

**Examination questions for the course in “Computer networks”**

<b>Operational level</b>							
<b>Computer networks</b>							
<b>Questions</b>							
O/T – specifies the nature of the question (obligatory, time demanding)							
<b>No.</b>	<b>O/T</b>	<b>Question</b>	<b>Correct answer</b>				
1.	○	The logical topology of a computer network describes: A. the structure of physical links, B. the way in which network devices communicate with one another, C. the arrangement of computers in a building, D. the arrangement of computers in a room.	<table border="1" style="width: 100px; height: 100px;"> <tr><td> </td></tr> <tr><td style="text-align: center;">B</td></tr> <tr><td> </td></tr> <tr><td> </td></tr> </table>		B		
B							
2.	○	What is the diameter of the 12 AWG wire when we know that the diameter of the 6 AWG is 4.115: A. 0.812, B. 2.906, C. 2.053, D. 1.291.	<table border="1" style="width: 100px; height: 100px;"> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td style="text-align: center;">C</td></tr> <tr><td> </td></tr> </table>			C	
C							
3.	○	In which layer of the ISO/OSI model does switch function? A. first, B. second, C. third, D. fourth.	<table border="1" style="width: 100px; height: 100px;"> <tr><td> </td></tr> <tr><td style="text-align: center;">B</td></tr> <tr><td> </td></tr> <tr><td> </td></tr> </table>		B		
B							
4.	○	What is a collision domain? A. a separate company network, B. a reserved set of domain names, C. a mechanism blocking the possibility of assigning the same IP address to several stations, D. separation of the network traffic among designated stations to limit the occurrence of collisions.	<table border="1" style="width: 100px; height: 100px;"> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td style="text-align: center;">D</td></tr> </table>				D
D							
5.	○	Which category of a UTP cable can be used with networks operating at 1Gb/s? A. 3, B. 4, C. 5,	<table border="1" style="width: 100px; height: 100px;"> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td style="text-align: center;">D</td></tr> </table>				D
D							

6.	<input type="radio"/>	<p>What is a transmission medium?</p> <p>A. Wires designed for current transmission,  B. Wires connecting devices in a computer network,  C. A material substance through which data is transmitted,  D. A method of establishing connection.</p>	<input type="text"/> <input type="text"/> <input type="text" value="C"/> <input type="text"/>
7.	<input type="radio"/>	<p>Which port is the default port for an SMTP server?</p> <p>A. 23,  B. 25,  C. 21,  D. 995.</p>	<input type="text"/> <input type="text" value="B"/> <input type="text"/> <input type="text"/>
8.	<input type="radio"/>	<p>Which layer is IP protocol included in in the ISO/OSI model?</p> <p>A. 2,  B. 3,  C. 4,  D. 5.</p>	<input type="text"/> <input type="text" value="B"/> <input type="text"/> <input type="text"/>
9.	<input type="radio"/>	<p>A proxy server is designed to:</p> <p>A. let only authorized addresses access an internal network, and act as a means of network control,  B. act as a means of network control,  C. let only authorized addresses inside an internal network,  D. block unauthorized web services.</p>	<input type="text" value="A"/> <input type="text"/> <input type="text"/> <input type="text"/>
10.	<input type="radio"/>	<p>Telnet makes it possible to:</p> <p>A. establish a connection with a remote computer via a graphic display terminal,  B. send files to a remote computer,  C. manage a computer remotely,  D. use a character terminal remotely.</p>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text" value="D"/>
11.	<input type="radio"/>	<p>VLAN is:</p> <p>A. a local network,  B. a local network "connected" through a wide area network,  C. a virtual connection to a local network,  D. a virtual network access point.</p>	<input type="text"/> <input type="text" value="B"/> <input type="text"/> <input type="text"/>

12.	<input type="radio"/>	<p>The maximum length of an UTP cable between active devices from the patch panel to the socket should be:</p> <p>A. 95m, B. 100m, C. 50m, D. 80m.</p>	<table border="1"> <tr><td>A</td></tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> </table>	A			
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13.	<input type="radio"/>	<p>In order to prevent modal dispersion in a multimode fibre, we can:</p> <p>A. change the source of light to laser, B. reduce the length of the optical fibre, C. replace the fibre optic connectors, D. use a gradient fibre.</p>	<table border="1"> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td>D</td></tr> </table>				D
D							
14.	<input type="radio"/>	<p>An STP cable is used:</p> <p>A. where there is a risk of mechanical damage of the cable in use, B. where there occurs increased external interference, C. where there is a risk of flooding the cable in use, D. where there is a possibility.</p>	<table border="1"> <tr><td> </td></tr> <tr><td>B</td></tr> <tr><td> </td></tr> <tr><td> </td></tr> </table>		B		
B							
15.	<input type="radio"/>	<p>What logical topology is based on application of a CSMA/CD protocol?</p> <p>A. bus type, B. ring type, C. star type, D. dual-ring type.</p>	<table border="1"> <tr><td>A</td></tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> </table>	A			
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16.	<input type="radio"/>	<p>What network technology features embedded QoS mechanisms?</p> <p>A. Ethernet, B. ATM, C. DQDB, D. CDDI.</p>	<table border="1"> <tr><td> </td></tr> <tr><td>B</td></tr> <tr><td> </td></tr> <tr><td> </td></tr> </table>		B		
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17.	<input type="radio"/>	<p>DQDB is an example of which type of topology?</p> <p>A. tree type, B. bus type, C. dual bus type, D. mesh type.</p>	<table border="1"> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td>C</td></tr> <tr><td> </td></tr> </table>			C	
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18.	<input type="radio"/>	<p>DNS is:</p> <ul style="list-style-type: none"> <li>A. a server of catalogue services,</li> <li>B. a dynamic name server,</li> <li>C. an incoming mail server,</li> <li>D. a domain name system.</li> </ul>	<div style="border: 1px solid black; width: 40px; height: 40px; margin: 0 auto; display: flex; flex-direction: column; align-items: center; justify-content: center;"> <div style="border: 1px solid black; width: 100%; height: 100%;"></div> <div style="border: 1px solid black; width: 100%; height: 100%;"></div> <div style="border: 1px solid black; width: 100%; height: 100%;"></div> <div style="border: 1px solid black; width: 100%; height: 100%; text-align: center;">D</div> </div>
19.	<input type="radio"/>	<p>DHCP is:</p> <ul style="list-style-type: none"> <li>A. a server enabling system clock synchronisation,</li> <li>B. a service of remote station control,</li> <li>C. a server enabling dynamic station configuration,</li> <li>D. a service of copying documents in the background.</li> </ul>	<div style="border: 1px solid black; width: 40px; height: 40px; margin: 0 auto; display: flex; flex-direction: column; align-items: center; justify-content: center;"> <div style="border: 1px solid black; width: 100%; height: 100%;"></div> <div style="border: 1px solid black; width: 100%; height: 100%;"></div> <div style="border: 1px solid black; width: 100%; height: 100%; text-align: center;">C</div> <div style="border: 1px solid black; width: 100%; height: 100%;"></div> </div>
20.	<input type="radio"/>	<p>A MAC sublayer of the second layer of the ISO/OSI model in a IEEE 802.3 standard contains:</p> <ul style="list-style-type: none"> <li>A. a collision detection protocol,</li> <li>B. a network access protocol,</li> <li>C. a packet routing setting protocol,</li> <li>D. a mechanism of abnormality correction.</li> </ul>	<div style="border: 1px solid black; width: 40px; height: 40px; margin: 0 auto; display: flex; flex-direction: column; align-items: center; justify-content: center;"> <div style="border: 1px solid black; width: 100%; height: 100%;"></div> <div style="border: 1px solid black; width: 100%; height: 100%; text-align: center;">B</div> <div style="border: 1px solid black; width: 100%; height: 100%;"></div> <div style="border: 1px solid black; width: 100%; height: 100%;"></div> </div>
21.	<input type="radio"/>	<p>Setting a Profibus DP master includes:</p> <ul style="list-style-type: none"> <li>A. entering the network, assigning a network name and a DP address, selecting the communication speed,</li> <li>B. assigning a network name, I/O addresses, a DPV profile,</li> <li>C. entering the ID address of the DP master, slave addresses.</li> </ul>	<div style="border: 1px solid black; width: 40px; height: 40px; margin: 0 auto; display: flex; flex-direction: column; align-items: center; justify-content: center;"> <div style="border: 1px solid black; width: 100%; height: 100%; text-align: center;">A</div> <div style="border: 1px solid black; width: 100%; height: 100%;"></div> <div style="border: 1px solid black; width: 100%; height: 100%;"></div> </div>
22.	<input type="radio"/>	<p>Setting a Slave in a Profibus DP network includes:</p> <ul style="list-style-type: none"> <li>A. entering a DP address, selecting the communication speed, entering the I/O addresses in the slave in the Master memory,</li> <li>B. entering the Master address, the Slave address, the communication speed.</li> </ul>	<div style="border: 1px solid black; width: 40px; height: 40px; margin: 0 auto; display: flex; flex-direction: column; align-items: center; justify-content: center;"> <div style="border: 1px solid black; width: 100%; height: 100%; text-align: center;">A</div> <div style="border: 1px solid black; width: 100%; height: 100%;"></div> <div style="border: 1px solid black; width: 100%; height: 100%;"></div> </div>
23.	<input type="radio"/>	<p>What is the topology type of a Profibus DP network?</p> <ul style="list-style-type: none"> <li>A. ring type,</li> <li>B. bus type,</li> <li>C. tree type.</li> </ul>	<div style="border: 1px solid black; width: 40px; height: 40px; margin: 0 auto; display: flex; flex-direction: column; align-items: center; justify-content: center;"> <div style="border: 1px solid black; width: 100%; height: 100%;"></div> <div style="border: 1px solid black; width: 100%; height: 100%; text-align: center;">B</div> <div style="border: 1px solid black; width: 100%; height: 100%;"></div> </div>
24.	<input type="radio"/>	<p>The bus of a Profibus network features terminators. Which of the terminators of the bus of Profibus DP have to be enabled:</p> <ul style="list-style-type: none"> <li>A. on each DP-Slave module,</li> <li>B. on extreme stations of the bus,</li> <li>C. on the Profibus DP master.</li> </ul>	<div style="border: 1px solid black; width: 40px; height: 40px; margin: 0 auto; display: flex; flex-direction: column; align-items: center; justify-content: center;"> <div style="border: 1px solid black; width: 100%; height: 100%; text-align: center;">A</div> <div style="border: 1px solid black; width: 100%; height: 100%;"></div> <div style="border: 1px solid black; width: 100%; height: 100%;"></div> </div>
25.	<input type="radio"/>	<p>Replacing a damaged Profibus DP-Slave requires:</p> <ul style="list-style-type: none"> <li>A. setting the address of a new slave, connecting it to the network, connecting the I/O,</li> <li>B. setting the address, connecting the slave and setting the network anew,</li> </ul>	<div style="border: 1px solid black; width: 40px; height: 40px; margin: 0 auto; display: flex; flex-direction: column; align-items: center; justify-content: center;"> <div style="border: 1px solid black; width: 100%; height: 100%; text-align: center;">A</div> </div>



32	○	<p>What method of network access is applied in a single master Profibus DP network?</p> <ul style="list-style-type: none"><li>A. Cyclical polling,</li><li>B. Token passing,</li><li>C. CSMA/CD,</li><li>D. CSMA/CA,</li><li>E. Token passing.</li></ul>	<table border="1"><tr><td>A</td></tr><tr><td> </td></tr><tr><td> </td></tr><tr><td> </td></tr><tr><td> </td></tr></table>	A				
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