



HPCL Engineer

Previous Year Paper (IS Officer) 04 Nov 2022



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HPCL-01st & 04th Nov 22

Participant ID	
Participant Name	
Test Center Name	
Test Date	04/11/2022
Test Time	2:00 PM - 4:30 PM
Subject	IS Officer

Section: English Language

Q.1 Select the correct option to fill in the blanks.

Throughout history, fantastic treasures from various cultures have been stolen or gone missing.

Ans

X 1. mystiriously

2. mysteriously

X 3. mysiterously

4. misteriously

Question ID: 8401605738

Status: Answered

Chosen Option : 2

Q.2 Select the most appropriate synonym of the given word.

TENDER

Ans

- 1. robust
- 2. durable
- 3. sturdy
- 4. delicate

Question ID: 8401605734 Status : Answered

Chosen Option: 4

Q.3 Select the option which is NOT an antonym of another word by way of adding the prefix 'in-'.

Ans

- 1. inoffensive
- 2. insidious
- 3. inscrutable
- 4. innumerable

Question ID: 8401605733

Status: Answered





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Q.4 Select the most appropriate option to fill in the blank.

__ her homework yet; she cannot go out to play.

Ans X 1. did not finish

X 2. does not finish

X 3. is not finishing

4. has not finished

Question ID: 8401605744

Status: Answered

Chosen Option: 4

Q.5 Select the most appropriate synonym of the given word.

PENURIOUS

X 1. benevolent

2. extravagant

X 3. prodigal

4. economical

Question ID: 8401605735

Status: Answered

Chosen Option: 1

Q.6 Select the most appropriate meaning of the given idiom.

put your foot down

Ans

- 1. to make great effort
- 2. to squash an insect
- 3. to be firm about something
- 4. to get into trouble

Question ID: 8401605737

Status: Answered

Chosen Option: 4

Q.7 Select the most appropriate meaning of the given idiom.

rock the boat

Ans

- 1. enjoy a boat ride
- 2. act without thinking
- X 3. escape from problems
- X 4. disturb an existing situation

Question ID: 8401605736

Status: Answered





11/14/22, 3:15 PM $https://www.digialm.com///per/g01/pub/1258/touchstone/AssessmentQPHTMLMode1/1258O22378/1258O22378S8D1106/16675\dots$ Q.8 Select the most appropriate option to fill in the blank. Sanjana is _____ different from her mother. X 1. the very Ans 2. very X 3. a very X 4. much very Question ID: 8401605747 Status: Answered Chosen Option: 2 Q.9 Given below are four jumbled sentences. Select the option that gives their correct order forming a meaningful and coherent paragraph. A. If the Beatrice is ever found, it may be possible to retrieve the ancient sarcophagus. B. In the 1830s, English military officer Howard Vyse explored the Giza pyramids. C. Vyse tried to ship the sarcophagus to England in 1838 aboard the merchant ship Beatrice, but the ship sank during its journey and took the ornate sarcophagus down D. Vyse made a number of discoveries at Giza, including an ornate sarcophagus found in Menkaure's pyramid. Ans X 1. BACD 2. ADBC 3. BDCA X 4. CDAB Question ID: 8401605740 Status: Answered Chosen Option: 3 Q.10 Select the option that completes the given proverb correctly. of all trades is master of none. 1. A workman Ans 2. A jack X 3. A speaker 4. A king Question ID: 8401605748 Status: Answered Chosen Option: 1 Q.11 Select the most appropriate option to fill in the blank. My brother Anurag is one year _____ than your brother Rohit. 1. elder Ans 2. older 3. eldest X 4. oldest Question ID: 8401605746 Status: Answered



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Q.12	Select the most appropriate option to fill in the blank.			
	This time next week, they in Canada.			
Ans	X 1. have been			
	X 2. had been			
	X 3. be			
	4. will be			
		Question ID: 8401605743		
		Status : Answered		
		Chosen Option : 4		
Q.13	3 Select the segment which has a spelling error in the given sentence. If there is no error, select 'No error'.			
	The National Education Policy, 2020, is based on the foundational principals of access, equity, quality, affordability and accountability			
Ans	★ 1. of access, equity, quality, affordability and accountability			
	2. is based on the foundational principals			
	X 3. The National Education Policy, 2020			
	X 4. No error			
		0(
		Question ID: 8401605739 Status: Answered		
		Chosen Option: 2		
Q.14 Ans	Select the most appropriate option to fill in the blank. In 1025 AD, Mahmud Gazni an attack on the Somnath tempt the wealth that had gathered within the temple. 1. to launch; stealing	ole in order		
/	2. launched ; to steal			
	✗ 3. launching; steal			
	4. launch ; stole			
		Question ID: 8401605742 Status: Answered		
		Chosen Option : 2		
Q.15	Select the most appropriate option to fill in the blank.			
	One pirate ship was by the king's soldiers but the other	one		
Ans	1. kidnapped ; deserted			
	2. captured ; escaped			
	X 3. collected; broke			
	X 4. abducted ; arived			
		Ougotice ID : 9404505744		
		Question ID : 8401605741 Status : Answered		
		Chosen Option : 2		

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Q.16 Select the most appropriate antonym of the given word.

IRATE

Ans X 1. indignant

X 2. annoyed

X 3. furious

4. cheerful

Question ID: 8401605732

Status: Answered

Chosen Option: 4

Q.17 Select the most appropriate option to fill in the blank.

People were quite prepared that day _____ the demolition of the Supertech Twin Towers in NOIDA.

X 1. to

2. for

X 3. of

4. at

Question ID: 8401605745

Status: Answered

Chosen Option: 2

Section: Quantitative Aptitude

Q.1 Two bowlers A and B take average wickets of 28 and 34 in a series of 8 and 12 matches, respectively. If they took 5 wickets in the 9th match and 1 wicket in the 13th match, then the average number of wickets of both the bowlers is:

Ans

1.30

X 2.32

3, 28

4.29

Question ID: 8401605754 Status: Answered

Chosen Option: 3

Q.2 A dealer has the following three schemes running for products in his store. Which of the following has maximum discount percentage?

I. Two successive discounts of 15% and 20%

II. Buy 5 get 3

III. Buy 5 get 6

Ans

1. Only III

X 2. Only I

3. Only II

X 4. Only I and III

Question ID: 8401605764

Status: Answered





 $\textbf{Q.3}\quad \text{Krishna's salary was increased by }8\%$ in the first year and then increased by 9% in the next year. In the third year, he earned Rs.2,536 for working overtime. If his initial salary was Rs.32,500, his total salary drawn in the third year is:

X 1. Rs.40,979

X 2. Rs.40,975

3. Rs.40,795

X 4. Rs.40,579

Question ID: 8401605757

Status: Answered

Chosen Option: 2

A merchandiser sells bananas and apples at a gain of 20% on bananas and at a loss of 5% on apples. If the cost price of both fruits is Rs.5,000 and he earned 6% on the whole, then the cost price of bananas is:

Ans

X 1. Rs.2,800

2. Rs.2,200

3. Rs.2,500

X 4. Rs.2,820

Question ID: 8401605759

Status: Answered

Chosen Option: 2

Q.5

Ans 1. Rs.5,760

2, Rs.5,706

3. Rs.5,607

4. Rs.5,670

Question ID: 8401605780 Status: Answered Chosen Option: 2

Q.6 Ten years ago, a man is six times as old as his daughter. Three years hence, thrice his age will be equal to five times of his daughter's age. The present age of his daughter is:

Ans

1. 12 years

2. 13 years

3. 14 years

4. 15 years

Question ID: 8401605775

Status: Not Answered





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Q.7 In what ratio must water be mixed with milk to gain 20% by selling the mixture at cost

Ans 1.1:5

X 2.2:5

X 3. 2 : 3

X 4.3:4

Question ID: 8401605755

Status: Answered

Chosen Option: 3

Q.8

Ans

1.25%

2.75%

3.50%

X 4. 80%

Question ID: 8401605772

Status: Answered

Chosen Option: 1

Q.9 The distance between two stations, Mathura and Haridwar, is 356 km. Train ABC Express, which is running at a speed of 72 km/h, leaves Mathura station at 10:50 p.m. Train XYZ Express, which is running at the speed of 82 km/h, leaves Haridwar station at 11:30 p.m. At what time will ABC Express and XYZ Express meet each other?

Ans

1. 12:50 a.m.

2. 1:00 a.m.

3. 1:50 a.m.

4. 1:30 a.m.

Question ID: 8401605771

Status: Not Answered





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Status : Answered





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Q.13 The monthly salary of teaching and non-teaching staff at a college is in the ratio of 5: 3. They wish to contribute 3% and 2% of their salaries to a welfare society. If each nonteaching staff member contributes Rs.390, then the teaching staff salary is:

X 2. Rs.35,020

3. Rs.32,500

X 4. Rs.32,050

Question ID: 8401605765

Status: Answered

Chosen Option: 3

The vulgar fraction of $0.\overline{32} + 0.2\overline{6} - 0.\overline{53}$ is:

Ans

× 3. $\frac{27}{990}$

Question ID: 8401605752

Status: Not Answered

Chosen Option: --

Q.15 A, B and C are trains travelling from Delhi to Ahmedabad at speeds of 45 km/h, 55 km/h and 61 km/h in 3 hours, 2 hours and 1 hour, respectively. Their average speed is:

Ans

X 2, 41 km/h

3, 55 km/h

4.45 km/h

Question ID: 8401605769 Status: Answered

Chosen Option: 1

Q.16 There are two number in the ration 5 : 3. If the difference between the two numbers is 22, find the larger number.

Ans

1.22

2.55

X 3.33

4.44

Question ID: 8401605776

Status: Answered





Q.17 What annual instalment will discharge a debt of Rs.16550 due in three years at 10% compound interest annually?

Ans

X 1. Rs. 6,556

2. Rs. 6,655

X 3. Rs. 5,566

X 4. Rs. 5,665

Question ID: 8401605768

Status: Not Answered

Chosen Option: --

Q.18 A merchant marked his goods at 20% above the cost price and offered a discount of 5%. Seeing poor results, he again offered 8% discount and noticed a growth in his sales. His profit will be:

Ans

1.4.88%

X 2. 10.88%

X 3. 5.88%

4.3.88%

Question ID: 8401605762

Status : **Answered**

Chosen Option: 1

Q.19 Study the given chart and answer the question that follows.



Find the ratio between the difference of rice in AP and Telangana to that of the difference of wheat in Karnataka and AP.

Ans

1.5:4

X 2.3:2

X 3.4:5

4.2:3

Question ID: 8401605773 Status: Answered

Chosen Option: 1

Q.20 If two numbers are in the ratio 3:5 and their LCM is 45, then the sum of those numbers is:

Ans

X 1, 22

2.15

X 3. 9

4.24

Question ID: 8401605750

Status: Answered





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Q.21 If the area of a circular field is 3850 m², then the cost of fencing it at the rate of Rs.52 per metre is:

Ans X 1. Rs.11,220

X 2. Rs.11,560

X 3. Rs.11,230

4. Rs.11,440

Question ID: 8401605782

Not Attempted and Status: **Marked For Review**

Chosen Option: --

Q.22 The largest length of tape to be used to measure a room's sides, whose distances are 6 m 48 cm, 11m 52 cm and 16m 20 cm is:

Ans

1.36

X 2, 32

X 3. 72

X 4. 45

Question ID: 8401605751

Status: Not Answered

Chosen Option: --

Q.23

Ans

- 1. The roots are real and more than 2.
- 2. There are no real roots.
- 3. The roots are real and distinct.
- 4. The roots are real and equal.

Question ID: 8401605778

Status: Answered

Chosen Option: 2

Q.24

Ans

X 2.

1.

3. $3 + \sqrt{5}$

4. $3 - \sqrt{5}$

Question ID: 8401605749

Status: Not Answered

Chosen Option : --





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Q.25 A dealer used a faulty weighing machine and measured 950 g instead of 1 kg and claims he sell his goods at cost price. His profit percentage is:

X 1. 4.56%

X 2. 5.56%

X 3. 4.26%

4. 5.26%

Question ID: 8401605761

Status: Answered

Chosen Option: 4

Q.26 A vendor earns 25% profit on selling his goods at Rs.2,355. The cost price of the goods is:

X 1. Rs.1,848 Ans

X 2. Rs.1,488

X 3. Rs.1,484

4. Rs.1,884

Question ID: 8401605760

Status: Answered

Chosen Option: 4

Q.27 A's income is two-fifth of B's income. The expenditure of A is 50% of B's expenditure and the income, expenditures of B are Rs. 48250, 28% of the income of A, respectively. Then the savings of A is:

Ans

1. Rs.16,985

2. Rs.16,589

3. Rs.16,598

X 4. Rs.16,895

Question ID: 8401605756 Status: Answered

Chosen Option: 3

Q.28 The factorisation of the equation $2x^2 + 7x + 6 = 0$ is:

Ans

2.

4. (2x+3)(x+2)=0

Question ID: 8401605779

Status: Answered





Q.29 What annual installment will discharge a debt of Rs.1,431 due in three years at 6% simple interest?

X 1. Rs. 350

X 2. Rs. 550

X 3. Rs. 445

4. Rs. 450

Question ID: 8401605767

Status: Answered

Chosen Option : 2

Q.30 A family wishes to attend a party 150 km away from their home. They travel at an average speed of 50 km/h and return at a speed of 75 km/h. Their average speed for the whole journey is:

Ans

1. 62 km/h

2. 60 km/h

X 3. 57 km/h

4. 65 km/h

Question ID: 8401605753

Status : Answered

Chosen Option: 2

Q.31 The number of 5-digit numbers that can be formed by the digits 2, 2, 3, 3 and 4 is:

Ans

X 1.35

2.30

X 3. 25

4.20

Question ID: 8401605774

Status : Answered

Chosen Option: 2

Q.32 The length of train A is 100 m more than the length of a platform. What is the time taken by train A to cross train B travelling in the opposite direction if the speed of train B is 70 km/h and the speed of train A is 90 km/h and the time taken by train A and B to cross the same platform is 24 seconds and 36 seconds, respectively?

2. 18 seconds

3. 15 seconds

X 4. 16 seconds

Question ID: 8401605770

Status: Answered





Q.33 If the curved surface area of a right circular cylinder is 3696 cm² and the circumference of its base is 88 cm, then find

× 1 27318 cm³

2. 25872 cm³

× 3. 24524 cm³

× 4. 26256 cm³

Question ID: 8401605781

Status: Answered

Chosen Option: 2

Q.34 An automobile accessory costs Rs.5,825. A customer requested a discount of 18%, in addition to the discount of 5% already offered by the merchant. The cost of the accessory after these discounts will be:

Ans

X 1. Rs. 4,536.675

X 2. Rs. 4,547.675

3. Rs. 4,537.675

X 4. Rs. 4,637.675

Question ID: 8401605763

Status: Answered

Chosen Option: 3

Section: Intellectual Potential Test

Amar, Beerbhan, Vaishali, Mohit, Nitin, Pallavi, Jyoti, Preeti and Sonu are nine friends and they are sitting around a circular table by facing the centre of the table. Mohit is sitting second to the right of Pallavi. Only two people are sitting between Mohit and Vaishali. Two people are sitting between Nitin and Amar. Neither Preeti nor Nitin are an immediate neighbor of Vaishali or Mohit. Only one person is sitting between Vaishali and Nitin, Preeti is an immediate neighbor of Nitin, Amar sits third to the left of Jyoti, Vaishali sits second to the right of Beerbhan.

Who is sitting on the immediate left of Vaishali?

Ans

- 1. Amar
- 2. Mohit
- 3. Nitin
- 4. Jyoti

Question ID: 8401605783

Status: Answered





Q.2 There are seven boxes named Mega, Meta, Rita, Docu, Gimu, Tina, Pina and Lopu of different colours, like; Black, Violet, Red, Blue, Yellow, White and Green but not necessarily in the same order. Only two boxes are kept between yellow colour box and box Docu, which is kept above yellow colour box. Box Docu is not of green colour. Black colour box is kept above violet colour box. Neither Box Rita nor Box Gimu is of Black colour. Box Gimu is kept above box Tina. There are two boxes between box Mega and the box which is Green in colour. Box Rita is kept either immediately above or immediately below green colour box. More than two boxes are kept between Box Rita and the box which is of red colour, which is neither kept at the top nor at the bottom. Box Mega is not of red colour. Only one box is kept between red colour box and the white colour box. Box Mega and box Gimu is not of white colour. Box Meta is of blue colour and is not kept at the top and not at the bottom.

Which box is kept immediately on the top of Box Docu?

Ans X 1. Tina

X 2. Meta

3. Mega

X 4. Rita

Question ID: 8401605787

Status: Answered

Chosen Option: 3

Q.3

Conclusions: I. $E \ge A$ II. $F \le C$ III. A

Which one of the above conclusions is corre

1. All I, II, III and IV are true Ans

2. Only III and IV are true

X 3. Only I and IV are true

4. Only III is true

Question ID: 8401605790

Status: Answered

Chosen Option: 4

Q.4 In the morning assembly of a school, in the single line of ninth class, Madan is standing at 28th place from both the ends of line. How many students are there in the line?

Ans

X 1.56

2.54

X 3.57

4.55

Question ID: 8401605785

Status: Answered





Q.5 If '+' means subtraction, '÷' means addition, '-'means multiplication and 'x' means division, then which of the following equation is correct?

Ans X 1. 112 + 24 × 68 – 24 = 204

2. $16 \div 88 - 10 + 50 = 846$

X 3. 18 ÷ 128 - 4 × 12 = 108

X 4. 224 × 88 – 24 + 20 = 92

Question ID: 8401605812

Not Attempted and Status: **Marked For Review**

Chosen Option: --

Q.6 If the day before yesterday was Friday, when will Tuesday be?

Ans

X 1. Tomorrow

X 2. Today

3. Day after tomorrow

¥ 4. Two days after tomorrow

Question ID: 8401605786

Status: Answered

Chosen Option: 3

Two friends Ashish and Mohit start moving in the opposite direction on a main road and both are 1500 meters apart from each other. Ashish walks for 250 meters on the main road and takes a right turn and then walks for another 150 meters. Then he turns left and walks for another 250 meters and then turns in the direction to reach back to the main road. Meanwhile, Mohit could walk only 350 meters on the main road. What is the distance between both of them at this point?

Ans

- 1.750 M
- 2.650 M
- 3, 450 M
- 4.550 M

Question ID: 8401605802 Status: Answered

Chosen Option: 1

Q.8 Choose the correct alternative from the given options which will continue the same pattern and replace the question mark in the given number series.

1, 2, 5, 26, 677,?

Ans

- 1.330458
- 2.458330
- 3.485033
- 4.330584

Question ID: 8401605794

Status: Answered





Q.9 Pointing towards a woman, Sumit told to Garima that she is mother of only daughter of my son. What is relationship between the pointed woman and Sumit?

Ans

X 1. Wife

2. Daughter-in-law

X 3. Mother-in-law

X 4. Mother

Question ID: 8401605805

Status : Answered

Chosen Option: 2

Q.10 NATION:NOITAN::ACTION:?

Ans

1. NOITCA

X 2. NOIACT

X 3. NOTICE X 4. TCAION

Question ID: 8401605807

Status: Answered

Chosen Option: 1

Q.11 Read the series: 8, 13, 11, 16, 14, 19, ... carefully and suggest the number that should come next?

Ans

1, 24 2. 17

X 3. 22

4. 21

Question ID: 8401605795

Status : Answered

Chosen Option: 2

Q.12 If + stands for 'x', x stands for '+', - stands for '÷' and ÷ stands for '-', then 10 x 4 + 8 -

 $4 + 12 - 6 \div 2 = ?$

Ans

1.42

2.32

3.26 4. 24

Question ID: 8401605811

Status: Answered





Q.13 Uncertain number of people are sitting in a row by facing the North direction. R is sitting at one of the ends and there are two people between R and Q. Equal number of persons are sitting between U and R and U and S. Two persons are sitting between S and V. Equal number of persons are sitting to the right and left side of V. T is sitting exactly in the middle of P and S. U is third to the left of Q who is sitting fourth from one of the extreme ends of the row. P is sitting at one of the extreme ends of the row. U is not sitting on any of the extreme ends of the row. Number of people sitting between P and S are five.

Who is sitting between U and S?

Ans

X 1. Q

2. S

X 3. R

X 4. P

Question ID: 8401605788

Status: Answered

Chosen Option: 2

Q.14 Following table gives the details of sales of different items sold by three different stores run by three women. Please read the table carefully and answer the question given at the end of table.

Type / Sale in Thousand	Ambika Stores	Mahi ma Stores	Rohini Stores
Watches	312	234	453
Calculators	231	211	342
Mob. Phones	456	765	889
Coffee Mugs	2109	2306	3212

Find the total number of Mobile Phones sold by all the three Stores.

Ans

1,2112

2. 2110

X 3. 2111

4.2113

Question ID: 8401605815

Status : Answered

Chosen Option: 2

Q.15 A, B, C, D, E, F, G & H are eight friends sitting around a circular table by facing the centre. Three girls are sitting between A and D. A is sitting second to the left of B. H is not an immediate of B. F is sitting at the immediate left of C. D is not an immediate neighbor of either F or E.

Who is sitting at the immediate right of C?

Ans

1. C

X 2. B

3. D

4. A

Question ID: 8401605784

Status: Answered





Q.16 Amit is standing by facing East and took a turn of 90 degree in the anti-clockwise direction and then he turns another 180 degrees in the same direction and then 90 degree in the clockwise direction. Find which direction Amit is facing now?

X 2. East

3. West

X 4. North

Question ID: 8401605801

Status: Answered

Chosen Option: 3

Q.17 Read the following numbers carefully and answer the questions as per direction given after the number series:

289 496 337 268 245

If all the digits are to be arranged in increasing order from left to right within the number, then what will be the difference between the highest number and the lowest number thus obtained?

Ans

1, 224

X 2, 442

3.242

X 4, 422

Question ID: 8401605793

Status: Answered

Chosen Option: 1

Q.18 In the given question sets of alphabets are given as options and these sets shares a common similarity, whereas one is different. Choose the odd one out.

Ans

1. SMO

2. ACV

3. XUH

🗙 4. QIB

Question ID: 8401605808

Status: Answered





Q.19 Following table gives the details of sales of different items sold by three different stores run by three women. Please read the table carefully and answer the question given at the end of table.

Type / Sale in Thousand	Ambika Stores	Mahi ma Stores	Rohini Stores
Watches	312	234	453
Calculators	231	211	342
Mob. Phones	456	765	889
Coffee Mugs	2109	2306	3212

Find the difference of highest and lowest sale of coffee Mugs.

Ans

1. 1103

X 2. 1003

X 3. 1303

X 4. 1203

Question ID: 8401605813 Status: Answered

Chosen Option: 1

Q.20 In the following series of alphabet identify the letter pattern and fill the blank in the

ZLM, YPQ, XST, WDE,

Ans X 1. UAB

2. VAB

3. UTP 4. VTP

Question ID: 8401605797

Status: Answered

Chosen Option: 4

Q.21 In a code sign MOHAN is coded as 13158114 and ROHIT is coded as 18158920 the what will be the code for ANUJ?

1. 1182110

2. 1142110

3. 1118210

4. 1042111

Question ID: 8401605799

Status: Answered





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Q.22 Read the following words and arrange their numbers by observing a pattern.

1. Baby 2. Adult 3. Child 4. Elder 5. Teenager

Ans

1. 1,3,5,2,4

X 2. 2,3,4,5,1

X 3. 4,5,3,1,2

X 4. 1,3,4,5,2

Question ID: 8401605796

Status: Answered

Chosen Option: 1

Q.23 If RAID is coded as 6821, THAT is coded as 7387 and PUT is coded as 457, what will be the code for RAT?

Ans

1.786

2.687

X 3.887

4.867

Question ID: 8401605798

Status: Answered

Chosen Option: 2

Following table gives the details of sales of different items sold by three different stores run by three women. Please read the table carefully and answer the question given at the end of table.

Type / Sale in Thousand	Ambika Stores	Mahi ma Stores	Rohini Stores
Watches	312	234	453
Calculators	231	211	342
Mob. Phones	456	765	889
Coffee Mugs	2109	2306	3212

Find the difference of total number of all the items sold by the Rohini and Ambika Stores. Mugs

Ans

1.1803

X 2. 1723

3. 1788

X 4. 1303

Question ID: 8401605814

Status: Answered

Chosen Option: 3

Q.25 In the given question, set of pairs of alphabets are given out of which three pairs have a common relationship. Choose the pair of which does not have that same relationship.

Ans

1. PUT:SXW

2. GOT:JRW

X 3. NOT:QRW

4. CAT:DBU

Question ID: 8401605810

Status: Answered





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Q.26 If B is sister of L and A is Mother of B and also L is father of K then what is relation of A with K?

Ans X 1. Daughter

X 2. Sister

X 3. Mother

4. Grandmother

Question ID: 8401605806 Status: Answered

Chosen Option: 4

Q.27

Ans X 1. Only I and III are true

X 2. Only II is true

3. Only II and IV are true

X 4. All I, II, III and IV are true

Question ID: 8401605792

Status: Answered

Chosen Option: 3

Q.28

Ans

2.4

3.3

4.6

Question ID: 8401605789

Status: Answered





Q.29 Following table gives the details of sales of different items sold by three different stores run by three women. Please read the table carefully and answer the question given at the end of table.

Type / Sale in Thousand	Ambika Stores	Mahi ma Stores	Rohini Stores
Watches	312	234	453
Calculators	231	211	342
Mob. Phones	456	765	889
Coffee Mugs	2109	2306	3212

Find the difference of total number of Calculators sold by all the Rohini and Ambika Stores.

Ans

X 1. 211

X 2. 112

X 3. 101

4. 111

Question ID: 8401605816 Status: Answered

Chosen Option: 4

Q.30 Indicating towards a photograph of a male child, Rohit told to Amit that the child in the photograph is the son of the only son of my mother. How is Rohit related to the male child in the photograph?

Ans

- 1. Father
- 2. Grand Father
- 3. Uncle
- X 4. Son

Question ID: 8401605803

Status: Answered

Chosen Option: 1

Q.31 Rohit is in the East of Mohan which is in the North of Sushil. If Punit is in the South of Sushil, then in which direction of Rohit, is Punit?

- X 1. South-East
 - 2. North-West
 - 3. South-West
 - 4. North-East

Question ID: 8401605800

Status: Answered





Q.32 Statement: $T = U \le S < Q = P > R$

Conclusions: 1) T > R 2) P > T

3) P < U

4) R > S

Which one of the above conclusions is correct?

Ans X 1. Only 1

X 2. Only 2 & 4

3. Only 2

X 4. Only 4

Question ID: 8401605791

Status: Answered

Chosen Option: 3

Q.33 In the given question, pairs of words are given in which the words of any three pairs have a common relationship. Choose the pair of words which does not have that relationship.

Ans

X 1. Car: Road

2. Ship: Captain

3. Train: Railway Track

4. Boat: Water

Question ID: 8401605809

Status : Answered

Chosen Option: 2

Q.34 Anuj told to Mohit that the boy Golu who is playing in the ground is the younger among the two brothers of the daughter of my father's wife. What is relationship between the boy playing in the ground with Anuj?

Ans

- 1. Uncle
- 2. Father
- 3. Grandfather
- 4 Brother

Question ID: 8401605804

Status: Answered

Chosen Option: 1

Section: Domain Knowledge

Q.1 Ans

1. $\{wwR: w \in \{a,b\}^* \text{ and } wR \text{ is reverse of string } w\}$

2. {b nab n: n≥1 where b n is the n number of b's}

{b na n: n≥1 where b n is the n number of b's and a n is n number of a's}

4. {a nba n: n≥1 where a n is the n number of a's}

Question ID: 8401606032

Status: Answered





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Q.2 In an operating system, ready queue is maintained in the ___

X 1. secondary

X 2. tertiary

X 3. virtual

4. primary

Question ID: 8401606045 Status: Answered

Chosen Option: 4

Q.3 A combination circuit takes two 3-bit numbers as inputs and its output is the sum of these numbers. How many output lines should be there in this combinational circuit?

Ans

X 1.5

X 2.6

3.4

X 4.3

Question ID: 8401605992

Status: Answered

Chosen Option: 2

Q.4 Which of the following statements is correct about the chained matrix multiplication problem?

Ans

The time complexity of the dynamic programming algorithm for this problem is Θ (n²).

2.

3.

X 4.

The time complexity of the brute force algorithm for this problem is Θ (n lg n).

Question ID: 8401606023

Status: Answered

Chosen Option: 1

Q.5 Which of the following statements is correct about register addressing mode?

Ans

1. In register addressing mode, the operand is stored in the instruction itself.

2. In register addressing mode, the operand is stored in a CPU register whose address is stored in the register field (address field) of the instruction.

X 3. In register addressing mode, the operand is stored in the memory whose address is stored in the address field of the instruction.

4. In register addressing mode, the operand is stored in a CPU register whose address is stored in the accumulator register (ACC).

Question ID: 8401605998

Status: Marked For Review



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Q.6 What will be the maximum number of links in a mesh-topology network of 10 nodes? X 1.55 X 2.54 3, 45 X 4. 10 Question ID: 8401606067 Status: Answered Chosen Option: 3 Which of the following types of constraints states that 'the value of primary key cannot X 1. Foreign key constraint Ans 2. Domain constraint X 3. Key constraint 4. Entity integrity constraint Question ID: 8401606053 Status: Marked For Review Chosen Option: 3 Q.8 If the size of logical address space is 4096 and page size is 512 addressing units, then the high-order _____ bits of logical address designate the page number. Ans 1.8 2.9 3.3 4.2 Question ID: 8401606048 Status : Answered Chosen Option: 3 _layer protocols ensure that packets arrive in sequence and without error, by swapping acknowledgments of data reception, and retransmitting lost packets. Ans 1. transport X 2. Internet 3. physical 4. application Question ID: 8401606062 Status: Marked For Review Chosen Option: 1

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Q.10 Which of the following statements is/are true about a shift register?

(i) A shift register is designed by using flip flops and basic gates.

(ii) The information stored within a register can be transferred with the help of shift registers.

Ans

X 1. Neither (i) nor (ii)

2. Only (i)

X 3. Only (ii)

4. Both (i) and (ii)

Question ID: 8401605996

Status: Answered

Chosen Option: 3

Q.11 Which of the following is the INCORRECT result corresponding to the expression

(5348) - (2873) that are in the base 9 number system?

X 1. 1760 in the decimal number system

2. 6E2 in the hexa-decimal system

X 3. 3340 in the octal number system

4. 2365 in the base 9 number system

Question ID: 8401605991

Status: Answered

Chosen Option: 3

Q.12

Ans

3. x=13y=8

4.

Question ID: 8401606012

Status: Answered





Q.13 Which of the following is a regular grammar for a language denoted by regular expression (ab)*a?

1.
$$G = (\{S\}, \{a, b\}, \{S \rightarrow abS | a\}, S)$$

$$\times$$
 2. G = ({S}, {a, b}, {S} \rightarrow aS|b}, S)

$$\times$$
 3. G = ({S}, {a, b}, {S} abS|b}, S)

$$\times$$
 4. G = ({S}, {a, b}, {S \rightarrow bS|a}, S)

Question ID: 8401606038

Status: Answered

Chosen Option: 1

Q.14 If Σ is an alphabet, and $a, b \in \Sigma$, then which of following is NOT a primitive regular expression?

[Note: \(\lambda\) is empty string]

Ans X 1. a

X 2. \(\lambda\)

X 3.

4. (a+b)*

Question ID: 8401606027

Status: Marked For Review

Chosen Option: 2

Q.15 Which of the following statements is correct about context free language?

Ans

- 1. For every context free language there is a regular expression.
- 2. For every context free language there is a nondeterministic pushdown automata.
- 3. Every context free language is also a regular language.
- 4. For every context free language there is a regular grammar.

Question ID: 8401606034

Status: Answered

Chosen Option: 2

Q.16 Which of the following problems CANNOT be solved by a greedy algorithm?

Ans 1. Finding the shortest paths of all vertices from a source vertex (single source shortest

2. Minimum spanning tree

3. 0-1 knapsack problem

X 4. Fractional knapsack problem

Question ID: 8401606019

Status: Answered





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Q.17 Which of the following grammars is a regular grammar?

1.
$$G = (\{S, A\}, \{a, b\}, \{S \rightarrow aS | A, A \rightarrow bAc | bc\}, S)$$

$$\times$$
 3. $G = (\{S, A\}, \{a, b\}, \{S \rightarrow aS | A, A \rightarrow abAc | bc\}, S)$

$$\times$$
 4. $G = (\{S, A\}, \{a, b\}, \{S \rightarrow aS | A, A \rightarrow bAc | abc\}, S)$

Question ID: 8401606037

Not Attempted and Status: **Marked For Review**

Chosen Option: --

Q.18 Which of the following is represented using double-lined diamond in an ER-diagram?

Ans

X 1. Weak entity

X 2. Derived attribute

X 3. Identifying owner

4. Identifying relationship

Question ID: 8401606052

Status: Answered

Chosen Option: 4

Q.19 Which of the following is equivalent to the Boolean expression A + A'?

Ans

1.0

X 2. A

3. A'

4. 1

Question ID: 8401605987

Status: Answered

Chosen Option: 4

Q.20 Which of the following provides the services of an operating system to the user programs via an Application Program Interface (API)?

Ans

X 1. Demand paging

2. Segmentation

3. Virtual memory

4. System call

Question ID: 8401606039

Status: Answered





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Q.21 Which of the following is/are optional statement(s) in an SQL query?

(i) SELECT, (ii) FROM, (iii) WHERE

Ans X 1. Only (ii)

X 2. Only (i) and (ii)

3. Only (iii)

X 4. Only (i) and (iii)

Question ID: 8401606058

Status: Answered

Chosen Option: 3

Which of the following for loop is an infinite looping in C++?

Ans

X 1.

2. for(int i=1; ; i++)

X 3.

X 4.

Question ID: 8401606008

Status: Marked For Review

Chosen Option: 3

Q.23 Which of the following statements is correct about cache memory?

Ans

1. Its speed is less than the main memory.

2. It is an auxiliary memory.

3. It directly communicates with the input device and transfers input data to the main memory.

4. It is a fast small memory and placed between the CPU and main memory.

Question ID: 8401606003

Status: Marked For Review

Chosen Option: 2

Q,24

Ans

1. None of the tuples of the Employee relation

2. All tuples of the Employee relation

3. All those tuples of the Employee relation in which Age value is 40 or more

4. Only first tuple of the Employee relation

Question ID: 8401606059

Status: Marked For Review





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Q.25 Which of the following statements is INCORRECT about three-address instructions?

Ans

1. In three-address instructions, the first address must be a register.

The instruction ADD R1, A, B is equivalent to $R1 \leftarrow M[A] + M[B]$, where M[A] denotes the operand at memory address

X 3. The Cyber 170 computer uses three-address instructions.

X 4. In it, each address field refers either a register or a memory.

Question ID: 8401606000

Status: Answered

Chosen Option: 2

Q.26 Which of the following data structures may be used in depth first search graph traversing algorithm?

Ans

X 1. Max Heap Tree

X 2. Queue

X 3. AVL Tree

4. Stack

Question ID: 8401606016

Status: Answered

Chosen Option: 4

Which of the following is the transition function (δ) of the deterministic finite automata $M = (Q, \Sigma, \delta, q0, F)$ Q.27 corresponding to language $L = \{w: |w| \text{ mod } 3 = 0\}$, where $\Sigma = \{a, b\}, Q = \{1, 2, 3\}, q0 = 1, F = \{1\}$?

Ans

 $\delta(1, a) = 2$, $\delta(1, b) = 2$, $\delta(2, a) = 3$, $\delta(2, b) = 3$, $\delta(3, a) = 1$, $\delta(3, b) = 1$

Question ID: 8401606031

Status: Answered

Chosen Option: 3

Q.28 provides a user interface through which two hosts can communicate on a character-by-character or line-by-line basis.

Ans

1. TELNET

2. FTP

3. TFTP

4. Anonymous FTP

Question ID: 8401606064

Status: Answered





Q.29 Which of the following regular expressions represents the language $\{\lambda, c, ab, cc, cab, abc, abab, ccc, ccab ...\}$? [Note: λ is empty string]

$$\times$$
 1 c* . (a+b)

$$\times$$
 2. (b + (a.c))*

3.
$$(c + (a.b))$$
*

$$\times$$
 4. (a + (b.c))*

Question ID: 8401606026

Status: Answered

Chosen Option: 3

Q.30 In an operating system, the job scheduler is also known as

Ans

X 1. dispatcher

X 2. short-term schedular

3. long-term schedular

X 4. medium-term schedular

Question ID: 8401606044

Status: Marked For Review

Chosen Option: 2

Q.31 A network on the Internet has a subnet mask of 255.255.240.0. What is the maximum number of hosts it can handle?

Ans

- 1. 1024
- 2.2048
- 3.4069
- 4.4096

Question ID: 8401606070

Status : Answered

Chosen Option: 3

Q.32 Which of the following statements is INCORRECT about the merge sort algorithm?

Ans

The time complexity of its merge() operation should be Θ (lg n).

3. It is based on the divide and conquer approach.

X 4.

Question ID: 8401606021

Status: Answered





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Q.33 Which of the following statements related to a thread is/are true?

- (i) There can be more than one thread inside a process.
- (ii) Thread is often referred to as a lightweight process.

X 1. Neither (i) nor (ii) Ans

X 2. Only (i)

3. Both (i) and (ii)

X 4. Only (ii)

Question ID: 8401606043

Status: Marked For Review

Chosen Option: 3

What will be the average turnaround time and average waiting time if the arrival times and burst times of three Q.34 processes are as follows?

PID	Arrival Time	Burst Time	
PI	0	2	
P2	3	1	
P3	5	6	

Ans

- 1. Average turnaround time: 0, Average waiting time: 3
- 2. Average turnaround time: 3, Average waiting time: 6
- X 3. Average turnaround time: 3, Average waiting time: 3
 - 4. Average turnaround time: 3, Average waiting time: 0

Question ID: 8401606051 Status: Answered

Chosen Option: 4

Q.35 Which of the following addressing modes is used in zero-address instructions in a stack-organised computer?

Ans

- 1. Register addressing mode
- 2. Implied addressing mode
- 3. Immediate addressing mode
- 4. Register indirect addressing mode

Question ID: 8401605997

Status: Answered

Chosen Option: 3

Q.36

Ans

1.

For this problem, the algorithms based on the divide and conquer approach as well as dynamic programming approach

For this problem, it is possible to device dynamic programming algorithm that requires single 1D array.

The dynamic programming algorithm solves this problem in bottom up fashion.

Question ID: 8401606024

Status: Answered





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Which of the following C++ code segments does NOT print 1 to 10?

Ans

X 1.

× 2. int a=1; while(a<=10){cout<<a; a++;}
</p>

 \times 3. int a=1; do{cout<<a; a++;}while(a<=10);

4.

Question ID: 8401606009

Status: Answered

Chosen Option: 4

Q.38 How many half adders and basic gates would be needed to implement a full adder combinational circuit?

Ans

1. 2 half adders and 1 NAND gate

2. 2 half adders and 1 OR gate

X 3, 2 half adders and 1 AND gate

X 4. 2 half adders and 1 NOR gate

Question ID: 8401605994

Status: Answered

Chosen Option: 1

Q.39 What is the dotted decimal notation of the IP address whose hexadecimal representation is C22F1582?

Ans

X 1. 194.74.21.130

2. 194.47.21.130

3. 194.47.21.103

4. 149.47.12.130

Question ID: 8401606069

Status: Answered

Chosen Option: 2

Q.40

Ans

1. Only (i)

X 2. Neither (i) nor (ii)

3. Both (i) and (ii)

4. Only (ii)

Question ID: 8401606018

Status: Marked For Review





Ans

X 1. aababa

2. aabbabba

X 3. aabbbabababa

💢 4. aabbababa

Question ID: 8401606033

Status: Answered

Chosen Option: 2

Q.42 Which of the following greedy algorithms may use the disjoint set data structure?

X 1. Greedy algorithm for Huffman code

X 2. Dijkstra's algorithm for single source shortest paths

X 3. Prime's algorithm to find minimum spanning tree

4. Kruskal's algorithm to find minimum spanning tree

Question ID: 8401606017

Status: Answered

Chosen Option: 1

Q.43 Which of the following has one entry for each disk block and is indexed by block number?

Ans

X 1. Virtual memory

2. Memory page

3. File Allocation Table (FAT)

4. Memory segment

Question ID: 8401606042

Status: Marked For Review

Chosen Option: 1

Q.44 In nondeterministic pushdown automata (npda), the transition function δ accepts current state of control unit, current input symbol, and

Ans

1. set of final states F

2. initial state q0

X 3. current output symbol

4. current symbol on top of the stack

Question ID: 8401606035

Status: Answered





Q.45 Which of the following statements is/are true about the instruction format?

- (i) The operation code field of the instruction specifies the operation to be performed.
- (ii) The mode field stores the address of the operand.

X 1. Neither (i) nor (ii) Ans

X 2. Only (ii)

3. Only (i)

4. Both (i) and (ii)

Question ID: 8401606001 Status: Answered

Chosen Option: 4

Q.46 Which of the following statements is INCORRECT about computer memory?

Ans

- 1. The main memory communicates with the auxiliary memory through an I/O processor.
- 2. The program and data currently needed by the processor are transferred from the main memory to auxiliary memory.
- X 3. The speed of the main memory is greater than that of the auxiliary memory.
- X 4. The main memory communicates directly with the CPU.

Question ID: 8401606002

Status: Marked For Review

Chosen Option: 4

Q.47 Which of the following traversing order of a binary search tree gives non-decreasing order of keys of the nodes?

Ans

X 1. Preorder traversing

2. Level order traversing

3. Postorder traversing

4. Inorder traversing

Question ID: 8401606014

Status: Answered

Chosen Option: 4

Q.48

Ans

1.4

2. 2

3.1

4.3

Question ID: 8401606006

Status: Answered





Q.49 Which of the following languages is represented by the regular expression r = (bb)*(aa)*a?

X 1. Set of all strings with an odd number of b's followed by an odd number of a's.

2. Set of all strings with an even number of b's followed by an odd number of a's.

X 3. Set of all strings with an odd number of b's followed by an even number of a's.

X 4. Set of all strings with an even number of b's followed by an even number of a's.

Question ID: 8401606029 Status : Answered

Chosen Option: 2

Q.50 When a computer software needs to access the operating system's kernel, it uses a

Ans

1. system call

X 2. virtual memory

X 3. CUI

X 4. GUI

Question ID: 8401606040 Status: Answered

Chosen Option: 1

Which of the following statements is correct about the fopen() function that is used to open a file in C programming Q.51 language?

Ans

1. Its return type is void.

2. It accepts two parameters, where the first parameter is the file name and second parameter should be int type.

3. It accepts three parameters.

4. It accepts two parameters, where both parameters should be char * types.

Question ID: 8401606010

Status : Answered

Chosen Option: 4

Q.52 How many binary search trees may be drawn from the keys 1, 2, 3?

Ans

1.3

2.4 3.5

4.1

Question ID: 8401606015

Status: Answered





Q.53

Ans X 1.6

X 3.7

X 4.5

Question ID: 8401606005

Status : Answered

Chosen Option: 2

Q.54 Which of the following network error conditions is/are detected and reported by the Internet Control Message Protocol (ICMP)?

(i) Dropped packets (ii) Connectivity failure

Ans

1. Neither (i) nor (ii)

X 2. Only (i)

3. Both (i) and (ii)

X 4. Only (ii)

Question ID: 8401606063

Status: Answered

Chosen Option: 2

Q.55 Which of the following is/are routing protocols for TCP/IP networks?

(i) RIP (ii) EGP

Ans

1. Both (i) and (ii)

2. Only (ii)

X 3. Only (i)

4. Neither (i) nor (ii)

Question ID: 8401606065

Status: Answered





- **Q.56** Which of the following statements is/are true about the Turing machine $M = (Q, \Sigma, \Gamma, \delta, q0, b, F)$?
 - (i) Γ is the finite nonempty set of tape symbols.
 - (ii) Σ is the finite nonempty set of input symbols and $b \in \Sigma$, where b is blank symbol of the tape.

Ans X 1. Only (ii)

- X 2. Neither (i) nor (ii) X 3. Both (i) and (ii)
 - 4. Only (i)

Question ID: 8401606036

Status: Answered

Chosen Option: 4

Q.57

Ans X 1. X=386

× 2. x=130

3. x=-126

4. x=256

Question ID: 8401606013 Status: Answered

Chosen Option: 2

Q.58 With respect to memory management in an operating system, what is the full-form of TLB?

Ans

- 1. Trivial Lookaside Buffer
- 2. Translation Lookaside Buffer
- X 3. Trivial Lookaside Block
 - 4. Translation Lookaside Block

Question ID: 8401606047

Status: Answered





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Q.59 Consider a system with byte-addressable memory having the following parameters:

Logical address size: 32 bits Page size: 4 kilobytes

Page table entries: 4 bytes each

What will be the size of the page table in the system?

Ans X 1.8 MB

2.4 MB

3.4 GB

X 4. 16 MB

Question ID: 8401606050 Status: Answered

Chosen Option: 2

Q.60 Which of the following statements is/are true about the relative address mode?

(i) In this mode, the effective address of the operand is computed by adding the content of the program counter to the address part of the instruction.

(ii) In this mode, the address part of the instruction may be either positive or negative.

Ans

- 1. Neither (i) nor (ii)
- 2. Only (i)
- 3. Both (i) and (ii)
- 4. Only (ii)

Question ID: 8401605999 Status: Answered

Chosen Option: 2

Q.61 Which of the following is the number of bits in the binary number equivalent to the decimal number 1000?

Ans

1.10

X 2, 11

3.9

X 4.8

Question ID: 8401605989

Status: Answered

Chosen Option: 1

Q.62 Which of the following combinational circuit may be implemented using only one X-OR gate and one AND gate?

Ans

- 1. Half Adder
- 2. Half Subtractor
- 3. Full Adder
- 4. Full Subtractor

Question ID: 8401605988

Status: Answered





11/14/22, 3:15 PM https://www.digialm.com///per/g01/pub/1258/touchstone/AssessmentQPHTMLMode1/1258O22378/1258O22378S8D1106/16675...

Q.63 How many 0's and 1's should be there in the binary number equivalent to the decimal number 992?

X 1. Four 0's and five 1's

X 2. Five 0's and four 1's

X 3. Four 0's and six 1's

4. Five 0's and five 1's

Question ID: 8401605990

Status: Answered

Chosen Option: 4

Q.64 Which of the following statement is correct about one-address instructions?

Ans

X 1.

The one-address instruction LOAD A is equivalent to $M[A] \leftarrow AC$, which transfer the content of accumulator register (AC) to memory address A.

2. The stack-organized computer uses two-address instructions.

X 3. One-address instructions use Index Register for all data manipulation.

The one-address instruction ADD A is equivalent to $AC \leftarrow AC + M[A]$, where M[A] denotes the operand at memory address A.

Question ID: 8401606071

Status: Answered

Chosen Option: 1

Q.65 Which of the following need connection-oriented service?

(i) File transfer, (ii) Remote login, (iii) public switched telephone network

Ans

X 1. Only (ii) and (iii)

X 2. Only (i) and (iii)

3. Only (i) and (ii)

4. (i), (ii) and (iii)

Question ID: 8401606068

Status: Answered

Chosen Option: 1

Q.66 Which of the following statements is correct about the quick sort algorithm?

Ans

The partition() operation of quick sort placed the pivot-element at its proper position.

2.

X 3.

4.

Question ID: 8401606022

Status: Answered





Q.67 Reverse Address Resolution Protocol (RARP) maps _

X 1. Ethernet addresses (64 bits); IPv4 addresses (32 bits)

2. IPv4 addresses (32 bits); Ethernet addresses (48 bits)

X 3. IPv4 addresses (32 bits); Ethernet addresses (32 bits)

4. Ethernet addresses (48 bits); IPv4 addresses (32 bits)

Question ID: 8401606066

Status: Answered

Chosen Option: 1

Q.68 Consider a database relation R1(A, B, C), where A, B, and C are atomic and singlevalued attributes. If A is the only one candidate key of R1, then which of the following statements is NOT true?

1. R1 may and may not be in BNCF. Ans

2. R1 is in first normal form.

3. R1 is definitely in third normal form.

4. R1 is in second normal form.

Question ID: 8401606057

Status: Answered

Chosen Option: 3

Q.69 If the size of logical address space is 1024 and page size is 256 addressing units, then _ low-order bits designate the page offset. the

Ans

1.8

2.16

X 3. 10

X 4. 12

Question ID: 8401606049 Status: Answered

Chosen Option: 1

Q.70 Which of the following relational algebra operators is NOT commutative?

Ans

X 1. Union

X 2. Intersection

3. Division

X 4. Natural Join

Question ID: 8401606056

Status: Answered





Q.71 Which of the following is NOT a Transaction Control Language command?

Ans X 1. SAVEPOINT

X 2. ROLLBACK

3. GRANT

X 4. COMMIT

Question ID: 8401606060

Status: Answered

Chosen Option: 3

Q.72

Ans X 1.

× 2. {aa, ab, bb}

3. {a, b}

X 4.

Question ID: 8401606025

Status: Answered

Chosen Option: 3

Q.73 If $\Sigma = \{a, b\}$ is an alphabet, then which of the following is NOT a regular expression?

Ans

1. (a + a.b)*

 \times 2. (a + b)*.(a + b)

× 3. (a+b)*

4.

Question ID: 8401606028

Status : Answered

Chosen Option: 4

Q.74

1. 17 Ans

2. 14

3. 15

4. 16

Question ID: 8401606004

Status: Answered





Q.75

Ans X 1. B

X 2. A

3. C

4. D

Question ID: 8401606007 Status: Answered

Chosen Option: 3

Q.76 Which of the following statements is/are true about Strassen's matrix multiplication algorithm?

(i) It is based on the divide and conquer approach.

(ii) It requires 7 multiplications and 18 additions/subtractions to get the production of two matrices of order 2x2 each.

Ans

- 1. Both (i) and (ii)
- 2. Only (i)
- 3. Neither (i) nor (ii)

X 4. Only (ii)

Question ID: 8401606020

Status: Answered

Chosen Option: 2

Q.77 Which of the following statements is INCORRECT about deterministic finite automata $M = (Q, \Sigma, \delta, q0, F)$?

Ans

X 1.

- 2.
- $q0 \in Q$ is the initial state, where Q is the finite nonempty set of states.

4.

Question ID: 8401606030

Status: Answered





Q.78 Consider 'supplies' relationship which associates supplier, project and product entities. If supplier, project and product have 10, 20, and 30 entities, then what is the degree of the 'supplies' relationship?

X 1.60

2.3

X 3.2

X 4. 6000

Question ID: 8401606054

Status: Answered

Chosen Option: 1

Q.79 A transaction is said to be in a/an _____ state if it executes all its operations successfully.

Ans

1. active

X 2. failed

X 3. aborted

4. committed

Question ID: 8401606061

Status : **Answered**

Chosen Option: 3

Q.80

Ans

2. YZ

3. XY

X 4. X

Question ID: 8401606011

Status: Answered

Chosen Option: 3

Q.81 The logical address generated by the CPU consists of ___

Ans

1. only offset

2. both page number and offset

3. only page number

4. neither page number nor offset

Question ID: 8401606046

Status: Answered





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Q.82 Which of the following statements is correct about seven segments to BCD code converter combinational circuit?

X 1. It converts hexa-decimal digits given in seven segments to BCD code.

2. It has 5 output lines.

3. It converts decimal digits given in seven segments to BCD code.

X 4. It has 6 input lines.

Question ID: 8401605993

Status: Answered

Chosen Option: 3

Q.83 Which of the following statements is/are true about asynchronous counter?

(i) In asynchronous counter, all flip flops are triggered with the same clock simultaneously.

(ii) Asynchronous counter is slower than synchronous counter in operation.

Ans

1. Only (ii)

2. Neither (i) nor (ii)

X 3. Only (i)

4. Both (i) and (ii)

Question ID: 8401605995

Status: Answered

Chosen Option: 3

Q.84 Which of the following relational algebra operators is unary in nature?

X 1. Division

2. Cartesian Product

3. Natural Join

4. Projection

Question ID: 8401606055 Status: Answered

Chosen Option: 4

Q.85 When multiple threads are executed in parallel at the same time, this process is known

Ans

1. parallel processing

2. multithreading

3. multitasking

¥ 4. distributed processing

Question ID: 8401606041

Status: Answered