PAPER-II COMPUTER SCIENCE & APPLICATIONS

Signature and Name of Invigilator	·	W 111 1			10				
1. (Signature)		OMR Sh	eet N	o. :					
(Name)		(To be filled by the Candidate)							
2. (Signature)		Roll No.							
(Name)			(In figures	as per adm	ission c	ard)		
		Roll No.							
J A U \ 	7			(In wo	ords)				
Time: 1 1/4 hours]					[Maxim	um Ma	rks:	100	
Number of Pages in this Booklet: 16			Numb	er of Que	estions in t	his Bo	oklet	: 50	
Instructions for the Candi					त्र लिए निर्दे श		_		
 Write your roll number in the space prove this page. 			के ऊपर 1	नेयत स्थान प	पर अपना रोल जीव सम्बन्ध	ं नम्बर लि	र्गाखए	l	
 This paper consists of fifty multiple-choice 		2. इस प्रश्न-प 3. परीक्षा प्राप	गत्र म पष् एम्भ होने	गस बहु।वकल पर प्रश्न-र्पा	पीय प्रश्न हैं । स्तका आ्पको	! देदीज	ा येगी	। पहले	
3. At the commencement of examination, th	e question booklet	पाँच मिन	ट आपक	ो प्रश्न-पुस्ति	का खोलने तध	था उसकी	निम्नी	लिखित	
will be given to you. In the first 5 minutes to open the booklet and compulsorily exa		जॉच के वि	लए दिये	जायेंगे, जिसव	क्री जाँच आपव जारा	_{र्गो} अवश्य	ा करनी	्हे :	
(i) To have access to the Question Bookle		(i) प्रश्न को	-पुस्तिका फार्ड लें	खालन का ल । खली हुई	गए पुस्तिका प या बिना स्टी	र लगा क किर-मील	।गज क की प	ग साल ग्रिनका	
seal on the edge of this cover page. Do	not accept a booklet	स्वीव	गर न क	रे ।					
without sticker-seal and do not accep (ii) Tally the number of pages and number of pages and number of pages and number of pages are number of pages and number of pages and number of pages are number of pages are number of pages and number of pages are number of pa		(ii) कवर	<u>र् पृष्ठ प</u>	र छपे निर्देश	गनुसार प्रश्न्-	पुस्तिका_	<u>के पृष्</u>	उ_तथा	
the booklet with the information pr	inted on the cover	प्रश्न हें ।	ाकास टोक्सर्णा	ख्याकाअ ग्रस्तिकाजि	च्छी तरह चैव नमें पष्ट/पुष्न	क्र कर ल क्रम टों:	1 ।क यास्त्र	य पूर ाग आ	
page. Faulty booklets due to pages/ or duplicate or not in serial ord	questions missing ler or any other	गये	हों या	पीरियल में	नमें पृष्ठ/प्रश्न न हो अर्थात	किसी भ	री प्रक	ार की	
discrepancy should be got replaced	immediately by a	त्रुटि	पूर्ण पुन्	स्तका स्वीक	गर नू करें	तथा उर्स	ो सम्	य_उसे	
correct booklet from the invigilator of 5 minutes. Afterwards, neither the	within the period	लाट स्मर्व	कर उस [्] इ. क्यार	क स्थान पर भागको गाँच	दूसरी सही मिनट दिये ज	प्रश्न-पुास्त् गरोंगे ।	तका ल उसके र	लि। सारम	
will be replaced nor any extra time	will be given.	३५५ तो ३	भापकी प्र	गाययम् याच श्न-पस्तिकाः	वापस ली जाय	गण और ग्रेगी और	न ही	आपको	
(iii) After this verification is over, the Tes	st Booklet Number	अति	रिक्त सम	मय दिया जा	येगा ।				
should be entered on the OMR Sh Sheet Number should be entered on		(iii) इस ^र	जाच के ब	ाद प्रश्न-पुस्तिव नगरान्य	म का नंबर ON	MR पत्रक	पर औ	ऋत करे दें	
(iv) The test booklet no. and OMR sheet n		आर (iv) प्रश्न	पस्तिका	त्रक का नषर : नं और OM	इस प्रश्न-पुस्तिक IR पत्रक नं. स	ग पर आक गमान होने	प्रा कर चाहिए	५ । ा यदि	
In case of discrepancy in the number, the	ne candidate should	े नंबर	भिन्न हों	, तो परीक्षार्थी	िप्रश्न-पुस्तिका	/ OMR	पत्रक	बंदलने	
immediately report the matter to t replacement of the Test Booklet / Ol	AD Class	के वि	लए निरीध	प्रक को तुरंत	सूचित करें।	(2) ====	- (1) f	```	
4. Each item has four alternative responses r		4. प्रत्येक प्रश् हैं । आपव	न का लए हो सदी उ	, चार उत्तर 19 हत्तर के वन व	ाकल्प (1), (2) को पेन से भरव), (3) तथ हर काला	। (4) । करना	दय गय है जैसा	
and (4). You have to darken the circle as i	ndicated below on	कि नीचे र्			7/1 11 (1 1(-	1777-1771	-1/\ II	Q -1XII	
the correct response against each item. Example: 1 2 4		उदाहरण	: 1		Ð				
where (3) is the correct response.		जब्कि (3)			6))			٠.٠	
5. Your responses to the items are to be indi	cated in the OMK				अन्दर दिये गये (पर दिये गये वृत्त				
Sheet given inside the Booklet only.	If you mark your	करन है। स्थान पर उ	वाद आप उत्तर चिट्टन	OMK पत्रक गंकित करते हैं	पर ।५५ गय पृष् , तो उसका मूर	त फ जला न्यांकन नर्ह	जा जिस् हें होगा	ता अप्प ।	
response at any place other than in the of Sheet, it will not be evaluated.		6. अन्दर दिये	ो गये निव	ईशों को ध्यान	ापूर्वक पढ़ें ।				
6. Read instructions given inside carefully.		7. कच्चा का	F (Roug	gh Work) इ	स [े] पुस्तिका के	अन्तिम पृ	मृष्ट पर	करें ।	
7. Rough Work is to be done in the end of the	is cookiet.				त स्थान के अ ऐसा चिह्न जि				
8. If you write your Name, Roll Number, Phany mark on any part of the OMR Sheet, e		सके. अंवि	न नम्बर ज्त करते	या यगर मा । हैं अथवा अ	५सा विट्रा जि भद्र भाषा का	सस् जापः प्रयोग कर	नम् अरू ते हैं. र	यान हा या कोई	
allotted for the relevant entries, which i	nay disclose your	अन्य अन्	चित साध	ान का प्रयोग	करते हैं, जैसे	ने कि अंग्रि	कत कि	न्ये गये	
identity, or use abusive language or emplo means, such as change of response by s		उत्तर को	मिटाना (या सफेद स्य	गही से बंदल	ना तो पर	रीक्षा वे	र्ग लिये	
white fluid, you will render yourself liable	to disqualification			में जा सकते ! एवं डोने एट ए	ह । मूल OMR पत्र	क्त निग्रीथ	क्य गरी	टरा स्रो	
9. You have to return the Original OMR Shee	t to the invigilators				पूरा OMK ५७ माप्ति के बाद उ				
at the end of the examination compulso carry it with you outside the Examinati		से बाहर न	लेकर जा	यें । हालांकि उ	आप परीक्षा समा	प्ति पर मूर	न प्रश्न-	पुस्तिका	
however, allowed to carry original que	estion booklet on	अपने साथ			 _	٠.			
conclusion of examination. 10. Use only Black Ball point pen.		10. काले बाल 11. किसी भी	१ प्वाइट प्रकार त्र	पन का हा जन्मंगणकः	्रस्तमाल कर कैलकलेटरा रा	१ । तलाग के	രണം ചാ	ाहि का	
11. Use of any calculator or log table etc.,	is prohibited.	गा. प्रिसा ना प्रयोग वरि	जनार प्र जित है ।	(1.1919) ((13/(10() 4		-(1 91	५ नग	
12. There is no negative marks for incorre	ect answers.	12. गलत उत्त		ए कोई नकार	ात्मक अंक नह	<u>त्रीं हैं</u> ।			

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Paper – II

Note: This paper contains **fifty (50)** objective type questions of **two (2)** marks each. **All** questions are compulsory.

1. Consider a sequence F_{00} defined as :

$$F_{00}(0) = 1, F_{00}(1) = 1$$

$$F_{00}(n) = \frac{10 * F_{00}(n-1) + 100}{F_{00}(n-2)} \text{ for } n \ge 2$$

Then what shall be the set of values of the sequence F_{00} ?

(1) (1, 110, 1200)

- (2) (1, 110, 600, 1200)
- (3) (1, 2, 55, 110, 600, 1200)
- (4) (1, 55, 110, 600, 1200)

2. Match the following :

List - I

List - II

- a. Absurd
- i. Clearly impossible being contrary to some evident truth.
- b. Ambiguous
- ii. Capable of more than one interpretation or meaning.
- c. Axiom
- iii. An assertion that is accepted and used without a proof.
- d. Conjecture
- iv. An opinion preferably based on some experience or wisdom.

Codes:

- (1) i ii iii iv
- (2) i iii iv ii
- (3) ii iii iv i
- (4) ii i iii iv

3. The functions mapping R into R are defined as :

$$f(x) = x^3 - 4x$$
, $g(x) = \frac{1}{x^2 + 1}$ and $h(x) = x^4$.

Then find the value of the following composite functions:

 $h_0g(x)$ and $h_0g_0f(x)$

(1)
$$(x^2 + 1)^4$$
 and $[(x^3 - 4x)^2 + 1]^4$

(2)
$$(x^2 + 1)^4$$
 and $[(x^3 - 4x)^2 + 1]^{-4}$

(3)
$$(x^2 + 1)^{-4}$$
 and $[(x^2 - 4x)^2 + 1]^4$

(4)
$$(x^2 + 1)^{-4}$$
 and $[(x^3 - 4x)^2 + 1]^{-4}$

4. How many multiples of 6 are there between the following pairs of numbers ?

0 and 100 and -6 and 34

(1) 16 and 6

(2) 17 and 6

(3) 17 and 7

(4) 16 and 7

5. Consider a Hamiltonian Graph G with no loops or parallel edges and with $|V(G)| = n \ge 3$. Then which of the following is true?

(1) $\deg(v) \ge \frac{n}{2}$ for each vertex v.

(2)
$$|E(G)| \ge \frac{1}{2}(n-1)(n-2) + 2$$

- (3) $\deg(v) + \deg(w) \ge n$ whenever v and w are not connected by an edge.
- (4) All of the above

6. In propositional logic if $(P \rightarrow Q) \land (R \rightarrow S)$ and $(P \lor R)$ are two premises such that

$$\frac{(P \to Q) \land (R \to S)}{P \lor R}$$

Y is the premise:

(1) $P \vee R$

(2) P \vee S

(3) $Q \vee R$

(4) Q \vee S

7.	7. ECL is the fastest of all logic families. High speed in ECL is possible because transistor are used in difference amplifier configuration, in which they are never driven into							
	(1)	Race condition	(2)	Saturation				
	(3)	Delay	(4)	High impedance				
8.		nary 3-bit down counter uses J-K fli		s, FF_i with inputs J_i , K_i and outputs Q_i , a for the input from following, is				
	I.	$J_0 = K_0 = 0$						
	II.	$J_0 = K_0 = 1$						
	III.	$J_1 = K_1 = Q_0$						
	IV.	$J_1 = K_1 = \overline{Q}_0$						
	V.	$J_2 = K_2 = Q_1 Q_0$						
	VI.	$J_2 = K_2 = \overline{Q}_1 \overline{Q}_0$						
	(1)	I, III, V	(2)	I, IV, VI				
	(3)	II, III, V	(4)	II, IV, VI				
9.	Conv	vert the octal number 0.4051 into its ed	quivale	ent decimal number.				
	(1)	0.5100098	(2)	0.2096				
	(3)	0.52	(4)	0.4192				
10.	The l	nexadecimal equivalent of the octal nu	ımber 2	2357 is :				
	(1)	2EE	(2)	2FF				
	(3)	4EF	(4)	4FE				
11.	Whic	ch of the following cannot be passed to	o a fun	ction in C++?				
	(1)	Constant	(2)	Structure				
	(3)	Array	(4)	Header file				
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12.	Whi	ch one of the following is correct for	overloa	aded functions in C++?								
	(1)	Compiler sets up a separate function	n for ev	very definition of function.								
	(2)	Compiler does not set up a separate	function	on for every definition of function.								
	(3)	Overloaded functions cannot handle different types of objects.										
	(4)	Overloaded functions cannot have s	ame nu	umber of arguments.								
13.	Whi	ch of the following storage classes ha	ve glol	oal visibility in C/C++ ?								
	(1)	Auto	(2)	Extern								
	(3)	Static	(4)	Register								
14.	Whi	ch of the following operators cannot l	be over	loaded in C/C++ ?								
	(1)	Bitwise right shift assignment										
	(2)	Address of										
	(3)	Indirection										
	(4)	Structure reference										
15.	If X	is a binary number which is power of	f 2, the	n the value of								
	X &	(X-1) is:										
	(1)	1111	(2)	0000								
	(3)	1000	(4)	0001								
16.	An a	attribute A of datatype varchar (20)	has val	ue 'Ram' and the attribute B of datatype								
			attribu	tte A has memory spaces and B								
		memory spaces.										
	(1)	20, 20	(2)	3, 20								
	(3)	3, 4	(4)	20, 4								
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	(4)	Neither dependency preserving nor lossless	s join.	
	(3)	Lossless join but not dependency preserving	g	
	(2)	Dependency preserving and lossless join		
	(1)	Dependency preserving but not lossless joi	n	
		omposition of R into $R_1(MN)$ and $R_2(PQ)$ is		
19.	Cons	sider a schema R(MNPQ) and functional d	lependencies $M \to N$, $P \to Q$.	Then the
	(3)	7 (4)	3	
	(1)	4 (2)	6	
	mod	lel are		
	The	minimum number of tables required to rep	present M, N, R ₁ and R ₂ in the	relational
	R_1 is	s one-to-many and R_2 is many-to-many.		
	R_2 as	are two relationship between M and N, where	as	
18.		M and N be two entities in an E-R diagram v		es. R ₁ and
	(4)	(A), (B) and (C) are false.		
	(3)	(A) and (B) are true; (C) false.		
	(2)	(A) false, (B) and (C) are true.		
	(1)	(A), (B) and (C) are true.		
	(C)	Budget of a company must be zero.		
	(B)	No two citizens have same Adhar-Id.		
	(A)	An instructor Id. No. cannot be null, provide	led Intructor Id No. being prima	ry key.
	the e	examples of integrity constraints?		
17.	_	lt into loss of data consistency. Which of the	•	
17.	Integ	grity constraints ensure that changes made to	o the database by authorized us	ers do not

- **20.** The order of a leaf node in a B⁺ tree is the maximum number of children it can have. Suppose that block size is 1 kilobytes, the child pointer takes 7 bytes long and search field value takes 14 bytes long. The order of the leaf node is ______.
 - (1) 16

(2) 63

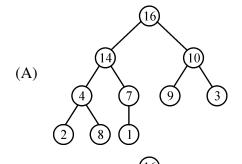
(3) 64

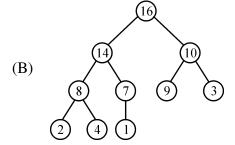
- (4) 65
- **21.** Which of the following is true for computation time in insertion, deletion and finding maximum and minimum element in a sorted array?
 - (1) Insertion -0(1), Deletion -0(1), Maximum -0(1), Minimum -0(1)
 - (2) Insertion -0(1), Deletion -0(1), Maximum -0(n), Minimum -0(n)
 - (3) Insertion O(n), Deletion O(n), Maximum O(1), Minimum O(1)
 - (4) Insertion O(n), Deletion O(n), Maximum O(n), Minimum O(n)
- 22. The seven elements A, B, C, D, E, F and G are pushed onto a stack in reverse order, i.e., starting from G. The stack is popped five times and each element is inserted into a queue. Two elements are deleted from the queue and pushed back onto the stack. Now, one element is popped from the stack. The popped item is ______.
 - (1) A

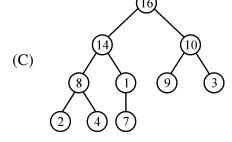
(2) B

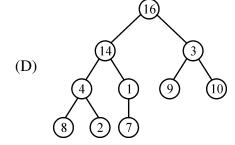
(3) F

- (4) G
- **23.** Which of the following is a valid heap?









(1) A

(2) B

(3) C

(4) D

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	(4)	iii	i	iv	ii					
	(3)	ii	iii	iv	i					
	(2)	iii	ii	i	iv					
	(1)	iv	i	ii	iii					
		a	b	c	d					
	Cod	es:								
	d.	Dat	alink	layer		iv.	HTTF	•		
	c.	Net	work	layer		iii.	PPP			
	b.	Tra	nsport	t layer		ii.	IP			
	a.	App	plicati	on of	layer	i.	TCP			
26.	Mate	ch the	e follo	wing	Layers	and Pro	otocols	for a ı	iser b	prowsing with SSL:
	(3)	C						(4)	D	
	(1)	A						(2)	В	
	(D)	Dep	oth-fir	st-sea	rch can	be use	d to find	d the c	onne	cted components of a graph.
	(C)		en the	-	x and p	ostfix	walks of	f a bir	nary tr	ree, the tree cannot be re-constructed
	(B)	Bre	adth-f	irst se	arch ca	nnot be	e used to	o find	conne	ected components of a graph.
	(A)	-	timal l gramn	•	search	tree co	onstructi	ion ca	n be j	performed efficiently using dynamic
25.	Whi	ch of	the fo	ollowi	ng state	ments	is false	?		
	(3)	1/m	1					(4)	n/m	
	(1)	1						(2)	1/n	
				ın		,				The second and the se
24.	If h is chosen from a universal collection of hash functions and is used to hash n keys into a table of size m, where $n \le m$, the expected number of collisions involving a particular									

27.	The maximum size of the data that the application layer can pass on to the TCP lay below is											
	(1)	2 ¹⁶ bytes			(2)	2 ¹⁶ bytes + TCP header length						
	(3)	2 ¹⁶ bytes – TCP h	eadei	elength	(4)	2 ¹⁵ bytes						
28.	A pa	acket whose destina	tion i	s outside the	local T	CCP/IP network segment is sent to						
	(1)	File server			(2)	DNS server						
	(3)	DHCP server			(4)	Default gateway						
29.		ance vector routing	_	-		routing algorithm. The routing tables in						
	(1)	automatically										
	(2)	by server										
	(3)	by exchanging inf	forma	tion with neighbors	ghbour	nodes						
	(4)	with back up data	base									
30.		ink state routing all aputed using:	lgorit	hm after con	structi	on of link state packets, new routes are						
	(1)	DES algorithm			(2)	Dijkstra's algorithm						
	(3)	RSA algorithm			(4)	Packets						
31.	Whi	ich of the following	string	gs would mat	ch the	regular expression : $p+[3-5]*[xyz]$?						
	I.	p443y	II.	р6у								
	III.	3xyz	IV.	p35z								
	V.	p353535 <i>x</i>	VI.	ppp5								
	(1)	I, III and VI only			(2)	IV, V and VI only						
	(3)	II, IV and V only			(4)	I, IV and V only						

32.	Consider the following assembly language instructions:									
	mov al, 15									
	mov ah, 15									
	xor a	al, al								
	mov	cl, 3								
	shr a	ıx, cl								
		al, 90H								
	adc a									
		at is the value in ax register after execu								
	(1)	0270H	(2)	0170Н						
	(3)	01E0H	(4)	0370Н						
33.	Cons	Lexical Analysis is specified by pushdown automata.		npiler construction: xt-free grammars and implemented by						
	II.	Syntax Analysis is specified by regumentine.	ılar ex	pressions and implemented by finite-state						
	Whi	ch of the above statement(s) is/are cor	rect?							
	(1)	Only I	(2)	Only II						
	(3)	Both I and II	(4)	Neither I nor II						
34.	3AH after	I respectively. The contents of AL, the executing 'SUB AL, BL' assembly la	he sta	LL) of 8085 microprocessor are 49H and tus of carry flag (CF) and sign flag (SF) ge instruction, are						
	(1)	AL = 0FH; CF = 1; SF = 1								
	(2)	AL = F0H; CF = 0; SF = 0								
	(3)	AL = F1H; CF = 1; SF = 1								
	(4)	AL = 1FH; $CF = 1$; $SF = 1$								

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	(4)	-2
	(3)	-1
	(2)	1
	(1)	0
	The	final value of semaphore will be:
	(e)	P1 exits critical section
	(d)	P2 exits critical section
	(c)	P3 needs to access
	(b)	P1 needs to access
	(a)	P2 needs to access
	orde	
		al value of semaphore is one. Assume that negative value of semaphore tells us how y processes are waiting in queue. Processes access the semaphore in following
36.		we are three processes P_1 , P_2 and P_3 sharing a semaphore for synchronizing a variable.
	(4)	Neither I nor II
	(3)	Both I and II
	(2)	Only II
	(1)	Only I
	II	A function of a linker is to replace absolute references in an object module by symbolic references to locations in other modules.
	I.	A function of a linker is to combine several object modules into a single load module.
35.	Whi	ch of the following statement(s) regarding a linker software is/are true?

37.	In a	pagir	ng sys	stem,	it takes 3	30 ns t	to search tran	slation Look-a-s	ide Buffer (TLB) and 90
	ns to	acce	ess the	e mai	n memoi	ry. If t	he TLB hit r	atio is 70%, the	effective me	emory access
	time	is:								
	(1)	48n	S				(2)	147ns		
	(3)	120	ns				(4)	84ns		
38.	Mate	ch the	e follo	wing	w.r.t. Inp	out/Ou	tput managei	ment:		
			List	– I			List	i – II		
	a.	Dev	vice co	ontrol	ler	i.		nformation fro register and stor		
	b.	Dev	vice di	river		ii.	I/O schedul	ing		
	c.	Inte	rrupt	handl	er	iii.	Performs da	ata transfer		
	d.	Ker	nel I/	O sub	system	iv.	Processing	of I/O request		
	Cod	es:								
		a	b	c	d					
	(1)	iii	iv	i	ii					
	(2)	ii	i	iv	iii					
	(3)	iv	i	ii	iii					
	(4)	i	iii	iv	ii					
39.	Whi	ch of	the fo	ollowi	ng sched	luling	algorithms m	ay cause starvati	on ?	
	a.	Firs	t-com	ne-firs	t-served					
	b.	Rou	ınd Ro	obin						
	c.	Pric	ority							
	d.	Sho	rtest _l	proces	s next					
	e.	Sho	rtest 1	remair	ning time	e first				
	(1)	a, c	and e	;			(2)	c, d and e		
	(3)	b, d	and e	2			(4)	b, c and d		
Pape	er-II						12			JA-087-17

- **40.** Distributed operating systems consist of :
 - (1) Loosely coupled O.S. software on a loosely coupled hardware.
 - (2) Loosely coupled O.S. software on a tightly coupled hardware.
 - (3) Tightly coupled O.S. software on a loosely coupled hardware.
 - (4) Tightly coupled O.S. software on a tightly coupled hardware.
- **41.** Software Engineering is an engineering discipline that is concerned with :
 - (1) how computer systems work.
 - (2) theories and methods that underlie computers and software systems.
 - (3) all aspects of software production
 - (4) all aspects of computer-based systems development, including hardware, software and process engineering.
- **42.** Which of the following is not one of three software product aspects addressed by McCall's software quality factors?
 - (1) Ability to undergo change
 - (2) Adaptiability to new environments
 - (3) Operational characteristics
 - (4) Production costs and scheduling
- **43.** Which of the following statement(s) is/are true with respect to software architecture?
 - S1: Coupling is a measure of how well the things grouped together in a module belong together logically.
 - S2 : Cohesion is a measure of the degree of interaction between software modules.
 - S3: If coupling is low and cohesion is high then it is easier to change one module without affecting others.
 - (1) Only S1 and S2

- (2) Only S3
- (3) All of S1, S2 and S3
- (4) Only S1

44.	The	proto	otypin	g mod	el of so	oftware	development	is	:
	(1)	a re	easona	ble ap	proach	when r	equirements a	are	e well-defined.
	(2)	a u	seful a	ipproa	ch whe	n a cust	tomer cannot	de	efine requirements clearly.
	(3)	the	best a	pproa	ch to us	se for p	rojects with la	arg	ge development teams.
	(4)	a ri	sky m	odel t	hat rare	ly prod	uces a meanin	ng	ful product.
45.	A so	oftwa	re desi	ign pa	ttern us	sed to ei	nhance the fur	nc	ctionality of an object at run-time is:
	(1)		apter	-6 r ··			(2)		Decorator
	(3)		legatio	on			(4)		Proxy
46.	Mat	ch th	e follo	wing	:				
			List	·			Lis	ist	: – II
	a.	Aff	iliate l	Marke	eting	i.		te.	partners to place logos on If customers click, come d buy.
	b.	Vir	al Ma	rketin	g	ii.	of-mouth. I	Re	prand on the net by word- eceivers will send your to their friends.
	c.	Gro	oup Pu	ırchasi	ing	iii.		ge	the demands of small et a large volume. Then ice.
	d.	Baı	rtering	; Onlir	ne	iv.	services wit	th oi re	surplus products and the process administered nline by an intermediary. ceives "points" for its
	Cod	les:							
		a	b	c	d				
	(1)	i	ii	iii	iv				
	(2)	i	iii	ii	iv				
	(3)	iii	ii	iv	i				
	(4)	ii	iii	i	iv				

47.		refers loosely to the process of	semi-a	automatically analyzing large databases to
	find	useful patterns.		
	(1)	Datamining	(2)	Data warehousing
	(3)	DBMS	(4)	Data mirroring
48.	Whi	ch of the following is/are true w.r.t. ap	plicat	ions of mobile computing?
	(A)	Travelling of salesman		
	(B)	Location awareness services		
	(1)	(A) true; (B) false.		
	(2)	Both (A) and (B) are true.		
	(3)	Both (A) and (B) are false.		
	(4)	(A) false; (B) true.		
49.	requ	ired for W-CDMA is		MTS. The minimum spectrum allocation
	(1)	2 MHz	(2)	20 KHz
	(3)	5 KHz	(4)	5 MHz
50.	Whi	ch of the following statements is/are tr	ue w.i	t.t. Enterprise Resource Planning (ERP) ?
	(A)	ERP automates and integrates majori	ty of	ousiness processes.
	(B)	ERP provides access to information	n a R	eal Time Environment.
	(C)	ERP is inexpensive to implement.		
	(1)	(A), (B) and (C) are false.		
	(2)	(A) and (B) false; (C) true.		
	(3)	(A) and (B) true; (C) false.		
	(4)	(A) true; (B) and (C) are false.		

Space For Rough Work