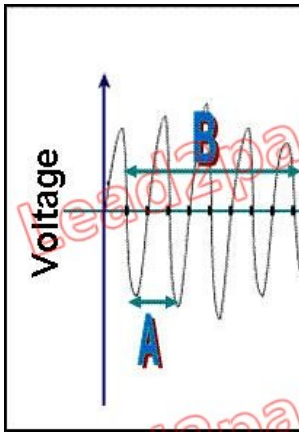
CCNA Voice Practice Tests – PSTN components and technologies (1-5)

Topic 2 - Describe PSTN components and technologies. (15 Questions) Question 1 You are CCNA VOICE associate in Lead2pass.com. You need configure a voice port that will allow the gateway to terminate 23 or 30 circuits from the PSTN. Which type of voice port you will configure? A.BRI B.FXS C.PRI T1/E1 D.E&M Answer: CB: FXS: analog circuits, supporting one-way session. C: T1: 23B+D E1: 30B+D+ synchronizing channel D: E&M: analog line, supporting one-way session. Explanation: This question tests the number of channels supported by a variety of circuits. The traditional digital communication circuit can be divided into channel B and channel D. Channel B is used to transport voice and channel D is used for signal transmission. Analog communication relies on analog signal transmission, which does not have the channel concept. The question requires 23 or 30 circuits to connect with PSTN. A: BRI: 2B+D Question 2 An analog telephone is connected to a _____ port on a router? A.FXO B.E1 C.T1 D.FXS Answer: D Explanation: This question tests the problems about the device port connection. A: FXO is used for the router to connect PSTN CO or PBX. B: E1 is used to connect PSTN CO or PBX. C: T1 is used to connect PSTN CO or PBX. D: FXS is used to connect analog terminals, including phone and fax. Question 3 You are CCNA VOICE associate in Lead2pass.com. Which identifies the amplitude of an analog signal stream?



A.A x C B.A x B C.A D.C Answer: D Explanation: This question tests the understanding of the traditional voice waveform. The traditional voice can be divided into two kinds: digital communication and analog communication. The digital communication is the TDM which uses slot time as its transmission unit. The analog communication refers to the continuous analog signals. In the exhibit of analog signal, the x-coordinate represents time and the y-coordinate represents intensity. Letter C represents the amplitude of an analog signal stream. Question 4 Time-Division Multiplexing (TDM) is a type of digital or (rarely) analog multiplexing in which two or more signals or bit streams are transferred apparently simultaneously as sub-channels in one communication channel, but are physically taking turns on the channel. Which is the best description of time-division multiplexing? A.One TDM frame consists of multiple timeslot per sub-channel. B.the time domain is only one recurrent timeslots of fixed length C.Individual source signals are combined into a composite signal, which allows a capacity equal to or greater than the sum of the component signals. D.All sources get an interleaved slice of time, which offers the entire frequency range allocated for that timeslot Answer: D Explanation: This question tests the operating mode of TDM transmission mode. TDM applies the working principle of rotation sampling at each slot-time. Each slot-time samples 8000 times per second and uses eight bits to represent each time-slot. Each time-slot is at the speed of 64kbps. During the whole transmission process, all the slots have an equal transmission opportunity, that is, each one takes 1/8000s. Question 5 Please match the CAS component to the office that it will apply. (1)CAS E1 (2)CAS T1 (3)1.544 mb/s (4)2.048 mb/s (5)RBS in-band (6)24 voice channels (7)30 voice channels (8)out-of-band signaling in time slot 17 (I)London, United Kingdom (II)Chicago, United States A.(I)-(1 4 5 8);(II)-(2 3 7 6) B.(I)-(2 4 7 8);(II)-(1 3 5 6) C.(I)-(1 4 7 8);(II)-(2 3 5 6) D.(I)-(1 3 7 8);(II)-(2 4 5 6) Answer: C Explanation: PRI is the standard for connections to offices. It's based on a T1 line in the US, and E1 line in Europe. The T1 consists of 24 channels, the E1 of 32. PRI has varying number of channels depending on the country. In North American and Japan, it is 23xB (B channels) + 1xD (D channel) (23 64Kbps digital channels + 1 64Kbps signaling/control channel) on a T1 1.544 Mbps. In Europe and Australia it's 30xB + 1xD on an E1 2.048 Mbps (One timeslot on the E1 is used for synchronization purposes and is not considered to be a B or D channel.)