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КОМПЛЕКТ ОЦЕНОЧНЫХ СРЕДСТВ ПО ПРОМЕЖУТОЧНОЙ АТТЕСТАЦИИ
(дифференцированный зачет)
ОП 09. Технический английский язык

по специальности 11.02.08 Средства связи с подвижными объектами

Дифференцированный зачет является промежуточной формой контроля, подводит итог освоения ОП 09. Технический английский язык для проверки освоения профессиональных компетенций (ПК) и общих компетенций (ОК):

- ПК.1.1. Выполнять монтаж и первичную инсталляцию оборудования мобильной связи;
- ПК.2.3. Обеспечивать работоспособность оборудования мультисервисных сетей;
- ПК.3.1. Использовать программно-аппаратные средства защиты информации в системах мобильной связи.
- ОК 1. Понимать сущность и социальную значимость своей будущей профессии, проявлять к ней устойчивый интерес
- ОК 2. Организовывать собственную деятельность, выбирать типовые методы и способы выполнения профессиональных задач, оценивать их эффективность и качество
- ОК 3. Принимать решения в стандартных и нестандартных ситуациях и нести за них ответственность
- ОК 4. Осуществлять поиск и использование информации, необходимой для эффективного выполнения профессиональных задач, профессионального и личностного развития
- ОК 5. Использовать информационно-коммуникационные технологии в профессиональной деятельности
- ОК 6. Работать в коллективе и команде, эффективно общаться с коллегами, руководством, потребителями
- ОК 7. Брать на себя ответственность за работу членов команды (подчиненных), результат выполнения заданий
- ОК 8. Самостоятельно определять задачи профессионального и личностного развития, заниматься самообразованием, осознанно планировать повышение квалификации
- ОК 9. Ориентироваться в условиях частой смены технологий в профессиональной деятельности

Результатом освоения ОП 09. Технический английский язык являются освоенные умения и усвоенные знания.

В результате освоения ОП 09. Технический английский язык студент должен уметь:

Уметь:

- У1 - общаться (устно и письменно) на иностранном языке на профессиональные и повседневные темы;
- У2 - переводить (со словарем) иностранные тексты профессиональной направленности;
- У3 - самостоятельно совершенствовать устную и письменную речь, пополнять словарный запас.

В результате освоения ОП 09. Технический английский язык студент должен знать:

Знать:

31 - лексический (1200 - 1400 лексических единиц) и грамматический минимум, необходимый для чтения и перевода (со словарем) иностранных текстов профессиональной направленности.

Дифференцированный зачёт по ОП 09. Технический английский язык проводится в форме тестирования.

Тест содержит 100 вопросов (суммарно тестовых позиций и теоретических вопросов с кратким ответом), выбираемых случайным образом из блока заданий по 10 вопросов (первый блок 50 вопросов закрытого типа, второй блок 50 теоретических вопросов с кратким ответом).

Время тестирования – 90 минут (по 2 минуты на каждый вопрос тестовых позиций и по 2,5 минуты на краткие ответы теоретических вопросов). Вес критерия одного вопроса 0,5 балла, вес критерия 20 вопросов – 10 баллов.

Шкала оценивания образовательных результатов:

Оценка	Критерии
«отлично»	Студент набрал 10-9 баллов (по весу критерия)
«хорошо»	Студент набрал 8-7 баллов (по весу критерия)
«удовлетворительно»	Студент набрал 6-5 баллов (по весу критерия)
«неудовлетворительно»	Студент набрал 4-0 балла (по весу критерия)

Блок заданий закрытого типа Формируемые ПК 1.1., ПК 2.3, ПК 3.1 ОК1, ОК2, ОК3, ОК4, ОК5, ОК6, ОК7, ОК8, ОК9		
№	Вопрос	Варианты ответа
1	What is the size of the picosote?	1 to 50 m;
		2 to 500 m;
		3 to 250 m;
		4 to 300 m
2	What services does GSM provide?	1 Datatransmission
		2 transfer of documents to the display
		3 all these services
		4 Speechtransmission
3	Which service provides call diverting?	1 fixing the movement of a mobile subscriber
		2 transferring an incoming call to another number
		3 Mobilestationmaintenance
		4 Calltransmissionreliability
4	What is used to provide access to paid mobile communication services when the user moves?	1 tube
		2 SIM card
		3 Transceiverequipment
		4 Signalsystem
5	Why is there a need for GSM development?	1 due to the rapid growth of mobile telephony
		2 due to incompatibility of equipment developed in different European countries
		3 duetocompetitiveconsiderations
		4 due to the need to use a new element base

6	What is the size of the macrosota?	1	upto 500 m;
		2	over 150 km;
		3	over 100 km;
		4	up to 35 km, sometimes 70 km.
7	What is GMSC?	1	gateway providing access to BSS;
		2	gateway providing access to MSC;
		3	gateway providing access to 2G;
		4	gateway providing access to wired landline phone networks.
8	Which organization has developed the basic GSM standards?	1	IEEE
		2	ITU
		3	ETSI.
		4	ISO
9	Which of the GSM services was missing in the previous systems?	1	packet data transmission
		2	asynchronous data transmission
		3	transfer of documents to the display
		4	short message service
10	How is the call routing provided?	1	BaseStationController (BSC)
		2	Mobile Communications Switching Center (MSC)
		3	BaseTransceiverStation (BTS)
		4	Transcoder (TCE)
11	What is a closed user group?	1	withlimitedoutgoingcommunication
		2	withlimitedincomingcommunication
		3	with preferential communication in the group
		4	withpriorityaccess
12	What is the wave length of mobile communication?	1	the number of vibrations per second, measured in meters;
		2	the distance from the receiver to the transmitter, measured in meters;
		3	the length of one oscillation, measured in kilometers;
		4	the length of one oscillation, measured in meters.
13	Which service provides call forwarding?	1	fixing the movement of a mobile subscriber
		2	transferring an incoming call to another number
		3	mobile station maintenance
		4	call transmission reliability
14	Where does the database of subscribers permanently registered on the network contain?	1	BaseStationController (BSC)
		2	(2) Business register (VLR)
		3	((3) Base Transceiver Station (BTS)
		4	(4) Home register (HLR)
15	What is a special term, which means «to obtain stored information from a computer`s memory	1	hardware
		2	multimedia
		3	trunking network
		4	Access
16	What elements are included in the block diagram of the mobile station of mobile communication systems?	1	control unit, transceiver unit, antenna unit
		2	transceiverunit, radiotransmitter
		3	antennaunit, radiotransmitter
		4	controlunit, transceiverunit

17.	What device transmits electromagnetic energy from radio transmitters to free space?	1	frequencygeneratorfrequency
		2	modulator
		3	powersupply
		4	antenna
18.	How is the database on the operation of a mobile station outside the HLR-controlled zone provided?	1	BaseStationController (BSC)
		2	visitorlocationregister(VLR)
		3	baseTransceiverstation (BTS)
		4	Homeregister (HLR)
19.	Which module provides the subscriber with authentication and access to GSM services?	1	basestationcontroller
		2	basestation
		3	SIM card
		4	radiotransmitter
20.	Which device handles the call in the local area and has information about the current location?	1	basestationcontroller
		2	visitorlocationregister (VLR)
		3	mobilecommunicationswitchingcenter
		4	homeregister
21.	What is GPRS?	1	trunking network
		2	home register
		3	satellite navigation
		4	packet data transmission technology.
22.	What equipment does the base station subsystem contain?	1	basestationcontroller
		2	transcoder
		3	SIM card
		4	radio transmitter
23.	What is the name of a low-power base station owned by the operator and using IP/internet as a transport network?	1	macrosota
		2	database
		3	picosota
		4	microsota
24.	Which number is stored in the home register to identify the identity of the subscriber?	1	International Mobile Subscriber Identification Number (IMSI);
		2	(2) Temporary Mobile Subscriber Identification Number (TMSI)
		3	(3) Mobile Station Roaming Service Number (MSRN)
25.	What is provided for with a softer transfer (softer handover) during the handover?	1	determining the location of the mobile station
		2	switching the connection to another base station
		3	temporary simultaneous operation of a mobile station with more than one base station
		4	combining signals coming from different base stations
26.	Which of the following signals refers to the movement control level?	1	call (SETUP)
		2	requesttochangelocation
		3	channelmodemodification
		4	encryptionmodecommand
27.	Where does the database of permanently registered on the network subscribers contain?	1	BaseStationController (BSC)
		2	Businessregister (VLR)
		3	BaseTransceiverstation (BTS)
		4	Homeregister (HLR)
28.	What is included in the base station equipment?	1	a set of transceiver equipment;
		2	antenna-feeder devices, connecting line equipment;
		3	power supply devices, air conditioning, security and fire alarm

			systems.
		4	allthefollowing
29.	What is the reflector used for?	1	Signal amplification
		2	Signal reflection
		3	Signal emission
		4	Signal reception
30.	What is diffraction?	1	overlay of radio waves
		2	distortion of radio waves
		3	avoiding small obstacles
		4	all the answers are correct
31	What elements does the functional scheme of the mobile communication system include?	1	antenna unit
		2	mobile station
		3	base station
		4	switching center
32	What elements are included in the block diagram of the mobile station of mobile communication systems?	1	control unit
		2	base station
		3	transceiver unit
		4	antenna unit
33	What equipment is used to operate and maintain the GSM network?	1	mobile communications switching center
		2	OMC
		3	NMC
		4	ADC
34	What is a location zone in mobile communications?	1	The radio capture area of one transceiver of one BTS
		2	the area in which the subscriber is most likely to be moving at the moment;
		3	area served by one network operator
		4	MSC service area
35	What is the Short message Broadcast channel (Call channel) used for?	1	transmitting a network connection request
		2	maintenance
		3	transmission of service information from MS during call establishment
		4	broadcast signal "call" to all stations of the location zone;
36	How does the registration procedure begin each time you turn on the phone after choosing a network?	1	search for the BCCH channel with the highest signal strength
		2	authentication procedures
		3	IMSI number transfers
		4	call signal transmission
37	What is used for sending and receiving radio signals?	1	antenna
		2	storage devices
		3	battery
		4	software
38	What operation is performed when the subscriber is first installed on the network?	1	subscriber authentication
		2	IMSI pinning
		3	Data updates in HLR
		4	Data updates in VLR
39	What is the name of the wave change in the strength of the electromagnetic field in free space?	1	interference of a radio wave
		2	radio wave
		3	electromagnetic oscillation
		4	wave absorption
40	What ranges is the radio	1	very low frequency, low frequency, high frequency, very high

	spectrum divided into?		frequency
		2	low frequency, high frequency, very high frequency, over high frequency
		3	low frequency, high frequency
		4	low frequency, high frequency, very high frequency
41	What is the name of a device designed to generate radio frequency oscillations and control them in order to transmit information without using a wired channel?	1	Generator
		2	Modulator
		3	power supply
		4	radio transmitter
42	What is the speed of propagation of radio waves?	1	30,000 km/s
		2	300,000 km/s
		3	600,000 km/s
43	What are the three main parts of a radio transmitter?	1	generator, modulator, antenna
		2	RF path, antenna, modulator
		3	RF path, modulator, power source
		4	manipulator, galvanic battery, antenna
44	Which device should amplify the received signal and isolate the modulating voltage?	1	transmitter
		2	receiver
		3	amplifier
		4	repeater
45	What does not apply to the main parameters of radio channels?	1	type of multi-station access
		2	wavelength
		3	frequency
46	What is the name of the zone on the earth's surface, within which the propagation of radio waves from the transmitter to the receiver is ensured?	1	Overlap
		2	coverage area
		3	service area
47	Which of these systems does not relate to satellite communications?	1	MPLS
		2	LEO - Low Earth Orbit
		3	VSAT
48	What parameter characterizes directional properties and takes into account losses in the antenna?	1	Efficiency factor
		2	Gain factor
		3	Wave resistance
		4	Directional factor
49	Which of the standards does not apply to trunking communication?	1	Delta
		2	TETRA
		3	there is no right answer
50	What kind of broadcasting ensures the absence of interference, low cost of subscriber equipment, energy intensity?	1	wireless
		2	wired
		3	TV broadcasting
		4	telex

Блок заданий открытого типа
Формируемые ПК 1.1., ПК 2.3, ПК 3.1
ОК1, ОК2, ОК3, ОК4, ОК5, ОК6, ОК7, ОК8, ОК9

1. What is GPS?
2. What is RFID?
3. What the word «barring» means?
4. Explain the meaning - Real-time locating systems (RTLS)?
5. What is Near Field Communication (NFC)?
6. What is electromagnetic compatibility?
7. What you can say about a touchscreen?
8. Explain the meaning – GSM?
9. What is USB?
10. What is included in the base station equipment?
11. What does the technical operation of base stations consist of?
12. What you can say about MMS?
13. What is ESN (Electronic Serial Number)?
14. What you can say about OS – an Operating System?
15. What is a smart card reader?
16. What is - interconnection?
17. Explain the meaning- DSL (Digital Subscriber Line)?
18. How are the antennas divided depending on the purpose?
19. What is necessary to increase the sensitivity of the receiver?
20. What determines the wind load?
21. What is the purpose of the transmitting antenna?
22. What is the aerial?
23. What components of a radio system serves to retain the definite frequency?
24. What do you know about USB (Universal Serial Bus)?
25. What are the main components of a transmitter?
26. How are radio transmitting devices divided according to the type of work?
27. What groups are high-rise structures divided into?
28. Define "interchannel interference"?
29. What is cell phone?
30. What is a contactless card?
31. What is included in the maintenance of antenna supports?
32. Explain the principle of channel separation in the GSM standard?
33. Explain the process of relay transmission (handover) in cellular communication?
34. What is included in the maintenance of antenna supports?
35. Name the types of mobile communication systems in the Russian Federation?
36. What is used to place antenna equipment for various purposes?
37. How can communication between information sources be carried out?
38. In what spheres of communication is computer networking used?
39. By what means are exchange networks interconnected?
40. What is called duplex radio transmission?
41. What is polythene?
42. How are radio transmitting devices divided according to the method of transportation?
43. What are the requirements for radio transmitting devices?
44. How can the sensitivity of the receiver be limited?
45. What determines the home register when there is a call service from a subscriber of a fixed network to a subscriber of a GSM mobile network?
46. What is the pricing system in Russia for cellular services?
47. What device is called an antenna?
48. What is a wireless network?
49. What is the basis of the principle of determining the distance to the target using a radar?

station?

50. How are radio transmitting devices divided into according to their purpose?

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