Code No.: 16438

VASAVI COLLEGE OF ENGINEERING (AUTONOMOUS), HYDERABAD

Accredited by NAAC with A++ Grade

B.E. (E.C.E.) VI-Semester Main & Backlog Examinations, June-2022 Computer Networks

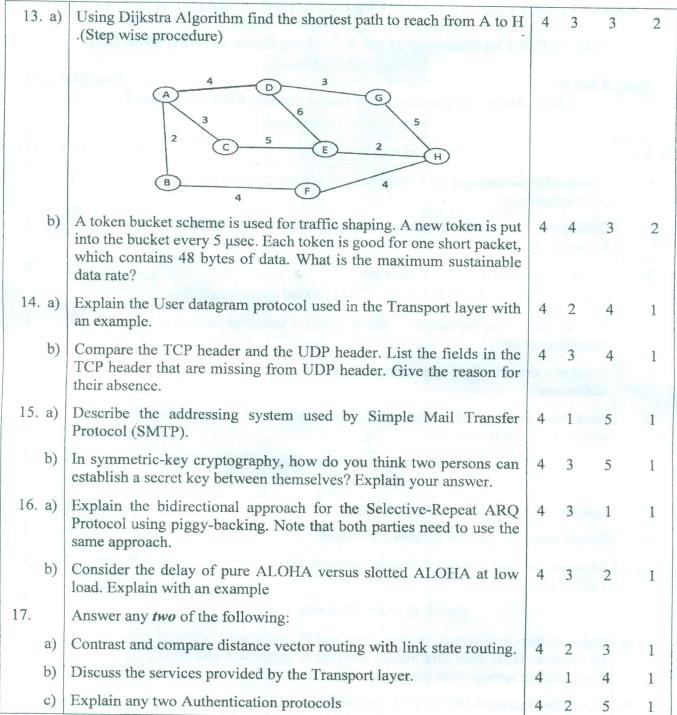
Time: 3 hours

Max. Marks: 60

Note: Answer all questions from Part-A and any FIVE from Part-B

Part-A $(10 \times 2 = 20 Marks)$

Q. No.	Stem of the question	M	L	CO	PO
1.	Mention the advantages of a multipoint connection over a point-to-point connection?	2	1	1	1
2.	Distinguish between forward error correction versus error correction by retransmission.	2	2	1	1
3.	For the following transmitted data bits 101111101010111111111111111111111100000 apply bit stuffing.	2	2	2	2
4.	Specify the role of the address field in a packet traveling through a datagram network?	2	1	2	1
5.	What is a mask in IPv4 addressing? What is a default mask in IPv4 addressing?	2	2	3	1
6.	Give two example computer applications for which connection- oriented service is appropriate.	2	1	3	1
7.	Are both UDP and IP unreliable to the same degree? Why or why not?	2	2	4	1
8.	List out the elements of Transport Layer.	2	1	4	1
9.	Justify how DNS and IP address are related.	2	2	5	1
10.	Mention the importance of Simple Network Management Protocol (SNMP).	2	1	5	1
	Part-B $(5 \times 8 = 40 \text{ Marks})$				
11. a)	Suppose there is a change in the service (set of operations) provided by layer k. How does this impact services at layers k-1 and k+1? Explain your answer with proper justifications.	4	2	1	2
b)	Given the dataword 1010011110 and the divisor 10111,	4	4	1	2
	a) Show the generation of the codeword at the sender site (using binary division).b) Show the checking of the codeword at the receiver site (assume no error).				
12. a)	How long does a station, s, have to wait in the worst case before it can start transmitting its frame over a LAN that uses the Stop and wait protocol? Explain.	4	4	2	2
b)	Illustrate the Architecture and Protocol Stack of 802.11.	4	2	2	1



M: Marks; L: Bloom's Taxonomy Level; CO; Course Outcome; PO: Programme Outcome

i)	Blooms Taxonomy Level – 1	22.50%
ii)	Blooms Taxonomy Level – 2	37.50%
iii)	Blooms Taxonomy Level – 3 & 4	40%
