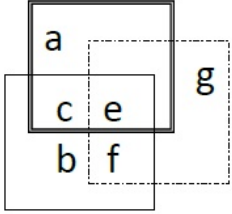


PREVIEW QUESTION BANK

Module Name : WOSC09-E

Exam Date : 30-Apr-2017 Batch : 11:00-13:00

Sr. No.	Client Question ID	Question Body and Alternatives	Marks	Negative Marks
Objective Question				
1	1	<p>In the given diagram there are three squares interlocking each other. Dotted Square represents <i>Singer</i>, double line square represents <i>Poets</i> and single line square represents <i>Writer</i>. Teachers who are writers and poets but not singers are represented by</p>  <p>A1 : f</p> <p>A2 : g</p> <p>A3 : c – (Correct Alternative)</p> <p>A4 : b</p>	1.0	0.25
Objective Question				
2	2	<p>Tina starts from point A and drives 2km towards north. She then turns to her left and drives 3km and after taking another turn to her left she drives 2km and finishes at point B. From this point Minu starts driving towards north. She drives 2km towards north and takes her right turn and drives another 3km She then again turns to her right hand and drives 2km and reaches point A. How far is points A from point B if both the points are in open ground requiring no turns?</p> <p>A1 : 7 km</p> <p>A2 : 5 km</p> <p>A3 : 3 km – (Correct Alternative)</p> <p>A4 : 2 km</p>	1.0	0.25
Objective Question				
3	3	<p>Which of the following fraction is the largest?</p> <p>A1 : $\frac{7}{8}$ – (Correct Alternative)</p> <p>A2 : $\frac{13}{16}$</p> <p>A3 : $\frac{31}{40}$</p> <p>A4 : $\frac{63}{80}$</p>	1.0	0.25

Objective Question				
4	4	<p>If 20% of a = b then b% of 20 is the same as</p> <p>A1 5% of a :</p> <p>A2 6% of a :</p> <p>A3 4% of a – (Correct Alternative) :</p> <p>A4 10% of a :</p>	1.0	0.25
Objective Question				
5	5	<p>3 pumps working 8 hours a day, can empty a tank in 2 days. How many hours a day must 4 pumps work to empty the tank in 1 day?</p> <p>A1 9 :</p> <p>A2 10 :</p> <p>A3 11 :</p> <p>A4 12 – (Correct Alternative) :</p>	1.0	0.25
Objective Question				
6	6	<p>Anuj reached for a meeting on 15 minutes before 8:30 hours and found himself half an hour earlier than a man who was 40 minutes late. What was the scheduled time of meeting?</p> <p>A1 8:00 hrs :</p> <p>A2 8:05 hrs – (Correct Alternative) :</p> <p>A3 8:15 hrs :</p> <p>A4 8:45 hrs :</p>	1.0	0.25
Objective Question				
7	7	<p>Facts: which deal with pieces of information that one has heard, seen or read and which is open to discovery or verification (the answer option indicates such a statement with an 'F').</p>	1.0	0.25

		<p>Inferences: which are conclusions drawn about the unknown, on the basis of the known (the answer option indicates such a statement with an 'I')</p> <p>Judgements: which are opinions that imply approval or disapproval of persons, objects, situations and occurrences in the past, the present or the future (the answer option indicates such a statement with a 'J').</p> <p>Identify the sequence of statements by choosing the right option:</p> <ul style="list-style-type: none"> ▪ So much of our day-to-day focus seems to be on getting things done, trudging our way through the tasks of living – it can feel like a treadmill that gets you nowhere. ▪ We are not doing things that make us happy; that bring us joy; that we cannot wait to do because we enjoy them so much. ▪ This is the stuff that joyful living is made of – identifying your calling and committing yourself to it. <p>A1 III :</p> <p>A2 JJJ – (Correct Alternative) :</p> <p>A3 IJI :</p> <p>A4 JII :</p>		
Objective Question				
8	8	Choose the option closest to the word - Stipulation	1.0	0.25
		<p>A1 excitement :</p> <p>A2 imitation :</p> <p>A3 signal :</p> <p>A4 requirement – (Correct Alternative) :</p>		
Objective Question				
9	9	The question below consists of a pair of related words followed by four pairs of words. Select the pair that best expresses the relation in the original pair. INTIMATE :CLOSE	1.0	0.25
		<p>A1 evanescent: permanency :</p> <p>A2 articulate: speech :</p> <p>A3 enclose :parentheses :</p> <p>A4 obsessed :attracted – (Correct Alternative) :</p>		
Objective Question				
10	10	Homeowners aged 40 to 50 are more likely to purchase ice cream and are more likely to purchase it in larger amounts than are members of any other demographic group. The popular belief that teenagers eat more ice cream than adults must, therefore, be false. The argument is flawed primarily because the author:	1.0	0.25

		<p>A1 : Fails to distinguish between purchasing and consuming – (Correct Alternative)</p> <p>A2 : Does not supply information about homeowners in age groups other than 40 and 50</p> <p>A3 : Does not specify the precise amount of ice cream purchased by any demographic group</p> <p>A4 : Discuss ice cream rather than more nutritious and healthful foods</p>		
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Objective Question

11	11	<p>There are seven books including one each on Psychology, Hindi, English, Sociology, Economics, Physical Education and Accountancy, lying on a table one over the other. The sociology book is lying on top of the pile. The English book is neither at the top nor at the bottom of the pile. The book on Accountancy is immediately below the one on Physical Education, which is immediately below the book on Sociology. The Economics book is immediately above the book on Psychology. The book on Hindi is immediately below the one on Psychology.</p> <p>The book on Economics is between which of the following books?</p> <p>A1 : Accountancy and Physical Education</p> <p>A2 : English and Psychology – (Correct Alternative)</p> <p>A3 : Psychology and Hindi</p> <p>A4 : Physical Education and Hindi</p>	1.0	0.25
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Objective Question

12	12	<p>There are seven books including one each on Psychology, Hindi, English, Sociology, Economics, Physical Education and Accountancy, lying on a table one over the other. The sociology book is lying on top of the pile. The English book is neither at the top nor at the bottom of the pile. The book on Accountancy is immediately below the one on Physical Education, which is immediately below the book on Sociology. The Economics book is immediately above the book on Psychology. The book on Hindi is immediately below the one on Psychology.</p> <p>Which three books are between the books on Accountancy and Hindi?</p> <p>A1 : English, Economics and Psychology – (Correct Alternative)</p> <p>A2 : Economics, Psychology and Sociology</p> <p>A3 : Economics, Physical Education and Psychology</p> <p>A4 : English, Physical Education and Sociology</p>	1.0	0.25
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Objective Question

13	13	<p>There are seven books including one each on Psychology, Hindi, English, Sociology, Economics, Physical Education and Accountancy, lying on a table one over the other. The sociology book is lying on top of the pile. The English book is neither at the top nor at the bottom of the pile. The book on Accountancy is immediately below the one on Physical Education, which is immediately below the book on Sociology. The Economics book is immediately above the book on Psychology. The book on Hindi is immediately below the one on Psychology.</p>	1.0	0.25
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		<p>If the books on Sociology and English, those on Accountancy and Hindi and the ones on Physical Education and Psychology interchange their respective positions, which book will be between the one on Psychology and the one on Sociology?</p> <p>A1 : Accountancy</p> <p>A2 : Hindi – (Correct Alternative)</p> <p>A3 : Psychology</p> <p>A4 : None of these</p>		
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Objective Question

14	14	<p>Choose the appropriate answer to complete the following sentence: Medicine is to illness as law is to _____</p> <p>A1 : Discipline</p> <p>A2 : Anarchy – (Correct Alternative)</p> <p>A3 : Treason</p> <p>A4 : Etiquette</p>	1.0	0.25
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Objective Question

15	15	<p>If $Z = 52$ and $ACT = 48$, then BAT will be equal to</p> <p>A1 : 39</p> <p>A2 : 41</p> <p>A3 : 44</p> <p>A4 : 46 – (Correct Alternative)</p>	1.0	0.25
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Objective Question

16	16	<p>If FLOWER is coded as HNQYGT, then JASMINE is coded as _____</p> <p>A1 : LCVNKQG</p> <p>A2 : LBVOKPG</p> <p>A3 : MCUOKQG</p> <p>A4 : LCUOKPG – (Correct Alternative)</p>	1.0	0.25
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Objective Question

17	17	<p>A person travelled a distance of 50 km in 8 hours. He covered a part of the distance on foot at the rate of 4 km per hour and a part on a bicycle at the rate of 10 km per hour. How much distance did he travel on foot?</p>	1.0	0.25
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		<p>A1 : 10 km</p> <p>A2 : 20km – (Correct Alternative)</p> <p>A3 : 30km</p> <p>A4 : 40km</p>		
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Objective Question

18	18	<p>In a garrison, there was food for 1000 soldiers for one month. After 10 days, 1000 more soldiers joined the garrison. How long would the soldiers be able to carry on with the remaining food?</p> <p>A1 : 25</p> <p>A2 : 20</p> <p>A3 : 15</p> <p>A4 : 10 – (Correct Alternative)</p>	1.0	0.25
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Objective Question

19	19	<p>Examine these statements, Rama scored more than Rani, Rani scored less than Ratna, Ratna scored more than Rama, and Padma scored more than Rama but less than Ratna. Who scored the highest?</p> <p>A1 : Rama</p> <p>A2 : Padma</p> <p>A3 : Rani</p> <p>A4 : Ratna – (Correct Alternative)</p>	1.0	0.25
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Objective Question

20	20	<p>A candidate attempted 12 questions and secured full marks in all of them. If he obtained 60% in the test and all questions carried equal marks, then what is the number of questions in the test?</p> <p>A1 : 36</p> <p>A2 : 30</p> <p>A3 : 25</p> <p>A4 : 20 – (Correct Alternative)</p>	1.0	0.25
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Objective Question

21	21	<p>Who invented Aqua-Lung?</p> <p>A1 : Auguste and Maurice Gagnon</p>	1.0	0.25
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		: आशादा मोनाच चक्रा बोरी A2 Newton : A3 Jacques Cousteau – (Correct Alternative) : A4 Thomas Bessemer :		
Objective Question				
22	22	The example of bio-degradable plastic is A1 Aromatic polyesters : A2 Aliphatic polyesters – (Correct Alternative) : A3 Oil : A4 Leather :	1.0	0.25
Objective Question				
23	23	Basic Characteristics of Radioactive materials is/are A1 Half life : A2 Radioactive decay process : A3 Fission and Fusion : A4 All the above – (Correct Alternative) :	1.0	0.25
Objective Question				
24	24	The science of weights and measures is called A1 Metrology – (Correct Alternative) : A2 Meteorology : A3 Morphology : A4 None of the above :	1.0	0.25
Objective Question				
25	25	The Statue of Liberty is green because of A1 Iron : A2 Copper – (Correct Alternative) :	1.0	0.25

		A3 Nickel :		
		A4 Stainless Steel :		

Objective Question

26	26	A simple pendulum is suspended from the ceiling of a lift. When the lift is at rest its time period is T. With what acceleration should the lift be accelerated upwards in order to reduce its period to $T/2$? (g is acceleration due to gravity). A1 3g – (Correct Alternative) : A2 4g : A3 8g : A4 Tg :	1.0	0.25
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Objective Question

27	27	The density of water is maximum at..... A1 277K – (Correct Alternative) : A2 32 ⁰ F : A3 100 ⁰ C : A4 0 ⁰ C :	1.0	0.25
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Objective Question

28	28	One that is based on forward biased pn junction is A1 LED – (Correct Alternative) : A2 Photo-diode : A3 Both (a) and (b) : A4 None of the above :	1.0	0.25
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Objective Question

29	29	“When two systems are in thermal equilibrium with a third system, then they are in thermal equilibrium with each other”. It is stated in A1 First Law of Thermodynamics : A2 Second Law of Thermodynamics : A3 Zeroth Law of Thermodynamics – (Correct Alternative) :	1.0	0.25
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		<p>A4 : None of the above :</p>		
Objective Question				
30	30	<p>A crystal is considered as</p> <p>A1 : Homogeneous solid :</p> <p>A2 : Homogeneous solid formed by atoms :</p> <p>A3 : Homogeneous solid formed by ions :</p> <p>A4 : All the above – (Correct Alternative) :</p>	1.0	0.25
Objective Question				
31	31	<p>Which radioactive element is used in heat pacemakers?</p> <p>A1 : Plutonium – (Correct Alternative) :</p> <p>A2 : Uranium :</p> <p>A3 : Radium :</p> <p>A4 : None of the above :</p>	1.0	0.25
Objective Question				
32	32	<p>The commercial source of alkane is</p> <p>A1 : Coal – (Correct Alternative) :</p> <p>A2 : Mineral :</p> <p>A3 : Sugar :</p> <p>A4 : None of the above :</p>	1.0	0.25
Objective Question				
33	33	<p>Enzymes and anti-bodies are mainly made of</p> <p>A1 : Protein – (Correct Alternative) :</p> <p>A2 : Fat :</p> <p>A3 : Vitamin :</p> <p>A4 : Mineral :</p>	1.0	0.25

Objective Question				
34	34	<p>What is the full form of OPEC?</p> <p>A1 : Oil Producing and Exporting Countries</p> <p>A2 : Organization of the Petroleum Exporting Countries – (Correct Alternative)</p> <p>A3 : Oil Producing and Exporting Coalition</p> <p>A4 : Oil Producer’s Economic Coalition</p>	1.0	0.25
Objective Question				
35	35	<p>Havells is a brand of</p> <p>A1 : Beer</p> <p>A2 : Whisky</p> <p>A3 : Electrical goods – (Correct Alternative)</p> <p>A4 : Television</p>	1.0	0.25
Objective Question				
36	36	<p>What is the full form of CRR?</p> <p>A1 : Cash Reserve Ratio – (Correct Alternative)</p> <p>A2 : Cash Report Ratio</p> <p>A3 : Cash Reserve Report</p> <p>A4 : Cash Restructuring Ratio</p>	1.0	0.25
Objective Question				
37	37	<p>In mobile telecommunication, SMS stands for</p> <p>A1 : Swift Message Service</p> <p>A2 : Swift Memo Service</p> <p>A3 : Short Message Service – (Correct Alternative)</p> <p>A4 : Short Memo Service</p>	1.0	0.25
Objective Question				
38	38	<p>Who became the first female CEO of PepsiCo’s?</p>	1.0	0.25

		<p>A1 : Indra Nooyi – (Correct Alternative)</p> <p>A2 : Chanda Kochhar</p> <p>A3 : Kiran Majumdar</p> <p>A4 : Padmasre Warrior</p>		
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Objective Question

39	39	<p>Paper Boat is a brand of</p> <p>A1 : Britannia Industries Ltd.</p> <p>A2 : ITC</p> <p>A3 : Dabur India Ltd.</p> <p>A4 : Hectare Beverages – (Correct Alternative)</p>	1.0	0.25
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Objective Question

40	40	<p>Geographically which state is largest in India?</p> <p>A1 : Maharashtra</p> <p>A2 : Uttar Pradesh</p> <p>A3 : Madhya Pradesh</p> <p>A4 : Rajasthan – (Correct Alternative)</p>	1.0	0.25
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Objective Question

41	41	<p>Full form of INTUC</p> <p>A1 : Indian National Trade Union Congress – (Correct Alternative)</p> <p>A2 : Indian National Travel Union Congress</p> <p>A3 : Indian National Top Union Congress</p> <p>A4 : Indian National Trust Union Congress</p>	1.0	0.25
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Objective Question

42	42	<p>Full form of NSE</p> <p>A1 : National Scientific Enterprises</p> <p>A2 : National Securities Exchange – (Correct Alternative)</p>	1.0	0.25
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		<p>A3 National Silk Exchange :</p> <p>A4 National Statistical Exchange :</p>		
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Objective Question

43	43	<p>What is the full form of MGNREGA?</p> <p>A1 Mahatma Gandhi National Rural Employment Guarantee Act – (Correct Alternative) :</p> <p>A2 Mahatma Gandhi New Rural Employment Guarantee Act :</p> <p>A3 Mahatma Gandhi National Rural Earning Guarantee Act :</p> <p>A4 Mahatma Gandhi National Rural Employment Giving Act :</p>	1.0	0.25
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Objective Question

44	44	<p>Which of the following is the most spoken language in the world?</p> <p>A1 English :</p> <p>A2 Mandarin – (Correct Alternative) :</p> <p>A3 Spanish :</p> <p>A4 Hindi :</p>	1.0	0.25
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Objective Question

45	45	<p>In Rio Olymoics 2016, PV Sindhu won the following medal</p> <p>A1 Gold Medal (Badminton) :</p> <p>A2 Silver Medal (Badminton) – (Correct Alternative) :</p> <p>A3 Silver Medal (Tennis) :</p> <p>A4 Bronze Model (Tennis) :</p>	1.0	0.25
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Objective Question

46	46	<p>What types of works are protected by copyright?</p> <p>A1 Songs :</p> <p>A2 Photographs :</p> <p>A3 Plays :</p>	1.0	0.25
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		A4 : All of the above – (Correct Alternative)		
Objective Question				
47	47	Patent can be granted to the person A1 One who conceived the idea first : A2 One who commercialised the idea first : A3 One who applied for the patent on idea first – (Correct Alternative) : A4 All of them listed above :	1.0	0.25
Objective Question				
48	48	ISI is A1 Trade Mark : A2 Service Mark : A3 Collective mark : A4 Certificate mark – (Correct Alternative) :	1.0	0.25
Objective Question				
49	49	A vendor in Flea Market is selling fake “TITAN” watches. Under which law can TITAN sue him A1 Copyright : A2 Trademarks – (Correct Alternative) : A3 Patent : A4 Industrial Design :	1.0	0.25
Objective Question				
50	50	If Mohit invents a new process for etching artwork on a metal plate, he will likely apply for a A1 Copyright : A2 Patent – (Correct Alternative) : A3 Trademark : A4 Design registration :	1.0	0.25

Objective Question				
51	51	<p>A computer programme in India can be protected under</p> <p>A1 : Patent Act</p> <p>A2 : Copyright Act – (Correct Alternative)</p> <p>A3 : Information Technology Act</p> <p>A4 : None of the above</p>	1.0	0.25
Objective Question				
52	52	<p>The term ‘Intellectual Property Rights’ covers</p> <p>A1 : Copyrights</p> <p>A2 : Designs</p> <p>A3 : Trade dress</p> <p>A4 : All of the above – (Correct Alternative)</p>	1.0	0.25
Objective Question				
53	53	<p>1. Note the following:</p> <p>I. The shape of ball point pen, where the tip of the pen is designed in such a way that it makes the flow of the ink smooth</p> <p>II. The term “Tasty Biscuits” for biscuits that have just been introduced to the market</p> <p>III. The made-up term “Velito” for a brand of wrist watches</p> <p>Which of the following describes what is protectable as a trademark?</p> <p>A1 : I only</p> <p>A2 : II only</p> <p>A3 : III only – (Correct Alternative)</p> <p>A4 : I, II, and III</p>	1.0	0.25
Objective Question				
54	54	<p>Essential requirements for obtaining a patent are :</p> <p>A1 : It should be valuable and informative.</p> <p>A2 : It should be new, inventive and pleasing to the eye.</p> <p>A3 : It should be new, inventive, and useful. – (Correct Alternative)</p>	1.0	0.25

		A4 : All of the above		
Objective Question				
55	55	The first Sound Mark obtained in India in 2008 is	1.0	0.25
		A1 : Loreal's fragrance mark		
		A2 : Allianz sound mark		
		A3 : Plumeria scent		
		A4 : Yahoo yodel – (Correct Alternative)		
Objective Question				
56	56	One of the following is correct in relation to patentable inventions in India	1.0	0.25
		A1 : Medical treatment methods		
		A2 : Essential Biological Process		
		A3 : New Chemical Composition – (Correct Alternative)		
		A4 : Traditional Knowledge per se		
Objective Question				
57	57	Which of the following Intellectual Property Rights can be transferred and licensed	1.0	0.25
		A1 : Patents		
		A2 : Copyrights		
		A3 : Trademarks		
		A4 : All of the above – (Correct Alternative)		
Objective Question				
58	58	Who is the owner of a work proceed during the course of author's employment	1.0	0.25
		A1 : Employer – (Correct Alternative)		
		A2 : Publisher		
		A3 : Real Author		
		A4 : Successor of Real Author		

Objective Question			
59	59	<p>PCT stands for</p> <p>A1 : Patent Concentration Treaty</p> <p>A2 : Patent Cooperation Treaty – (Correct Alternative)</p> <p>A3 : Patent Convention Treaty</p> <p>A4 : Patent Centralisation Treaty</p>	1.0 0.25
Objective Question			
60	60	<p>WTO has its headquarters located in</p> <p>A1 : London</p> <p>A2 : Paris</p> <p>A3 : New York</p> <p>A4 : Geneva – (Correct Alternative)</p>	1.0 0.25
Objective Question			
61	61	<p>Following are two statements:</p> <p>(i) Two finite-dimensional vector spaces over the same field are isomorphic.</p> <p>(ii) Two finite-dimensional vector spaces over the same field and of the same dimension are isomorphic.</p> <p>Then</p> <p>A1 : (i) is true but (ii) is not true,</p> <p>A2 : (ii) is true, but (i) is not true, – (Correct Alternative)</p> <p>A3 : None of them is true,</p> <p>A4 : All of them are true.</p>	1.0 0.25
Objective Question			
62	62	<p>$\ln(x-1)^2 = 2 \ln(x-1)$ for all x in the interval</p> <p>A1 : $(-\infty, +\infty)$</p> <p>A2 : $[0, +\infty)$</p> <p>A3 : $(-\infty, 1) \cup (1, +\infty)$</p> <p>A4 : $(1, +\infty)$</p>	1.0 0.25

– (Correct Alternative)

Objective Question

63	63	<p>If $f(x) = g(u)$ and $u = u(x)$, then</p> <p>A1 $f(x) = g'(u)$:</p> <p>A2 $f(x) = g'(u) \cdot u'(x)$: – (Correct Alternative)</p> <p>A3 $f(x) = u'(x)$:</p> <p>A4 none of the above :</p>	1.0	0.25
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Objective Question

64	64	<p>The value of the limit</p> $\lim_{x \rightarrow -\infty} \left(\frac{\sqrt{x^2+1}}{3x-2} \right) \text{ is}$ <p>A1 -1 :</p> <p>A2 1/5 :</p> <p>A3 -1/3 : – (Correct Alternative)</p> <p>A4 1/3 :</p>	1.0	0.25
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Objective Question

65	65	<p>If 4/5 of an estate be worth of Rs. 3,36,000 then the value of the 3/7 of the estate is</p> <p>A1 Rs. 1,60,000 :</p> <p>A2 Rs. 1,46,000 :</p> <p>A3 Rs. 2,50,000 :</p> <p>A4 Rs. 1,80,000 – (Correct Alternative) :</p>	1.0	0.25
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Objective Question

66	66	<p>What fraction of an hour is equal to a second?</p> <p>A1 1/60 :</p> <p>A2 1/3600 – (Correct Alternative) :</p> <p>A3 1/24 :</p>	1.0	0.25
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		A4 1/120 :		
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Objective Question

67	67	The average age of the mother and her six children is 12 years, which is reduced by 5 years if the age of the mother is excluded. How old is the mother? A1 63 : A2 53 : A3 42 – (Correct Alternative) : A4 32 :	1.0	0.25
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Objective Question

68	68	The 9 % of x is 6.3. Then the value of x is equal to A1 70 – (Correct Alternative) : A2 75 : A3 60 : A4 50 :	1.0	0.25
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Objective Question

69	69	A bag contains 50 paise, 25 paise and 10 paise coins in the ratio, 5:9:4 amounting to Rs. 206. Find the number of 10 paise coins? A1 140 : A2 150 : A3 160 – (Correct Alternative) : A4 170 :	1.0	0.25
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Objective Question

70	70	If 40 men can do a piece of work in 24 hours, in how many hours will 12 men do it? A1 50 : A2 60 : A3 70 : A4	1.0	0.25
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		↕ 80 – (Correct Alternative) :		
Objective Question				
71	71	Choose the words that best express a relationship similar to that of the original pair. COBBLER: SHOE A1 Contractor :Building – (Correct Alternative) : A2 Jockey : Horse : A3 Mason:Brick : A4 Potter:Paint :	1.0	0.25
Objective Question				
72	72	From the given alternatives, choose the word that is most nearly similar in meaning to the word given in CAPITAL letters. DEFER A1 Deject : A2 Postpone – (Correct Alternative) : A3 Estimate : A4 Minimize :	1.0	0.25
Objective Question				
73	73	From the given alternatives, choose the word that is most nearly opposite in meaning to the word given in CAPITAL letters. NEBULOUS A1 Vague : A2 Definite – (Correct Alternative) : A3 Deceptive : A4 Lazy :	1.0	0.25
Objective Question				
74	74	From the given alternatives, choose the word that is most nearly opposite in meaning to the word given in CAPITAL letters. PERIPHERAL A1 Central – (Correct Alternative) : A2 Actual :	1.0	0.25

		<p>A3 Axial :</p> <p>A4 Radial :</p>		
Objective Question				
75	75	<p>Which of the phrases (A), (B) and (C) and (D) given below should replace the phrase given in BOLD in the following sentence to make the sentence grammatically meaningful and correct. If the sentence is correct as it is and no correction is required, mark (D) as the answer. They were all shocked at his failure in the business venture.</p> <p>A1 Were shocked at all :</p> <p>A2 Had all shocked by :</p> <p>A3 Had been all shocked on :</p> <p>A4 No correction required – (Correct Alternative) :</p>	1.0	0.25
Objective Question				
76	76	<p>Which of the phrases (A), (B) and (C) and (D) given below should replace the phrase given in BOLD in the following sentence to make the sentence grammatically meaningful and correct. If the sentence is correct as it is and no correction is required, mark (D) as the answer. The police has so far succeeded in recovering only a part of the stolen cash and jewellery.</p> <p>A1 Thus far succeeded for recovery :</p> <p>A2 So far succeeded in recovery of :</p> <p>A3 So far succeeded to recover :</p> <p>A4 No correction required – (Correct Alternative) :</p>	1.0	0.25
Objective Question				
77	77	<p>Which of the phrases (A), (B) and (C) and (D) given below should replace the phrase given in BOLD in the following sentence to make the sentence grammatically meaningful and correct. If the sentence is correct as it is and no correction is required, mark (D) as the answer. The police break-up the trunk and found the looted jewellery.</p> <p>A1 Broke open – (Correct Alternative) :</p> <p>A2 Break opened :</p> <p>A3 Breakingly opened :</p> <p>A4 No correction required :</p>	1.0	0.25
Objective Question				

78	78	<p>Which of the phrases (A), (B) and (C) and (D) given below should replace the phrase given in BOLD in the following sentence to make the sentence grammatically meaningful and correct. If the sentence is correct as it is and no correction is required, mark (D) as the answer.</p> <p>Finding himself in financial crisis, he came forward me for help and support.</p> <p>A1 : Came across</p> <p>A2 : Came to – (Correct Alternative)</p> <p>A3 : Comes with</p> <p>A4 : No correction required</p>	1.0	0.25
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Objective Question

79	79	<p>Which of the following choices would make the sentence meaningfully complete.</p> <p>As the old soldier watched the parade, he was suddenly overcome with _____ for the youthful years he spent in the army.</p> <p>A1 : nostalgia – (Correct Alternative)</p> <p>A2 : adroit</p> <p>A3 : mythical</p> <p>A4 : dilemma</p>	1.0	0.25
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Objective Question

80	80	<p>Which of the following choices would make the sentence meaningfully complete.</p> <p>An expert from the museum _____ the painting, looking for telltale signs that would prove it to be genuine or expose it as a forgery.</p> <p>A1 : speculate</p> <p>A2 : seminal</p> <p>A3 : seemly</p> <p>A4 : scrutinized – (Correct Alternative)</p>	1.0	0.25
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Objective Question

81	81	<p>In the sentence below one word has been printed in bold. Below the sentence, four words are suggested, one of which can replace the word printed in bold, without changing the meaning of the sentence. Find out the appropriate word.</p> <p>Family pressure, social customs, gender bias, and a shortage of role models are just some of the impediments almost all of us face.</p> <p>A1 : instruction</p>	1.0	0.25
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		<p>A2 impairments :</p> <p>A3 barriers :</p> <p>A4 hindrance – (Correct Alternative) :</p>		
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Objective Question

82	82	<p>In the sentence below one word has been printed in bold. Below the sentence, four words are suggested, one of which can replace the word printed in bold, without changing the meaning of the sentence. Find out the appropriate word.</p> <p>The group of people burnt the effigy of the lawyer as a mark of their irritation.</p> <p>A1 dress :</p> <p>A2 files :</p> <p>A3 dummy – (Correct Alternative) :</p> <p>A4 copy :</p>	1.0	0.25
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Objective Question

83	83	<p>Pick out the synonym of the lead word</p> <p>Animated</p> <p>A1 Forceful :</p> <p>A2 Technical :</p> <p>A3 Crafty :</p> <p>A4 Lively – (Correct Alternative) :</p>	1.0	0.25
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Objective Question

84	84	<p>Pick out the synonym of the lead word</p> <p>Affluent</p> <p>A1 Prosperous – (Correct Alternative) :</p> <p>A2 Outdated :</p> <p>A3 Urgent :</p> <p>A4 Immediate :</p>	1.0	0.25
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Objective Question

85	85	<p>In the following sentence, a part of sentence is given in bold. Below are alternatives to the bold part which may improve the sentence. Choose the correct alternative.</p>	1.0	0.25
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		<p>At an early age, he had made his mark as a teacher</p> <p>A1 made his mark – (Correct Alternative)</p> <p>A2 makes his mark</p> <p>A3 made his markings</p> <p>A4 no improvement</p>		
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Objective Question

86	86	<p>In the following sentence, a part of sentence is given in bold. Below are alternatives to the bold part which may improve the sentence. Choose the correct alternative.</p> <p>They had to put off until later the open air performance because of heavy rain</p> <p>A1 postpone – (Correct Alternative)</p> <p>A2 delay</p> <p>A3 adjourn</p> <p>A4 no improvement</p>	1.0	0.25
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Objective Question

87	87	<p>Spot the error in the following sentence:</p> <p>Being a holiday/we went out/for a picnic</p> <p>A1 Being a holiday – (Correct Alternative)</p> <p>A2 we went out</p> <p>A3 for a picnic</p> <p>A4 no error</p>	1.0	0.25
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Objective Question

88	88	<p>Spot the error in the following sentence:</p> <p>Having found a piece/ of cheese nil two cats went to a dog/ to divide it among them</p> <p>A1 Having found a piece</p> <p>A2 of cheese nil two cats went to a dog</p> <p>A3 to divide it among them – (Correct Alternative)</p>	1.0	0.25
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		A4 : no error		
Objective Question				
89	89	<p>Choose the correct option so as to make the sentence grammatically correct:</p> <p>The driver was ____ injured; he died within an hour.</p> <p>A1 : significantly</p> <p>A2 : fatally – (Correct Alternative)</p> <p>A3 : fatefully</p> <p>A4 : vitally</p>	1.0	0.25
Objective Question				
90	90	<p>Choose the correct option so as to make the sentence grammatically correct:</p> <p>Students of St. Xavier's ____ all the prizes.</p> <p>A1 : bear of</p> <p>A2 : bore away – (Correct Alternative)</p> <p>A3 bore on :</p> <p>A4 bear on :</p>	1.0	0.25
Objective Question				
91	91	<p>Under the same conditions two gases have the same number of molecules. They must</p> <p>A1 : Noble gases</p> <p>A2 : Have equal volumes – (Correct Alternative)</p> <p>A3 have a volume of 22.4 dm³ each :</p> <p>A4 : Have equal number of atoms</p>	1.0	0.25
Objective Question				
92	92	<p>LPG is a mixture of iso-butane and n-butane. The volume of oxygen needed to burn 1 kg of LPG at NTP would be</p> <p>A1 : 2240 litres</p> <p>A2 : 2510 litres – (Correct Alternative)</p> <p>A3 : 1000 litres</p>	1.0	0.25

		A4 : 500 litres :		
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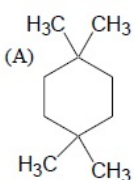
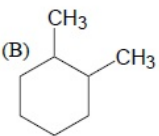
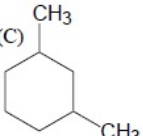
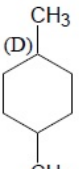
Objective Question

93	93	The vapour density of completely dissociated NH_4Cl would be	1.0	0.25
		A1 : Slightly less than half of that of ammonium chloride :		
		A2 : Double that of ammonium chloride :		
		A3 : Half of that of ammonium chloride – (Correct Alternative) :		
		A4 : Determined by amount of solid ammonium chloride used in the experiment :		

Objective Question

94	94	Two moles of an ideal gas expand spontaneously in vacuum. The work done is	1.0	0.25
		A1 : 2 Joule :		
		A2 : 4 Joule :		
		A3 : Zero – (Correct Alternative) :		
		A4 : Infinite :		

Objective Question

95	95	Which one of the following compound give four monochloro isomeric products after chlorination?	1.0	0.25
		A1 :  (A)		
		A2 :  (B) – (Correct Alternative)		
		A3 :  (C)		
		A4 :  (D)		

CH3

Objective Question

96	96	<p>For which of the following compounds cis-trans isomers are possible? (1) $\text{CH}_2\text{CH}=\text{CH}_2$; (2) $\text{CH}_3\text{CH}=\text{CHCH}_2\text{CH}_3$; (3) $\text{CH}_3\text{CH}=\text{CHCH}_3$</p> <p>A1 Only 3 :</p> <p>A2 Only 2 :</p> <p>A3 Both 2 and 3 – (Correct Alternative) :</p> <p>A4 Both 1 and 3 :</p>	1.0	0.25
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Objective Question

97	97	<p>Which of the following compounds would have the highest boiling point?</p> <p>A1 $\text{CH}_3\text{CH}_2\text{CH}_2\text{CH}_3$:</p> <p>A2 CH_3NH_2 :</p> <p>A3 CH_3OH – (Correct Alternative) :</p> <p>A4 CH_2F_2 :</p>	1.0	0.25
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Objective Question

98	98	<p>Which of the following is present in vinegar?</p> <p>A1 HCOOH :</p> <p>A2 CH_3COOH – (Correct Alternative) :</p> <p>A3 CH_3CHO :</p> <p>A4 $\text{CH}_3\text{CH}_2\text{OH}$:</p>	1.0	0.25
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Objective Question

99	99	<p>Which of the following substances falls in the category of carbohydrates?</p> <p>A1 Glycogen – (Correct Alternative) :</p> <p>A2 Insulin :</p> <p>A3 Cytosine :</p> <p>A4 Glycerol :</p>	1.0	0.25
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Objective Question

100	100	Which of the following is not a state function?	1.0	0.25
		A1 Enthalpy :		
		A2 Entropy :		
		A3 Work – (Correct Alternative) :		
		A4 Internal energy :		

PREVIEW QUESTION BANK

Module Name : WOSC09-E

Exam Date : 30-Apr-2017 Batch : 11:00-13:00

Sr. No.	Client Question ID	Question Body and Alternatives	Marks	Negative Marks
Objective Question				
101	101	<p>For a reaction, equilibrium constant increases with increase in temperature. The reaction is</p> <p>A1 Endothermic – (Correct Alternative) :</p> <p>A2 Exothermic :</p> <p>A3 Unfeasible :</p> <p>A4 None of the above :</p>	1.0	0.25
Objective Question				
102	102	<p>Which of the following has the lowest mass?</p> <p>A1 Electron – (Correct Alternative) :</p> <p>A2 Proton :</p> <p>A3 Neutron :</p> <p>A4 Hydrogen atom :</p>	1.0	0.25
Objective Question				
103	103	<p>What are the dimensions of diffusivity?</p> <p>A1 m/s :</p> <p>A2 m/s² :</p> <p>A3 m²/s – (Correct Alternative) :</p> <p>A4 m²/s² :</p>	1.0	0.25
Objective Question				
104	104	<p>What is Sherwood number?</p> <p>A1 $D_a/k_i d_p$:</p> <p>A2 $k_i d_p/D_a$ – (Correct Alternative) :</p> <p>A3 : $k_i D_a/d_p$</p>	1.0	0.25

		A4 m^2/s^2 :		
Objective Question				
105	105	What is Reynolds number? A1 $\mu v p / d$: A2 $\mu v d / \rho$: A3 $\rho v / \mu d$: A4 $d v \rho / \mu$: – (Correct Alternative)	1.0	0.25
Objective Question				
106	106	A fouling factor is A1 Resistance – (Correct Alternative) : A2 Reciprocal of resistance : A3 Capacitance : A4 Combination of all of the above three :	1.0	0.25
Objective Question				
107	107	Rate of radiative heat transport is proportional to A1 T : A2 T^5 : A3 T^4 – (Correct Alternative) : A4 $T^{1/2}$:	1.0	0.25
Objective Question				
108	108	An autocatalytic reaction is best carried out in A1 PFR : A2 CSTR : A3 Batch reactor : A4 PFR with a recycle – (Correct Alternative) :	1.0	0.25

Objective Question				
109	109	All heat exchangers in a large chemical plant are	1.0	0.25
		A1 : Precisely designed to meet the process requirements		
		A2 : Under-designed		
		A3 : Over-designed to fail independently		
		A4 : Over-designed so as to fail Simultaneously – (Correct Alternative)		
Objective Question				
110	110	PET bottles are made out of	1.0	0.25
		A1 : Poly(ethylene terephthalate) – (Correct Alternative)		
		A2 : Poly(ethylene tartrate)		
		A3 : Polyethylene and terephthalic acid		
		A4 : Polyethylene and tartaric acid		
Objective Question				
111	111	According to the Kohlrausch law of independent migration of ions, $\Lambda_m^\circ(\text{NaCl})$, is equal to	1.0	0.25
		A1 : $\lambda_{\text{Na}^+}^0 + \lambda_{\text{Cl}^-}^0$ – (Correct Alternative)		
		A2 : $\lambda_{\text{Na}^+}^0 - \lambda_{\text{Cl}^-}^0$		
		A3 : $\lambda_{\text{Na}^+}^0 \times \lambda_{\text{Cl}^-}^0$		
		A4 : $\lambda_{\text{Na}^+}^0 / \lambda_{\text{Cl}^-}^0$		
Objective Question				
112	112	Kjeldahl's method is used for the estimation of	1.0	0.25
		A1 : Nitrogen – (Correct Alternative)		
		A2 : Sulfur		
		A3 : Halogens		
		A4 : Phosphorus		
		:		
Objective Question				
113	113	A patient may suffer from diabetes mellitus due to the deficiency of one of the following hormones	1.0	0.25

		<p>A patient may suffer from diabetes mellitus due to the deficiency of one of the following hormones</p> <p>A1 Insulin – (Correct Alternative)</p> <p>A2 Erythropoietin</p> <p>A3 Thyroxine</p> <p>A4 Testosterone</p>		
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Objective Question

114	114	<p>Which of the following is an anti-pyretic agent</p> <p>A1 Ciprofloxacin</p> <p>A2 Ranitidine</p> <p>A3 Penicillin</p> <p>A4 Paracetamol – (Correct Alternative)</p>	1.0	0.25
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Objective Question

115	115	<p>Half-life of a drug refers to</p> <p>A1 Time required for the concentration of the drug in the body to be reduced by one-half – (Correct Alternative)</p> <p>A2 Amount of drug required to treat a patient of half-age compared to an average adult</p> <p>A3 Time duration in which the efficacy of the drug becomes half when kept on shelf</p> <p>A4 Amount of drug required to treat a patient in half the average time required to become healthy</p>	1.0	0.25
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Objective Question

116	116	<p>Which of the following is not a part of the urinary system?</p> <p>A1 Kidney</p> <p>A2 Ureter</p> <p>A3 Urinary bladder</p> <p>A4 Rectum – (Correct Alternative)</p>	1.0	0.25
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Objective Question

117	117	<p>One of the following is not used to prevent heartburn</p> <p>A1 Rantidine</p>	1.0	0.25
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		<p>A2 : Famotidine</p> <p>A3 : Cimetidine</p> <p>A4 : Azacitidine – (Correct Alternative)</p>		
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Objective Question

118	118	<p>Which of the following provides the best definition of pharmaceutics?</p> <p>A1 : Study of dosage form design, including associated manufacturing techniques – (Correct Alternative)</p> <p>A2 : Study of the effect that drugs have on the body</p> <p>A3 : Study of the effect that the body has on drugs</p> <p>A4 : Study of how drugs can be chemically synthesized</p>	1.0	0.25
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Objective Question

119	119	<p>Which of the following statements best describe “bioavailability”?</p> <p>A1 : Fraction of an ingested dose of a drug that is excreted out of the body</p> <p>A2 : Fraction of an ingested dose of a drug that escapes systemic circulation</p> <p>A3 : Fraction of an ingested dose of a drug that enters the brain</p> <p>A4 : Fraction of an ingested dose of a drug that gains access to the systemic circulation – (Correct Alternative)</p>	1.0	0.25
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Objective Question

120	120	<p>Pharmacologically inactive drugs having active metabolites are known as</p> <p>A1 : Neodrugs</p> <p>A2 : Prodrugs – (Correct Alternative)</p> <p>A3 : Adjuvant drugs</p> <p>A4 : Predrugs</p>	1.0	0.25
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Objective Question

121	121	<p>The following image depicts kinetics of which order?</p> 	1.0	0.25
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		Time		
		<p>A1 : Zero order kinetics – (Correct Alternative)</p> <p>A2 : First order kinetics</p> <p>A3 : Second order kinetics</p> <p>A4 : Third order kinetics</p>		

Objective Question

122	122	Which of the following is not a TNF inhibitor?	1.0	0.25
		<p>A1 : Adalimumab</p> <p>A2 : Etanercept</p> <p>A3 : Muromonab – (Correct Alternative)</p> <p>A4 : Infliximab</p>		

Objective Question

123	123	The organ where “first pass metabolism” takes place is	1.0	0.25
		<p>A1 : Lung</p> <p>A2 : Liver – (Correct Alternative)</p> <p>A3 : Stomach</p> <p>A4 : Large intestine</p>		

Objective Question

124	124	What do you understand by topical administration of a drug?	1.0	0.25
		<p>A1 : Drug is ingested orally to give relief to a particular area of the body.</p> <p>A2 : Drug is applied to a particular surface of the body to give rise to local effects. – (Correct Alternative)</p> <p>A3 : Drug is injected into the vascular system of the body to give rise to local effects.</p> <p>A4 : Drug is injected into the musculature of the body to give rise to local effects.</p>		

Objective Question

125	125	The acronym ADME in Pharmacokinetics stands for	1.0	0.25
		<p>A1 : Absorption, distribution, metabolism and excretion – (Correct Alternative)</p>		

		A2 : Adsorption, distribution, metabolism and excretion		
		A3 : Absorption, dissolution, metabolism and excretion		
		A4 : Absorption, distribution, metabolism and egestion		

Objective Question

126	126	Which of the following statements is true for the “blood-brain barrier”?	1.0	0.25
		A1 : It is an impermeable membrane barrier separating circulating blood from the brain extracellular fluid in the central nervous system (CNS).		
		A2 : It allows entry of neurotoxins into the brain.		
		A3 : It allows mixing of blood and cerebrospinal fluid (CSF).		
		A4 : It is a highly selective semi-permeable membrane. – (Correct Alternative)		

Objective Question

127	127	Which of the following is used as an antidote to toxicity caused due to paracetamol overdose?	1.0	0.25
		A1 : N-acetylcysteine – (Correct Alternative)		
		A2 : NAPQI (N-acetyl-p-benzoquinone imine)		
		A3 : 1, 4 Benzoquinone		
		A4 : Paraformaldehyde (PFA)		

Objective Question

128	128	Therapeutic index (TI) of a drug in humans can be calculated by one of the following formulae (TI: Therapeutic index; LD: Lethal dose; TD: Toxic dose; ED: Effective dose; MTD: Maximum tolerated dose)	1.0	0.25
		A1 : $TI = TD_{50}/ED_{50}$ – (Correct Alternative)		
		A2 : $TI = MTD_{50}/ED_{50}$		
		A3 : $TI = TD_{50}/LD_{50}$		
		A4 : $TI = MTD_{50}/TD_{50}$		

Objective Question

129	129	Consider the following statements regarding sublingual administration of drugs: i. Sublingual administration cannot avoid first pass metabolism ii. Sublingually administered drugs are absorbed via the oral mucosa drain into the inferior venae cavae to the heart and systemic circulation iii. Glyceryl trinitrate (nitroglycerin) is usually administered sublingually to avoid first pass metabolism	1.0	0.25
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to avoid first pass metabolism

iv. Sublingual route of administration increases the bioavailability of drugs that are extensively metabolised by the liver

In the context of the statements above which of the following option is correct?

A1
: Only statement (i) is correct

A2
: Statements (i) and (ii) are correct

**A3
: Statements (iii) and (iv) are correct – (Correct Alternative)**

A4
: Only statement (iv) is correct

Objective Question

130	130	<p>With regard to “anticholinesterases” consider the following statements below.</p> <p>(i) Increase the concentrations of acetylcholine at muscarinic receptors</p> <p>(ii) Decrease the concentration of acetylcholine at nicotinic receptors</p> <p>(iii) Are used in the treatment of Alzheimer’s disease</p> <p>(iv) Decrease muscle activity at neuromuscular junction</p> <p>In the context of the statements above which of the following option is correct?</p>	1.0	0.25
		<p>A1 : Only (i) is correct</p> <p>A2 : Only (ii) is correct.</p> <p>A3 : Both (i) and (iii) are correct. – (Correct Alternative)</p> <p>A4 : Both (ii) and (iv) are correct.</p>		

Objective Question

131	131	<p>Which of the following drugs was not isolated from a natural source?</p>	1.0	0.25
		<p>A1 : quinine</p> <p>A2 : morphine</p> <p>A3 : isoniazid – (Correct Alternative)</p> <p>A4 : artemisinin</p>		

Objective Question

132	132	<p>Which of the following statements gives the best description of the phospholipid bilayer in cell membranes?</p>	1.0	0.25
		<p>A1 : It is made up of two layers of phospholipid polymers.</p> <p>A2 : It is made up of two layers of phospholipid molecules with the tails pointing away from each other.</p> <p>A3</p>		

		<p>It is made up of two layers of phospholipid molecules with the tails lying parallel to each other.</p> <p>A4 It is made up of two layers of phospholipid molecules with the tails interacting with each other. – (Correct Alternative)</p>		
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Objective Question

133	133	<p>Which of the following agents act as irreversible inhibitors?</p> <p>A1 : sulphonamides</p> <p>A2 : penicillin – (Correct Alternative)</p> <p>A3 : statins</p> <p>A4 : protease inhibitors</p>	1.0	0.25
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Objective Question

134	134	<p>Which of the following terms best describes a drug which inhibits the enzyme, but binds to a binding site other than the active site?</p> <p>A1 : allosteric inhibitor – (Correct Alternative)</p> <p>A2 : irreversible inhibitor</p> <p>A3 : reversible inhibitor</p> <p>A4 : suicide substrate</p>	1.0	0.25
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Objective Question

135	135	<p>What is meant by a lead compound in medicinal chemistry?</p> <p>A1 : A drug containing the element lead.</p> <p>A2 : A leading drug in a particular area of medicine.</p> <p>A3 : A compound that acts as the starting point for drug design and development. – (Correct Alternative)</p> <p>A4 : A drug which is normally the first to be prescribed for a particular ailment.</p>	1.0	0.25
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Objective Question

136	136	<p>In a bacterial cell undergoing division all cells have 40 copies of plasmid of which half of the plasmid DNA is in form of dimer and one-fifth in form of tetramers. The number of replicative units present per cell is:</p> <p>A1 : 20</p> <p>A2 : 12</p> <p>A3 : 24 – (Correct Alternative)</p>	1.0	0.25
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		A4 40 :		
Objective Question				
137	137	<p>The concentration of glucose inside the cell is 0.8mM and outside the cell is 8mM at a body temperature of 37°C. Assuming the plasma membrane is permeable for glucose, the free energy released for glucose transport is</p> <p>A1 -2.8 kcal/mol :</p> <p>A2 2.8 kcal/mol :</p> <p>A3 -1.4 kcal/mol – (Correct Alternative) :</p> <p>A4 1.4 kcal/mol :</p>	1.0	0.25
Objective Question				
138	138	<p>Which of the following statement is incorrect for a Ping Pong enzymatic reaction?</p> <p>A1 One or more products are released before all substrates have been added :</p> <p>A2 A functional group of the first substrate is displaced by the enzyme to yield the first product :</p> <p>A3 The substrates in a ping pong reaction encounters one another on the surface of the enzyme – (Correct Alternative) :</p> <p>A4 Amino-transferase reaction catalyzed by transaminase enzymes occur via Ping pong mechanism :</p>	1.0	0.25
Objective Question				
139	139	<p>The ratio of number of photons emitted to the number of photons absorbed for a fluorescent molecule is called</p> <p>A1 Fluorescence Intensity :</p> <p>A2 Fluorescence Lifetime :</p> <p>A3 Quantum Yield – (Correct Alternative) :</p> <p>A4 Fluorescence Polarization :</p>	1.0	0.25
Objective Question				
140	140	<p>If red blood cells are kept in a hypertonic solution, the cells will</p> <p>A1 Shrink – (Correct Alternative) :</p> <p>A2 Remain healthy :</p> <p>A3 Swell and burst :</p> <p>A4 None of the above :</p>	1.0	0.25

Objective Question				
141	141	<p>Endocytosis is</p> <p>A1 : An energy requiring process for taking bulky materials inside the cells – (Correct Alternative)</p> <p>A2 : An energy independent process for taking bulky materials into cells</p> <p>A3 : An energy requiring process to release bulky material out of the cell</p> <p>A4 : An energy independent process to release bulky materials out of the cells</p>	1.0	0.25
Objective Question				
142	142	<p>Mass spectrometry separates molecular ions on the basis of</p> <p>A1 : mass</p> <p>A2 : mass to charge ratio – (Correct Alternative)</p> <p>A3 : charge to mass ratio</p> <p>A4 : charge</p>	1.0	0.25
Objective Question				
143	143	<p>The ideal B-DNA helix has</p> <p>A1 : 10 base pairs per turn and pitch of 34 Å – (Correct Alternative)</p> <p>A2 : 11 base pairs per turn and pitch of 34 Å</p> <p>A3 : 10 base pairs per turn and pitch of 3.4 Å</p> <p>A4 : 11 base pairs per turn and pitch of 3.4 Å</p>	1.0	0.25
Objective Question				
144	144	<p>As the dielectric constant of a medium increases</p> <p>A1 : Force between the charges embedded in the medium increases</p> <p>A2 : Force between the charges embedded in the medium remain constant</p> <p>A3 : Force between the charges embedded in the medium decreases – (Correct Alternative)</p> <p>A4 : Force between the charges embedded in the medium become zero</p>	1.0	0.25
Objective Question				
145	145	<p>The enzyme glycogen phosphorylase is involved in</p>	1.0	0.25

		<p>A1 : Debranching of glycogen</p> <p>A2 : Phosphorolysis of glycogen to yield Glucose-1-phosphate – (Correct Alternative)</p> <p>A3 : Conversion of Glucose-1-phosphate to glucose-6-phosphate</p> <p>A4 : Glycogen synthesis</p>		
Objective Question				
146	146	<p>Protein synthesis occurs from the following RNA</p> <p>A1 : t-RNA</p> <p>A2 : r-RNA</p> <p>A3 : mRNA – (Correct Alternative)</p> <p>A4 : siRNA</p>	1.0	0.25
Objective Question				
147	147	<p>Ribosomes are attached to the</p> <p>A1 : Smooth endoplasmic reticulum</p> <p>A2 : Rough endoplasmic reticulum – (Correct Alternative)</p> <p>A3 : Trans Golgi apparatus</p> <p>A4 : All of the above</p>	1.0	0.25
Objective Question				
148	148	<p>Which of the following is not a secondary lymphoid organ?</p> <p>A1 : Liver – (Correct Alternative)</p> <p>A2 : Spleen</p> <p>A3 : Tonsils</p> <p>A4 : Peyer's patches</p>	1.0	0.25
Objective Question				
149	149	<p>Gram-positive bacterias take up purple stain because</p> <p>A1 : They have a thin cell membrane</p>	1.0	0.25

		<p>A2 They have a thick layer of peptidoglycan – (Correct Alternative)</p> <p>A3 They have more pores on the cell wall</p> <p>A4 None of the above</p>		
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Objective Question

150	150	<p>If you start with 100 E.coli cells and grow them for 4 hours, what will be the number of cells in culture after 4 hours if the generation time of E.coli is 20 mins?</p> <p>A1 24000</p> <p>A2 1200</p> <p>A3 409600 – (Correct Alternative)</p> <p>A4 406900</p>	1.0	0.25
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Objective Question

151	151	<p>Which of the following is NOT an excitatory neurotransmitter</p> <p>A1 Acetylcholine</p> <p>A2 Epinephrine</p> <p>A3 Gamma-aminobutyric acid – (Correct Alternative)</p> <p>A4 Glutamate</p>	1.0	0.25
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Objective Question

152	152	<p>Propagation of impulses is</p> <p>A1 higher in myelinated axons – (Correct Alternative)</p> <p>A2 higher in non-myelinated axons</p> <p>A3 same in both myelinated and non-myelinated axons</p> <p>A4 None of the above</p>	1.0	0.25
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Objective Question

153	153	<p>Replication of cellular DNA occurs in which of the phase of cell cycle?</p> <p>A1 S-phase – (Correct Alternative)</p> <p>A2 G1 phase</p>	1.0	0.25
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		A3 M-phase :		
		A4 G2 phase :		

Objective Question

154	154	Small disc-shaped complex at the surface of the centromeres are called	1.0	0.25
		A1 spindle fibres :		
		A2 kinetochores – (Correct Alternative) :		
		A3 sister chromatids :		
		A4 metaphase plate :		

Objective Question

155	155	Which of the following DNA sequence is a perfect palindromic sequence	1.0	0.25
		A1 GGTAGC :		
		A2 GCTCTG :		
		A3 GGACCA :		
		A4 GGATCC – (Correct Alternative) :		

Objective Question

156	156	Chromosome synapsis during prophase I of meiosis is accompanied by the formation of complex protein structure called	1.0	0.25
		A1 tetrad :		
		A2 synaptonemal complex – (Correct Alternative) :		
		A3 chiasmata :		
		A4 None of the above :		

Objective Question

157	157	In animals, adipocytes are specialized for the synthesis and storage of:	1.0	0.25
		A1 glycogen :		
		A2 proteins :		
		A3 triacylglycerol – (Correct Alternative) :		
		A4 glycerol :		

Objective Question			
158	158	<p>Which of the following components do not participate in endocytosis?</p> <p>A1 Endoplasmic reticulum – (Correct Alternative)</p> <p>A2 Plasma membrane</p> <p>A3 Clathrin</p> <p>A4 Phospholipids</p>	1.0 0.25
Objective Question			
159	159	<p>Which of the following hormone molecule is a peptide containing intra-molecular disulphide bond?</p> <p>A1 Gonadotropin releasing factor</p> <p>A2 vasopressin – (Correct Alternative)</p> <p>A3 progesterone</p> <p>A4 testosterone</p>	1.0 0.25
Objective Question			
160	160	<p>Neurotransmitter serotonin biosynthesis starts from</p> <p>A1 Tyrosine</p> <p>A2 Glutamine</p> <p>A3 Histamine</p> <p>A4 Tryptophan – (Correct Alternative)</p>	1.0 0.25
Objective Question			
161	161	<p>Human hemoglobin exists as a</p> <p>A1 monomer</p> <p>A2 dimer</p> <p>A3 trimer</p> <p>A4 tetramer – (Correct Alternative)</p>	1.0 0.25
Objective Question			
162	162	<p>Kupffer cells are found in</p>	1.0 0.25

		<p>A1 kidney :</p> <p>A2 lungs :</p> <p>A3 muscles :</p> <p>A4 liver – (Correct Alternative) :</p>		
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Objective Question

163	163	Which of the following is not an antigen presenting cell?	1.0	0.25
		<p>A1 macrophage :</p> <p>A2 dendritic cells :</p> <p>A3 platelets – (Correct Alternative) :</p> <p>A4 B lymphocytes :</p>		

Objective Question

164	164	Which of the following immune cells do not originate from myeloid progenitor?	1.0	0.25
		<p>A1 Basophil :</p> <p>A2 Erythrocytes :</p> <p>A3 B-cells – (Correct Alternative) :</p> <p>A4 Dendritic cells :</p>		

Objective Question

165	165	Which of the following immunoglobulin molecule is pentameric?	1.0	0.25
		<p>A1 IgA :</p> <p>A2 IgG :</p> <p>A3 IgD :</p> <p>A4 IgM – (Correct Alternative) :</p>		

Objective Question

166	166	Digestion of an Immunoglobulin G molecule by papain will result in	1.0	0.25
		<p>A1 Two identical fragments :</p>		

		<p>A2 : Four fragments of which two are identical</p> <p>A3 : Three fragments of which two are identical – (Correct Alternative)</p> <p>A4 : Four identical fragments</p>		
Objective Question				
167	167	<p>The large and small subunits of E.coli ribosomes have sedimentation coefficients:</p> <p>A1 : 50S and 30S – (Correct Alternative)</p> <p>A2 : 16S and 5S</p> <p>A3 : 18S and 5.8S</p> <p>A4 : 60S and 40S</p>	1.0	0.25
Objective Question				
168	168	<p>Unwinding of DNA strands during replication is done by</p> <p>A1 : DNA replicase</p> <p>A2 : DNA helicase – (Correct Alternative)</p> <p>A3 : DNA topoisomerase</p> <p>A4 : DNA ligase</p>	1.0	0.25
Objective Question				
169	169	<p>The semiconservative nature of DNA replication was first experimentally established by</p> <p>A1 : Hershey and Chase</p> <p>A2 : Meselson and Stahl – (Correct Alternative)</p> <p>A3 : Barbara McClintock</p> <p>A4 : Linus Pauling</p>	1.0	0.25
Objective Question				
170	170	<p>Which of the following antibiotics is an inhibitor of bacterial DNA-dependent RNA synthesis?</p> <p>A1 : Amoxicillin</p> <p>A2 : Rifamycin – (Correct Alternative)</p>	1.0	0.25

		A3 Chloramphenicol :		
		A4 Clavulanic acid :		

Objective Question

171	171	The Sanger method of DNA sequencing is also called the	1.0	0.25
		A1 DNA extension method :		
		A2 Dideoxy chain termination method – (Correct Alternative) :		
		A3 Chemical degradation based synthesis :		
		A4 Sequencing by synthesis protocol :		

Objective Question

172	172	A DNA element that has an ability to move or insert itself at a position within a genome to create or reverse mutations and alter the genome is called	1.0	0.25
		A1 Transposon – (Correct Alternative) :		
		A2 Moving DNA :		
		A3 Gene invader :		
		A4 Centroposon :		

Objective Question

173	173	The left handed helical structure form of DNA is	1.0	0.25
		A1 B form :		
		A2 Z form – (Correct Alternative) :		
		A3 D form :		
		A4 None of the above :		

Objective Question

174	174	Tonoplast is a	1.0	0.25
		A1 Membrane surrounding the nucleus :		
		A2 The plant cell vacuole :		
		A3 Membrane surrounding the plant cell vacuole – (Correct Alternative) :		
		A4 :		

		↕ Type of chromoplast :		
Objective Question				
175	175	The five carbon compound that reacts with CO ₂ in Calvin Cycle is A1 Oxaloacetic acid : A2 Malic acid : A3 Alpha ketoglutaric acid : A4 Ribulose biphosphate – (Correct Alternative) :	1.0	0.25
Objective Question				
176	176	Actin filament is responsible for A1 Cell movement – (Correct Alternative) : A2 Nuclear movement : A3 Mitochondrial movement : A4 Chromosomal movement :	1.0	0.25
Objective Question				
177	177	In Eukaryotic based DNA replication, the lagging strand is formed by A1 RNA fragments : A2 Okazaki fragments – (Correct Alternative) : A3 DNA fragments : A4 Nucleotide fragments :	1.0	0.25
Objective Question				
178	178	DNA gyrase A1 Enzyme that catalyzes the ATP dependent negative supercoiling of ds circular DNA – (Correct Alternative) : A2 Enzyme involved in the repair of pyrimidine dimers : A3 Enzyme involved in cleaving DNA : A4 Enzyme involved in editing DNA :	1.0	0.25
Objective Question				
179	179		1.0	0.25

177	177	CRISPR in relation to gene editing means	1.0	0.25
		A1 : Compact Readable Interposed Sequence Palindromic Repeats		
		A2 : Compact Readable Interposed Sequence Peptide Repeats		
		A3 : Clustered Regularly Interspaced Short Palindromic Repeats – (Correct Alternative)		
		A4 : Clustered Readable Interspaced Short Palindromic Repeats		

Objective Question

180	180	Flavr Savr tomato is a transgenic that was created to	1.0	0.25
		A1 : Increase the shelf life – (Correct Alternative)		
		A2 : Improve antioxidant value		
		A3 : Produce antibodies		
		A4 : Improve pest resistance		

Objective Question

181	181	Desired coefficient of performance (COP), defined as ratio of desired output (cooling effect) to required input (work input), for refrigerators is	1.0	0.25
		A1 : Greater than one – (Correct Alternative)		
		A2 : Less than one		
		A3 : Equal to one		
		A4 : None of the above		

Objective Question

182	182	Entropy of an isolated system	1.0	0.25
		A1 : Never increases		
		A2 : Never decreases – (Correct Alternative)		
		A3 : Always stays constant		
		A4 : None of the above		

Objective Question

183	183	Temperature at which water boils can be increased by	1.0	0.25
		A1 : Boiling it at pressures much higher than atmospheric pressure – (Correct Alternative)		

		<p>A2 Boiling it at pressures below atmospheric pressure :</p> <p>A3 Boiling point of water cannot be changed :</p> <p>A4 None of the above :</p>		
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Objective Question

184	184	<p>Which machine tool do we use to generate a cylindrical surface for a bar stock</p> <p>A1 Lathe machine – (Correct Alternative) :</p> <p>A2 Milling machine :</p> <p>A3 Surface grinder :</p> <p>A4 Shaping machine :</p>	1.0	0.25
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Objective Question

185	185	<p>Hot tear defect appears in which process</p> <p>A1 Machining :</p> <p>A2 Forming :</p> <p>A3 Casting – (Correct Alternative) :</p> <p>A4 Polishing :</p>	1.0	0.25
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Objective Question

186	186	<p>Work hardening of metals is dominant in</p> <p>A1 Cold forming – (Correct Alternative) :</p> <p>A2 Hot forming :</p> <p>A3 Warm forming :</p> <p>A4 All of the above :</p>	1.0	0.25
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Objective Question

187	187	<p>Blow holes can occur in castings because of</p> <p>A1 Shrinkage of material as it solidifies :</p> <p>A2 Trapped gases :</p>	1.0	0.25
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		<p>A3 : Excessive moisture absorption by cores</p> <p>A4 : All of the above – (Correct Alternative)</p>		
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Objective Question

188	188	<p>Cooking on a gas stove in a copper vessel as opposed to stainless steel vessel results in more uniform temperatures because of the following reason</p> <p>A1 : Higher density of copper</p> <p>A2 : Lower elastic modulus of copper</p> <p>A3 : Lower specific heat of copper</p> <p>A4 : Much higher thermal diffusivity of copper – (Correct Alternative)</p>	1.0	0.25
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Objective Question

189	189	<p>Lowest natural frequency of a slender beam of length L and diameter D would depend on</p> <p>A1 : Length of the bar L</p> <p>A2 : Density of the bar material ρ</p> <p>A3 : Bending moment of inertia of the bar I</p> <p>A4 : All of the above – (Correct Alternative)</p>	1.0	0.25
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Objective Question

190	190	<p>Goodman diagram is used in the context of</p> <p>A1 : Low cycle fatigue</p> <p>A2 : High cycle fatigue – (Correct Alternative)</p> <p>A3 : Failure from plastic yield</p> <p>A4 : Failure from fracture</p>	1.0	0.25
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Objective Question

191	191	<p>Which of the following is the hardest phase of steels</p> <p>A1 : Ferrite</p> <p>A2 : Austenite</p> <p>A3 : Martensite – (Correct Alternative)</p>	1.0	0.25
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		A4 All are equally hard :		
Objective Question				
192	192	Bauschinger effect results in the following A1 : Increases corrosion resistance of materials A2 : Increases the stiffness of materials A3 : Reduces yield stress in tension if the material was earlier loaded in compression – (Correct Alternative) A4 : All of the above	1.0	0.25
Objective Question				
193	193	Electrical discharge machining is done in A1 : Dielectric fluid – (Correct Alternative) A2 : Electrolyte A3 : Inert gas A4 : Oxygen gas	1.0	0.25
Objective Question				
194	194	Cavitation damage in pumps occurs from A1 : Corrosion A2 : Erosion from particulate matter in pumping fluid A3 : Collapse of vapour bubbles – (Correct Alternative) A4 : All of the above	1.0	0.25
Objective Question				
195	195	Length of the diagonal, that passes through the cube center, for a unit cube is around A1 : 1 A2 : 1.414 A3 : 1.732 – (Correct Alternative) A4 : 2	1.0	0.25

Objective Question				
196	196	Which of the following welding techniques employs a non-consumable electrode	1.0	0.25
		<p>A1 Tungsten inert gas welding – (Correct Alternative)</p> <p>⋮</p> <p>A2 Metal inert gas welding</p> <p>⋮</p> <p>A3 Gas welding</p> <p>⋮</p> <p>A4 None of the above</p> <p>⋮</p>		
Objective Question				
197	197	Which of the following flames is commonly used for welding of steels	1.0	0.25
		<p>A1 Neutral flame – (Correct Alternative)</p> <p>⋮</p> <p>A2 Carburizing flame</p> <p>⋮</p> <p>A3 Oxiding flame</p> <p>⋮</p> <p>A4 All of the above</p> <p>⋮</p>		
Objective Question				
198	198	Which ISO standard is used for environment management?	1.0	0.25
		<p>A1 ISO 9000</p> <p>⋮</p> <p>A2 ISO 26000</p> <p>⋮</p> <p>A3 ISO 14000 – (Correct Alternative)</p> <p>⋮</p> <p>A4 ISO 31000</p> <p>⋮</p>		
Objective Question				
199	199	Which one of the quality improvement tools mention the cause and effect relationship	1.0	0.25
		<p>A1 SPC (statistical process control)</p> <p>⋮</p> <p>A2 Six-sigma</p> <p>⋮</p> <p>A3 Taguchi</p> <p>⋮</p> <p>A4 DOE (Design of Experiments) – (Correct Alternative)</p> <p>⋮</p>		
Objective Question				
200	200	Quality function deployment (QFD)is mainly focused on	1.0	0.25
		<p>A1</p>		

A1 To check the robustness of the parts
:

A2 To reduce the unnecessary cost prior to production
:

A3 Defining customer needs or requirements – (Correct Alternative)
:

A4 To reduce the number of parts in the process
:

PREVIEW QUESTION BANK

Module Name : WOSC09-E

Exam Date : 30-Apr-2017 Batch : 11:00-13:00

Sr. No.	Client Question ID	Question Body and Alternatives	Marks	Negative Marks									
Objective Question													
201	201	<p>The Taguchi loss function is based on</p> <p>A1 : Linear distribution</p> <p>A2 : Negative exponential distribution</p> <p>A3 : Binomial distribution</p> <p>A4 : Quadratic loss function – (Correct Alternative)</p>	1.0	0.25									
Objective Question													
202	202	<p>What will be the effect of acceptance number (c) on OC curve</p> <p>A1 Increasing acceptance number does not significantly change the shape of OC curve but Producer's risk increases : –(Correct Alternative)</p> <p>A2 : Increasing acceptance number does not significantly change the shape of OC curve but Producer's risk decreases</p> <p>A3 : Increasing acceptance number increases the shape of OC curve but it does not significantly change the Producer's risk</p> <p>A4 : Increasing acceptance number decreases the shape of OC curve but it does not significantly change the Producer's risk</p>	1.0	0.25									
Objective Question													
203	203	<p>How expected time can be calculated? (a=optimistic time, b=pessimistic time, m=most likely time)</p> <p>A1 : $\frac{a + m + b}{3}$</p> <p>A2 : $\frac{4a + m + b}{6}$</p> <p>A3 : $\frac{a + 4m + b}{6}$ – (Correct Alternative)</p> <p>A4 : $\frac{a + m + 4b}{6}$</p>	1.0	0.25									
Objective Question													
204	204	<p>1. In a drug test the following data is given. What is the probability that the person is a Men and the test is success?</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Joint</th> <th>Women</th> <th>Men</th> </tr> </thead> <tbody> <tr> <td>Success</td> <td>800</td> <td>1200</td> </tr> <tr> <td>Failure</td> <td>1200</td> <td>800</td> </tr> </tbody> </table> <p>A1 0.5 :</p>	Joint	Women	Men	Success	800	1200	Failure	1200	800	1.0	0.25
Joint	Women	Men											
Success	800	1200											
Failure	1200	800											

		<p>A2 0.2 :</p> <p>A3 0.3 – (Correct Alternative) :</p> <p>A4 0.4 :</p>		
Objective Question				
205	205	<p>Which chart is used when the control chart is having quality characteristics as attributes and defective with constant sample size?</p> <p>A1 p chart or np chart – (Correct Alternative) :</p> <p>A2 c chart or u chart :</p> <p>A3 X bar chart and R chart :</p> <p>A4 X bar chart and s chart :</p>	1.0	0.25
Objective Question				
206	206	<p>Total cost of facility is equal to sum of the</p> <p>A1 Operating cost and cost of inward transport :</p> <p>A2 Cost of inward transport, outward transport and operating cost – (Correct Alternative) :</p> <p>A3 Cost of inward transport, and outward transport :</p> <p>A4 none of these :</p>	1.0	0.25
Objective Question				
207	207	<p>Maximum flow time</p> <p>A1 Is the maximum time at which any job stays in the system :</p> <p>A2 Is the total protected time :</p> <p>A3 Is make-span :</p> <p>A4 All of the above – (Correct Alternative) :</p>	1.0	0.25
Objective Question				
208	208	<p>Classification based on unit cost of the item is called</p> <p>A1 SDE classification :</p> <p>A2 XYZ classification :</p>	1.0	0.25

A3 VED classification
:

A4 HML classification – (Correct Alternative)
:

Objective Question

209 209

1.0

0.25

Match the followings

a) Six sigma	1) Control the quality at particular stage
b) Inspection	2) Robust design method which leads to improve the quality of the product
c) Quality management system	3) TQM, ISO 9000, ISO 14000
d) Taguchi	4) DMAIC framework

A1 a-4, b-2, c-3, d-1
:

A2 a-4, b-1, c-3, d-2
: – (Correct Alternative)

A3 a-2, b-1, c-4, d-3
:

A4 a-3, b-2, c-4, d-1
:

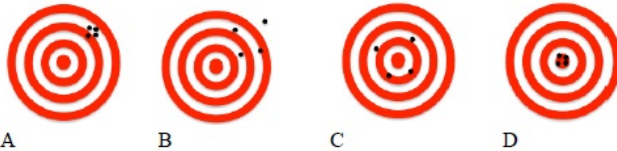
Objective Question

210 210

1.0

0.25

Mr. Mishra had participated in shooting event. The following A, B, C and D instances were observed for Mr. Mishra. How would you describe the shooting of Mr. Mishra?



A1 a)
:
A- Precise and accurate
B- Neither precise nor accurate
C- Accurate but not precise
D- Precise but not accurate

A2 b)
:
A- Precise but not accurate
B- Accurate but not precise
C- Neither precise nor accurate
D- Precise and accurate

A3
:

c)
A- Neither precise nor accurate
B- Precise but not accurate
C- Precise and accurate

C- Accurate and accurate
 D- Accurate but not precise

- A4** d)
 :
 A- Precise but not accurate
 B- Neither precise nor accurate
 C- Accurate but not precise
 D- Precise and accurate

– (Correct Alternative)

Objective Question

211 211

1.0

0.25

In Fig. 1, the power consumed by the $3\ \Omega$ resistor is

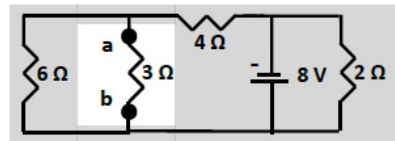


Fig. 1

- A1** 3.27 W
 :

- A2** 2.37 W – (Correct Alternative)
 :

- A3** 7.1 W
 :

- A4** 3 W
 :

Objective Question

212 212

1.0

0.25

The sum of two signals $v_1 = 200\sin(\omega t)$ and $v_2 = 150\cos(\omega t)$ results in

- A1** $v = 350\sin(\omega t + 63.13^\circ)$
 :

- A2** $v = 350\cos(\omega t + 63.13^\circ)$
 :

- A3** $v = 250\sin(\omega t + 36.87^\circ)$
 :

– (Correct Alternative)

- A4** $v = 250\cos(\omega t + 36.87^\circ)$
 :

Objective Question

213 213

1.0

0.25

The overall efficiency of a thermal power plant is around

- A1** 70%
 :

- A2** 90%
 :

- A3** 20% – (Correct Alternative)
 :

		A4 : 50%		
Objective Question				
214	214	The power in a 3-phase, 4-wire circuit can be measured by using a minimum of A1 : 2 wattmeters A2 : 4 wattmeters A3 : 3 wattmeters – (Correct Alternative) A4 : 1 wattmeter	1.0	0.25
Objective Question				
215	215	A 5kVA single phase transformer has a core loss of 40W and full load ohmic loss of 100W. The transformer is loaded at 3kW with 0.6 power factor (lag) for 12 hours and kept at no-load for the remaining 12 hours of the day. The all day efficiency of the transformer is A1 : 96.22% A2 : 89.95% A3 : 94.34% – (Correct Alternative) A4 : 90.21%	1.0	0.25
Objective Question				
216	216	The characteristics of a non-linear resistance is $i = kv^4$. If i becomes 100 times, v becomes A1 : about 100 times A2 : about 10 times A3 : about 3 times – (Correct Alternative) A4 : twice	1.0	0.25
Objective Question				
217	217	In a series resonant circuit, the impedance of the circuit at resonant frequency is A1 : Maximum A2 : Minimum – (Correct Alternative) A3 : Zero	1.0	0.25

		A4 Infinite :		
Objective Question				
218	218	<p>What will be the phase angle between two alternating waves of equal frequency, when one wave attains maximum value while the other is at zero value?</p> <p>A1 0° :</p> <p>A2 45° :</p> <p>A3 90° – (Correct Alternative) :</p> <p>A4 180° :</p>	1.0	0.25
Objective Question				
219	219	<p>A star circuit of balanced impedances has each of the impedances as 30 Ω. What will be equivalent impedance of each element in delta?</p> <p>A1 90 Ω – (Correct Alternative) :</p> <p>A2 30 Ω :</p> <p>A3 0.33 Ω :</p> <p>A4 10 Ω :</p>	1.0	0.25
Objective Question				
220	220	<p>A transformer core is laminated to</p> <p>A1 Reduce hysteresis loss :</p> <p>A2 Reduce copper losses :</p> <p>A3 Reduce eddy current loss – (Correct Alternative) :</p> <p>A4 All of the above :</p>	1.0	0.25
Objective Question				
221	221	<p>In a parallel RC circuit, there is 100 mA rms current through a purely resistive branch and 100 mA rms current through purely inductive branch. The total rms current is</p> <p>A1 100mA :</p> <p>A2 200mA :</p> <p>A3 141mA – (Correct Alternative) :</p>	1.0	0.25

		A4 241mA :		
Objective Question				
222	222	<p>If a 100 W bulb connected to 220 volt supply consumes power for 15 minutes, what would the energy meter read, if the said bulb is the only load connected to the meter?</p> <p>A1 100 :</p> <p>A2 0.1 :</p> <p>A3 25 :</p> <p>A4 0.025 – (Correct Alternative) :</p>	1.0	0.25
Objective Question				
223	223	<p>A fundamental voltage signal is: $v(t) = 600 \sin(628.3185t + \phi)$. What is its fifth harmonic?</p> <p>A1 500 Hz – (Correct Alternative) :</p> <p>A2 20 Hz :</p> <p>A3 3000 Hz :</p> <p>A4 120 Hz :</p>	1.0	0.25
Objective Question				
224	224	<p>A sinusoidal source of $v(t) = 170 \sin 377t$ is applied to an RL circuit. It is found that the circuit absorbs 720 W when an effective rms current of 12 A flows through it. Find the power factor of the circuit.</p> <p>A1 0.5 – (Correct Alternative) :</p> <p>A2 1 :</p> <p>A3 0.8 :</p> <p>A4 0.4 :</p>	1.0	0.25
Objective Question				
225	225	<p>A six pole, 3 phase, 50 Hz induction motor is running at 950 RPM. The percentage slip will be</p> <p>A1 3% :</p> <p>A2 4% :</p> <p>A3 5% – (Correct Alternative) :</p>	1.0	0.25

		A4 : 6%		
Objective Question				
226	226	The forward characteristic of a diode has a slope of approximately 50mA/V at a desired point. The approximate incremental resistance of the diode is A1 : 50Ω A2 : 35Ω A3 : 20Ω – (Correct Alternative) A4 : 10Ω	1.0	0.25
Objective Question				
227	227	Atria depolarization is represented in the ECG by A1 : T wave A2 : Q wave A3 : P wave – (Correct Alternative) A4 : S wave	1.0	0.25
Objective Question				
228	228	To measures the rate at which red blood cells sediment in 24 hour we use A1 : ECG A2 : Stress Echo A3 : ESR A4 : Ultrasound – (Correct Alternative)	1.0	0.25
Objective Question				
229	229	To measure resistances of very high values we use A1 : Potentiometer A2 : Ohmmeter A3 : Kelvin Bridge A4 : Meggar – (Correct Alternative)	1.0	0.25

Objective Question			
230	230	<p>An ideal Trans-conductance amplifier should have</p> <p>A1 : large input impedance and large output impedance – (Correct Alternative)</p> <p>A2 : small input impedance and large output impedance</p> <p>A3 : large input impedance and small output impedance</p> <p>A4 : small input impedance and small output impedance</p>	1.0 0.25
Objective Question			
231	231	<p>For a Low Noise Amplifier at high frequency we need to match impedance at both input and output to obtain</p> <p>A1 : best power efficiency</p> <p>A2 : increased amplifier gain</p> <p>A3 : reduced reflections – (Correct Alternative)</p> <p>A4 : increased input impedance</p>	1.0 0.25
Objective Question			
232	232	<p>In an operational amplifier the concept of virtual ground at the input (voltage at the negative terminal being equated to the voltage at the positive terminal) means</p> <p>A1 : Output voltage much greater than input voltage</p> <p>A2 : The voltage difference between negative and positive terminal is zero</p> <p>A3 : The voltage difference between negative and positive terminal is negligible compared to the input signal. – (Correct Alternative)</p> <p>A4 : Input voltage is very small.</p>	1.0 0.25
Objective Question			
233	233	<p>A self biased Common Emitter amplifier with the emitter resistance not bypassed is</p> <p>A1 : a Series – Series Feedback Amplifier – (Correct Alternative)</p> <p>A2 : a Series – Shunt Feedback Amplifier</p> <p>A3 : a Shunt – Shunt Feedback Amplifier</p> <p>A4 : not a Feedback Amplifier</p>	1.0 0.25
Objective Question			
234	234	<p>A Dynamic RAM uses a</p>	1.0 0.25

		<p>A1 Latch to store Data :</p> <p>A2 Flip-Flop to store Data :</p> <p>A3 Capacitor to store Data – (Correct Alternative) :</p> <p>A4 Ferrite core to store Data :</p>		
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Objective Question

235	235	<p>A matched filter has the following characteristic</p> <p>A1 Its impulse response is the conjugate time reversed version of the known signal to be detected, – (Correct Alternative) :</p> <p>A2 Its impulse response is the same as the known signal to be detected, :</p> <p>A3 It is an all-pass filter :</p> <p>A4 Its impulse response is the integration of the known signal to be detected :</p>	1.0	0.25
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Objective Question

236	236	<p>The tossing of an unbiased coin produces the following amount of information</p> <p>A1 Zero bits :</p> <p>A2 One bit – (Correct Alternative) :</p> <p>A3 Between one and two bits :</p> <p>A4 Two bits :</p>	1.0	0.25
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Objective Question

237	237	<p>If three resistors of different values are connected in parallel and connected to a voltage source, then the power dissipated shall be</p> <p>A1 Maximum across the smallest resistance – (Correct Alternative) :</p> <p>A2 Maximum across the largest resistance :</p> <p>A3 Maximum across the resistance with middle value :</p> <p>A4 Same across all the three resistances :</p>	1.0	0.25
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Objective Question

238	238	<p>A 5 KHz co-sinusoidal signal is sampled at 8 KHz and reconstructed ideally. The frequency of the reconstructed signal will be</p> <p>A1 2 KHz :</p>	1.0	0.25
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		<p>A2 : 3KHZ – (Correct Alternative)</p> <p>A3 : 5KHZ</p> <p>A4 : 8KHZ</p>		
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Objective Question

239	239	<p>The process of transmitting two or more signals simultaneously over the same channel is called</p> <p>A1 : Modulation</p> <p>A2 : Mixing</p> <p>A3 : Multiplexing – (Correct Alternative)</p> <p>A4 : Broadcasting</p>	1.0	0.25
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Objective Question

240	240	<p>If human speech signal is sampled at 8 KHz and quantized using 16 bits, then an 80 GB hard-disk can store approximately the following number of minutes of speech</p> <p>A1 : 83333 – (Correct Alternative)</p> <p>A2 : 10417</p> <p>A3 : 174</p> <p>A4 : 1389</p>	1.0	0.25
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Objective Question

241	241	<p>Which of the following is/are correct in-order traversal sequence(s) of binary search tree(s)? (i) 3, 5, 7, 8, 15, 19, 25 (ii) 5, 8, 9, 12, 10, 15, 25 (iii) 2, 7, 10, 8, 14, 16, 20 (iv) 4, 6, 7, 9, 18, 20, 25</p> <p>A1 (i) and (iv) only – (Correct Alternative) :</p> <p>A2 (ii) and (iii) only :</p> <p>A3 (i) and (ii) only :</p> <p>A4 (iii) and (iv) only :</p>	1.0	0.25
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Objective Question

242	242	<p>The output of the following C program is _____.</p> <pre>void f1 (int a, int b) { int c; c=a; a=b; b=c;</pre>	1.0	0.25
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```

    c=a, a=b, b=c;
}
void f2 (int *a, int *b)
{
    int c;
    c=*a; *a=*b;*b=c;
}
int main()
{
    int a=4, b=5, c=6;
    f1(a, b);
    f2(&b, &c);
    printf ("%d", c-a-b);
    return 0;
}
    
```

A1 -5 – (Correct Alternative)
:

A2 -3
:

A3 4
:

A4 5
:

Objective Question

243	243	<p>What are the worst-case complexities of insertion and deletion of a key in a binary search tree?</p> <p>A1 O(log n) for both insertion and deletion :</p> <p>A2 O(n) for both insertion and deletion – (Correct Alternative) :</p> <p>A3 O(n) for insertion and O(log n) for deletion :</p> <p>A4 O(log n) for insertion and O(n) for deletion :</p>	1.0	0.25
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Objective Question

244	244	<p>The height of a tree is the length of the longest root-to-leaf path in it. The maximum and minimum numbers of nodes in a binary tree of height 5 are</p> <p>A1 64 and 5 respectively :</p> <p>A2 63 and 6 respectively – (Correct Alternative) :</p> <p>A3 31 and 5 respectively :</p> <p>A4 32 and 6 respectively :</p>	1.0	0.25
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Objective Question

245	245	<p>In Unix, Which system call creates the new process?</p> <p>A1 fork – (Correct Alternative) :</p> <p>A2 create :</p> <p>A3 ... :</p>	1.0	0.25
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		: new		
		A4 none of the mentioned		

Objective Question

246	246	A set of processes is deadlock if	1.0	0.25
		A1 each process is blocked and will remain so forever – (Correct Alternative)		
		A2 each process is terminated		
		A3 all processes are trying to kill each other		
		A4 none of the mentioned		

Objective Question

247	247	Which one of the following is the deadlock avoidance algorithm?	1.0	0.25
		A1 Banker's algorithm – (Correct Alternative)		
		A2 Round-robin algorithm		
		A3 Elevator algorithm		
		A4 Karn's algorithm		

Objective Question

248	248	In C programming language, an array ARR[i][j] can be written as	1.0	0.25
		A1 *(a+i+j)		
		A2 *(* (a+i)+j) – (Correct Alternative)		
		A3 **(a+i+j)		
		A4 *(* (a+j)+i)		

Objective Question

249	249	What is the worst case time complexity of Quick sort?	1.0	0.25
		A1 O(n)		
		A2 O(log n)		
		A3 O(n ²) – (Correct Alternative)		
		A4 O(n log n)		

		:		
Objective Question				
250	250	When generating physical addresses from logical address the offset is stored in	1.0	0.25
		A1 Translation look-aside buffer :		
		A2 Relocation register – (Correct Alternative) :		
		A3 Page table :		
		A4 Shift register :		
Objective Question				
251	251	The unit which acts as an intermediate agent between memory and backing store to reduce process time is	1.0	0.25
		A1 TLB's :		
		A2 Registers :		
		A3 Page tables :		
		A4 Cache – (Correct Alternative) :		
Objective Question				
252	252	The register used to store the flags is called as	1.0	0.25
		A1 Flag register :		
		A2 Status register – (Correct Alternative) :		
		A3 Test register :		
		A4 Log register :		
Objective Question				
253	253	In a normal n-bit adder, to find out if an overflow as occurred we make use of	1.0	0.25
		A1 And gate :		
		A2 Nand gate :		
		A3 Nor gate :		
		A4 Xor gate – (Correct Alternative) :		
Objective Question				
254	254	An endpoint of an inter-process communication flow across a computer network is called	1.0	0.25

		<p>An endpoint of an inter-process communication flow across a computer network is called</p> <p>A1 Socket – (Correct Alternative) :</p> <p>A2 Pipe :</p> <p>A3 Port :</p> <p>A4 None of the mentioned :</p>		
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Objective Question

255	255	<p>Which one of the following routing algorithm can be used for network layer design?</p> <p>A1 Shortest path algorithm :</p> <p>A2 Distance vector routing :</p> <p>A3 Link state routing :</p> <p>A4 All of the mentioned – (Correct Alternative) :</p>	1.0	0.25
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Objective Question

256	256	<p>Which of the following is true regarding regular expression?</p> <p>A1 $(01)^*0 = 0(10)^*$:</p> <p>A2 $(0+1)^*0(0+1)^*1(0+1) = (0+1)^*01(0+1)^*$:</p> <p>A3 $(0+1)^*01(0+1)^*+1^*0^* = (0+1)^*$:</p> <p>A4 All of the mentioned – (Correct Alternative) :</p>	1.0	0.25
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Objective Question

257	257	<p>Identify the disadvantage of Spiral Model for Software Engineering</p> <p>A1 Doesn't work well for smaller projects – (Correct Alternative) :</p> <p>A2 High amount of risk analysis :</p> <p>A3 Strong approval and documentation control :</p> <p>A4 Additional Functionality can be added at a later date :</p>	1.0	0.25
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Objective Question

258	258	<p>Which is not present in a computer processor?</p> <p>A1 ALU :</p>	1.0	0.25
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		<p>A2 Control Unit :</p> <p>A3 Memory – (Correct Alternative) :</p> <p>A4 Registers :</p>		
Objective Question				
259	259	<p>Which of the following have the fastest access time?</p> <p>A1 Semiconductor Memories – (Correct Alternative) :</p> <p>A2 Magnetic Disks :</p> <p>A3 Magnetic Tapes :</p> <p>A4 Compact Disks :</p>	1.0	0.25
Objective Question				
260	260	<p>If there are n number of Boolean variables in an expression, then the number of rows in the truth table are</p> <p>A1 2^n – (Correct Alternative) :</p> <p>A2 n^2 :</p> <p>A3 $2n$:</p> <p>A4 None of these :</p>	1.0	0.25
Objective Question				
261	261	<p>Which of these are Universal gate?</p> <p>A1 NAND :</p> <p>A2 NOR :</p> <p>A3 Both (A) & (B) – (Correct Alternative) :</p> <p>A4 None of these :</p>	1.0	0.25
Objective Question				
262	262	<p>Which of the following is the proper declaration of a pointer in the C++ programming language?</p> <p>A1 int x :</p> <p>A2 int &x :</p>	1.0	0.25

		<p>A3 *int x :</p> <p>A4 int *x – (Correct Alternative) :</p>		
Objective Question				
263	263	<p>A stack is a linear list implemented in</p> <p>A1 LIFO – (Correct Alternative) :</p> <p>A2 FIFO :</p> <p>A3 SIFO :</p> <p>A4 FISO :</p>	1.0	0.25
Objective Question				
264	264	<p>Which of the following sorting methods would be most suitable for sorting a list which is almost sorted?</p> <p>A1 Bubble Sort – (Correct Alternative) :</p> <p>A2 Insertion Sort :</p> <p>A3 Selection Sort :</p> <p>A4 Quick Sort :</p>	1.0	0.25
Objective Question				
265	265	<p>Mutual exclusion implies that</p> <p>A1 If a process is executing in its critical section, then no other process must be executing in their critical sections – (Correct Alternative) :</p> <p>A2 If a process is executing in its critical section, then other processes must be executing in their critical sections :</p> <p>A3 If a process is executing in its critical section, then all the resources of the system must be blocked until it finishes execution :</p> <p>A4 None of these :</p>	1.0	0.25
Objective Question				
266	266	<p>A set of one or more attributes that can uniquely identified tuples within the relation is known as</p> <p>A1 Primary Key – (Correct Alternative) :</p> <p>A2 Alternate Key :</p> <p>A3 Foreign Key :</p> <p>A4 None of these :</p>	1.0	0.25

Objective Question			
267	267	<p>Standard language for RDBMS is</p> <p>A1 SQL – (Correct Alternative)</p> <p>A2 PASCAL</p> <p>A3 JAVA</p> <p>A4 C++</p>	1.0 0.25
Objective Question			
268	268	<p>The transmission media that facilitate mobility for long distances are</p> <p>A1 Microwave</p> <p>A2 Radio Wave – (Correct Alternative)</p> <p>A3 Infrared Wave</p> <p>A4 None of these</p>	1.0 0.25
Objective Question			
269	269	<p>The layered set of protocols that handles the way data is transmitted across Internet</p> <p>A1 TCP/IP – (Correct Alternative)</p> <p>A2 FTP</p> <p>A3 PPP</p> <p>A4 Telnet</p>	1.0 0.25
Objective Question			
270	270	<p>Given the following definitions in C language, what is the value of b[1][1]?</p> <pre>int b[3][2]={{1, 2},{3, 4},{5}};</pre> <p>A1 3 – (Correct Alternative)</p> <p>A2 4</p> <p>A3 5</p> <p>A4 None of these</p>	1.0 0.25