	(A) 20 (8) 18 (C) 16 (D)15						
63.	Modern warfare has changed from large scale clashes of armies to suppression of civilian populations. Chemical agents that do their work silently appear to be suited to such warfare; and regretfully, there exist people in military establishments who think that chemical agents are useful tools for their cause.						

(A) Modern war	fare has resulted in cir	vil strife.	
(8) Chemical a	gents are useful in mo	dem warfare.	
(C) Use of cher	nical agents in warfare	would be undesirable	1
(D) People in n	nilitary establishments	like to use chemical a	in war.
Given digite 2.2	224444 how man	distinct 4 digit numb	pers greater than 3000
can be formed?		y distinct 4 digit numb	ers greater trial 3000
(A) 50	(8) 51	(C) 52	(D)54
If 137+276=435	how much is 731+67	2?	
(A) 534	(8) 1403	(C) 1623	(D)1513

Which of the following statements best sums up the meaning of the above

passage:

64.

65.

CE GA	TE 2	010 Ar	swer	Keys									
1	A	2	C	3	A	4	D	5	C	6	В	7	C
8	D	9	D	10	C	11	В	12	C	13	D	14	В
15	В	16	D	17	A	18	В	19	C	20	A	21	В
22	Α	23	В	24	A	25	С	26	C	27	В	28	A
29	C	30	D	31	A	32	В	33	С	34	A	35	A
36	Α	37	D	38	В	39	В	40	С	41	D	42	В
43	С	44	В	45	C	46	D	47	D	48	С	49	A
50	В	51	C	52	C	53	В	54	С	55	С	56	С
57	Α	58	В	59	С	60	D	61	D	62	A	63	D
64	A	65	В										

47. A bench mark has been established at the soffit of an ornamental arch at the known elevation of 100.0m above sea level. The back sight used to establish height of instrument is an inverted staff reading of 2.105m. A forward sight reading with normally held staff of 1.105m is taken on a recently constructed plinth. The elevation of the plinth is
(A) 103.210m
(B) 101.000m
(C) 99.000m
(D) 96.790m

Common Data Questions: 48 & 49

Ion concentrations obtained for a groundwater sample (having pH=8.1) are given below.

Ion	Ca ² +	Mg2+	Na+	HC0 _r	50/-	cr
lon concentration (rnq/L)	100	6	15	250	45	39
Atomic Weight	Ca=40	Mg=24	Na=23	H=I, C=12, 0=16	5=32, 0=16	CI=35.5

48. Total hardiness (rng/L as CaCO₃) present in the above water sample is

(A) 205 (8) 250

(C) 275

(D) 308

49. Carbonate hardness (rnq/L as CaCO₃₁ present in the above water sample is

(A) 205

(8) 250

(C) 275

(D) 289

Common Data Questions: 50 & 51

The moisture holding capacity of the soil in a 100 hectare farm is 18cm/m. the field is to be irrigated when 50 percent of the available moisture in the root zone is depleted. The irrigation water is to be supplied by a pump working for 10hours a day, and water application efficiency is 75%. Details of crops planned for cultivation are as follows:

Crop	Root zone depth (rn)	Peak rate of moisture use (mm/day)		
×	1.0	5.0		
У	0.8	4.0		

50. The capacity of irrigation system required to irrigate crop X in 36 hectares is

(A) 83litres/sec

(8) 67 liters/sec

(C) 57 liters/sec

(D) 53 liters/sec