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Computer Science Engineering CSE

Subject	2018
General Aptitude	15
Discrete & Engg. Maths	19
Theory of Computation	7
Computer Organisation	11
Programming Languages	6
Computer Networks	7
DBMS	4
Design & Analysis of Algorithms	7
Operating Systems	10
Digital Logic	4
Compiler Design	6
Data Structures	4

1. Find out missing one

2, 12, 60, 240, 720, 1440, ... , 0

Sol. **1440**

2. Where from they are bringing their book? _____ bringing _____ books from _____

Sol. **They are, their, there**

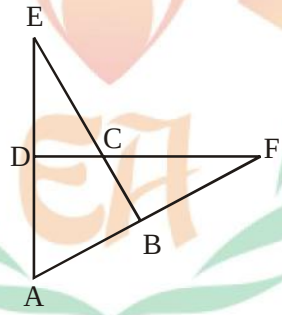
3. If PQR ≠ 0, $P^{-X} = \frac{1}{Q}$, $Q^{-Y} = \frac{1}{R}$, $R^{-Z} = \frac{1}{P}$ then XYZ = ?

(a) –1 (b) PQR

(c) 2 (d) 1

Sol. (d)

4. ∠BFC + ∠DEC = ?



(a) ∠BCD – ∠BAD (b) ∠BCF + ∠BAD

(c) ∠BCD + ∠BAD (d) None of these

Sol. (a)

5. A _____ investigation can sometimes yield new facts, but typically organized once are more successful.

Sol. **Meandering**

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6. The smallest natural number divided by 20, 42 and 76 leaves a remainder '7' is _____?

Sol. **7987**

7. The area of square is 'd'. What is the area of the circle which has the diagonal of the square as it's diameter?

Sol. **$0.5\pi d$**

8. A six sided unbiased dice with four green faces and two red faces is rolled '7' times outcome of the dice.

Sol. **Five Green + Two red**

9. 60% guests are male and 40% are female are invited in a party. If 80% of invited guests attended party and all female attended the party. What would be the ratio of male to female among attendees?

Sol. **1 : 1**

10. Matrix P has Eigen vectors are multiple of $\begin{bmatrix}1\\4\end{bmatrix}$

I. P does not have an inverse

II. P cannot be diagonalised

III. P has a respected Eigen Value

Sol. **P does not have an inverse & cannot be diagonalised**

11. Given $G = UV^T$

$$U = \begin{bmatrix}1\\2\end{bmatrix}_{2\times1}$$

$$V = \begin{bmatrix}1\\1\end{bmatrix}_{2\times1}$$

Highest Eigen value of G is -

Sol. **3**

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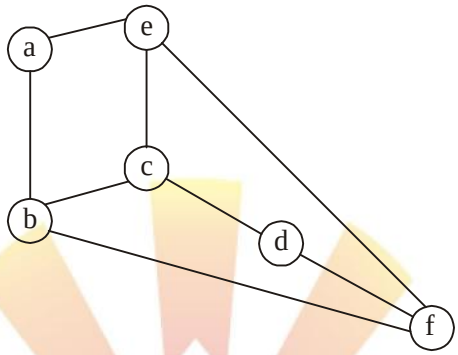
12. $\int_0^{\pi/4} x\cos(x^2)dx = _____$

Sol. **0.289**

13. Chromatic number of graph _____.



Sol. **3**

14. TCP headers is 40 bytes and IP header is 20 bytes, total packet size is 1500. Packet transfer on IP router. MMU is 600 bytes. First offset field number is 0. What is the offset field number on 3rd packet.

Sol. **144**

15. RISC is

(a) Hardwired
(b) Register based
(c) Limited Instruction based
(d) All of the above

Sol. **(d) All of the above**

16. Processer design characteristics

I. Register to Register

II. Fixed length Instruction

III. Hardwired control unit

Sol. **Register to Register, Fixed length Instruction and Hardwired control unit**

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17. A and B roll a dice. In case of a dice between them, they roll repeatedly unit there is no dice. Define a trial as throw at a dice. All 6 numbers are equally probable and each trial is independent. The probability that one of them wins.

Sol. **1**

❑❑❑

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