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|  | **ENGINEERING MATHEMATICS IV**  **(AAS0402)**  **UNIT-V** | | **SESSION: 2022-23** |
| **CLASS/SEM: (CSE+ECE)- IV(EVEN)** |
| Assignment Given Date: 10/05/23  Assignment Submission Date: 15/05/23 | | Maximum Points: 100 | |
| Weightage in University Exam: 34 Marks | |
| Faculty Name: Dr. Aakansha Vyas | | Faculty Mail Id: aakanshavyas.m@niet.co.in | |

**Note: Write solution of each question in clear handwriting.**

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| Q. N. | Question Statement | Pts | CO | BLOOM’S KNOWLEDGE LEVEL |
| 1 | Write Short Notes on   1. Discrete wavelet Transform (DWT) 2. Continuous Wavelet Transform (CWT) 3. Haar Wavelet 4. Shannon Wavelet 5. Orthogonal Wavelet | 10 | 5 | K5 |
| 2 | Two dice are thrown together. What is the probability that the sum of the numbers on the two faces is divisible by 4 or 6? | 5 | 5 | K5 |
| 3 | Dev can hit a target 3 times in 6 shorts Pawan can hit the target 2 times in 6 shorts and Lakhan can hit the target 4 times in 4 shorts. What is the probability that at least 2 shorts hit the target? | 5 | 5 | K3, K5 |
| 4 | A speaks truth in 75% cases and B in 80% of the cases. In what percentage of cases are they likely to contradict each other, in narrating the same incident? | 2 | 5 | K3, K5 |
| 5 | If the number 3422213pq is divisible by 99, find the missing digits p and q. | 5 | 5 | K5 |
| 6 | Find the remainder when (397)3589 + 5 is divided by 398. | 5 | 5 | K2, K5 |
| 7 | Find the remainder when is divisible by 5. | 2 | 5 | K5 |
| 8 | Find the unit digit (Last digit) of . | 2 | 5 | K5 |
| 9 | What is the number of zeros at the end of the product-  55 × 1010 × 1515 ×....... × 125125? | 5 | 5 | K5 |
| 10 | Write a short note with example on   1. One-one function 2. Onto function 3. Into function 4. Many one function | 10 | 5 | K4, K5 |
| 11 | Write a short not on bijective function and prove that the function given by is defined by is not bijective function. | 5 | 5 | K5 |
| 12. | Direction (1-4):       1. Total number of candidates qualified from all the states together in 1997 is approximately what percentage of the total number of candidates qualified from all the states together in 1998? 2. What are the average candidates who appeared from State Q during the given years? 3. In which of the given years the number of candidates appeared from State P has maximum percentage of qualified candidates? 4. What is the percentage of candidates qualified from State N for all the years together, over the candidates appeared from State N during all the years together? | 10 | 5 | K5 |
| 13. | |  | | --- | | **Statements:** All the harmoniums are instruments.  All the instruments are flutes.  **Conclusions:**   1. All the flutes are instruments. 2. All the harmoniums are flutes. | | |  |  | | --- | --- | | [A.](javascript:%20void%200;) | Only (1) conclusion follows | | [B.](javascript:%20void%200;) | Only (2) conclusion follows | | [C.](javascript:%20void%200;) | Either (1) or (2) follows | | [D.](javascript:%20void%200;) | Neither (1) nor (2) follows | | | 2 | 5 | K5 |
| 14. | |  | | --- | | **Statements:** Some ants are parrots. All the parrots are apples.  **Conclusions:**   1. All the apples are parrots. 2. Some ants are apples. | | |  |  | | --- | --- | | [A.](javascript:%20void%200;) | Only (1) conclusion follows | | [B.](javascript:%20void%200;) | Only (2) conclusion follows | | [C.](javascript:%20void%200;) | Either (1) or (2) follows | | [D.](javascript:%20void%200;) | Neither (1) nor (2) follows | | | 2 | 5 | K5 |

**Answer:**

**1. Short note**

**2. 7/18**

**3. 2/3**

**4. 35%**

**5.**

**6. 4**

**7. 1**

**8. 7**

**9. 1520**

**10. Short note**

**11. To prove**

**12. 80%, 8990, 2001,11.15%**

**13. B**

**14. B**