**DON BOSCO INSTITUTE OF TECHNOLOGY, BANGALORE-560074**

**DEPARTMENT OF INFORMATION SCIENCE AND ENGINEERING**

Subject: COMPUTER NETWORKS AND SECURITY

Subject Code: 18CS52

Semester: V

Section: A & B

Academic Year: Aug 2020 – Jan 2021

**Assignment 3**

**Guidelines:**

1. Assignment has been given for four batches with 5 questions each separately
2. Batch contains the following Rollnos as per the order of Nominal Roll attached herewith.
   1. Batch -1: 1DB16IS008 to 1DB18IS060 – 12 Members
   2. Batch -2: 1DB18IS061 to 1DB18IS075 – 12 Members
   3. Batch -3: 1DB18IS076 to 1DB18IS088 – 12 Members
   4. Batch -4: 1DB18IS089 to 1DB14IS022 – 13 Members
3. Each batch of students should write for their assigned questions. If the questions are used from other batches then the assignment will not be considered.

**Batch-1**

1. Brief out 3 broad categories of multimedia network application.

2. With a neat diagram, explain the operation of CDN.

3. Explain HTTP streaming and UDP streaming in detail

4. Explain the elements of Network Security

5. Give examples for Symmetric-Key Cryptography. Explain DES

**Batch-2**

1. Discuss the following

a. Adaptive streaming b. DASH

2. How recovering from Packet Loss is done? Explain

3. Explain the server placement philosophies

4. Give examples for Symmetric-Key Cryptography. Explain AES

5. Explain i) Digital Signatures ii) Firewalls

**Batch-3**

1. With graph, explain client playout delay in video streaming.

2. Explain HTTP streaming and UDP streaming in detail

3. Mention the Protocols for Real-Time Conversational Applications .Explain RTP

4. Explain the classification of Network Attacks

5. What are the examples for Public-Key Cryptography? Explain Diffie-Hellman Key-Exchange Protocol

**Batch-4**

1. Explain the Limitations of the Best-Effort IP Service

2. Explain the process of removing Jitter at the Receiver for Audio

3. Mention the Protocols for Real-Time Conversational Applications .Explain SIP

4. What are the examples for Public-Key Cryptography ? Explain RSA Algorithm

5. Explain i)Hash Function ii) Secure Hash Algorithm (SHA)

**Faculty:** Dr. M. Selvam & Ms. C. Haripriya

**NOMINAL ROLL – V SEMESTER B SECTION**

|  |  |  |
| --- | --- | --- |
| **S.No** | **USN** | **NAME** |
| 1 | 1DB16IS008 | AYUSH PANDEY |
| 2 | 1DB17IS013 | GOLU KUMAR |
| 3 | 1DB17IS034 | SHAKTHI VINAYAKA E |
| 4 | 1DB17IS038 | SHUBANGI L |
| 5 | 1DB17IS045 | YASHASWI. S |
| 6 | 1DB18IS054 | NITHIN RC |
| 7 | 1DB18IS055 | PAVAN K |
| 8 | 1DB18IS056 | PAVAN RAJ B |
| 9 | 1DB18IS057 | PAVITHRA S |
| 10 | 1DB18IS058 | POOJITH S |
| 11 | 1DB18IS059 | PRARTHANA K |
| 12 | 1DB18IS060 | PRIYADHARSHINI K |
| 13 | 1DB18IS061 | RAASHI SINGH |
| 14 | 1DB18IS062 | RACHANA D |
| 15 | 1DB18IS064 | RESHMA M |
| 16 | 1DB18IS065 | SAHANA R |
| 17 | 1DB18IS066 | SAKSHI SINGH |
| 18 | 1DB18IS067 | SANJANA M |
| 19 | 1DB18IS069 | SANMATHI R |
| 20 | 1DB18IS071 | SATHWIK HEBBAR K |
| 21 | 1DB18IS072 | SHREAS S |
| 22 | 1DB18IS073 | SHREYAS KS |
| 23 | 1DB18IS074 | SHREYAS S |
| 24 | 1DB18IS075 | SHRINIDHI M |
| 25 | 1DB18IS076 | SNEHA U |
| 26 | 1DB18IS077 | SNEHA V WALIKAR |
| 27 | 1DB18IS079 | SSOUMYA K |
| 28 | 1DB18IS078 | SONY SK |
| 29 | 1DB18IS080 | SRILAKSHMI R |
| 30 | 1DB18IS081 | SUBHASH.H |
| 31 | 1DB18IS082 | SUMA K R |
| 32 | 1DB18IS083 | SUMANTH K |
| 33 | 1DB18IS084 | SUMANTH GOWDA DM |
| 34 | 1DB18IS085 | SUNETHRA RANGANATH |
| 35 | 1DB18IS087 | SUSHMITHA NAYAK |
| 36 | 1DB18IS088 | T KANISHKAR |
| 37 | 1DB18IS089 | T N SHESHU |
| 38 | 1DB18IS090 | TEJESHWAR R |
| 39 | 1DB18IS092 | VALLAMKONDA SAI ROHIT |
| 40 | 1DB18IS093 | VARSHITA S |
| 41 | 1DB18IS094 | VARSHITHA N |
| 42 | 1DB18IS095 | VASU DEV SIRVI |
| 43 | 1DB18IS096 | VIKAS KUMAR P |
| 44 | 1DB18IS097 | VISHWAS D RAJ |
| 45 | 1DB18IS098 | VIVEK V PAI |
| 46 | 1DB18IS099 | YASHWANTH B H |
| 47 | 1DB18IS100 | YASMIN FATHIMA.A |
| 49 | 1DB15IS012 | HEPSIBHA SUSANNA Y |
| 50 | 1DB14IS022 | LOKESH CHOUDHARY |

**Faculty:** Dr. M.Selvam