

Roll No.-----

प्रश्नपुस्तिका क्रमांक
Question Booklet No.

466737

O.M.R. Serial No.

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BCA (Sixth Semester) Examination, 2024-25

(NEP)

(BCA6002)

INTERNET OF THINGS

K-702

Paper Code							
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(To be filled in the
OMR Sheet)

प्रश्नपुस्तिका सीरीज
Question Booklet Series

A

Time : 1:30 Hours]

[Maximum Marks-75

SEA

Instructions to the Examinee :

1. Do not open the booklet unless you are asked to do so.
2. The booklet contains 100 questions. Examinee is required to answer 75 questions in the OMR Answer-Sheet provided and not in the question booklet. All questions carry equal marks.
3. Examine the Booklet and the OMR Answer-Sheet very carefully before you proceed. Faulty question booklet due to missing or duplicate pages/questions or having any other discrepancy should be got immediately replaced.

(Remaining instructions on the last page)

परीक्षार्थियों के लिए निर्देश :

1. प्रश्न-पुस्तिका को तब तक न खोलें जब तक आपसे कहा न जाए।
2. प्रश्न-पुस्तिका में 100 प्रश्न हैं। परीक्षार्थी को 75 प्रश्नों को केवल दी गई OMR आन्सर-शीट पर ही हल करना है, प्रश्न-पुस्तिका पर नहीं। सभी प्रश्नों के अंक समान हैं।
3. प्रश्नों के उत्तर अंकित करने से पूर्व प्रश्न-पुस्तिका तथा OMR आन्सर-शीट को सावधानीपूर्वक देख लें। दोषपूर्ण प्रश्न-पुस्तिका जिसमें कुछ भाग छपने से छूट गए हों या प्रश्न एक से अधिक बार छप गए हो या उसमें किसी अन्य प्रकार की कमी हो, तो उसे तुरन्त बदल लें।

(शेष निर्देश अन्तिम पृष्ठ पर)

1. What is the main purpose of routing in IoT networks ?
 - (A) To play games online
 - (B) To send messages to friends
 - (C) To find the best path for data to travel
 - (D) To make phone calls
2. Which of these is an example of an IoT device in your home ?
 - (A) A paper book
 - (B) A smart thermostat
 - (C) A wooden chair
 - (D) A regular pencil
3. What helps IoT devices talk to each other ?
 - (A) Sign language
 - (B) Written letters
 - (C) Wireless signals
 - (D) Smoke signals
4. Why do IoT devices need to save power ?
 - (A) To help save money on electricity
 - (B) To make them look prettier
 - (C) To make them heavier
 - (D) To make them louder
5. What is a network protocol ?
 - (A) A set of rules for devices to communicate
 - (B) A type of computer game
 - (C) A kind of internet password
 - (D) A charging cable

6. What happens when IoT devices share data ?
- (A) They make loud noises
 - (B) They change color
 - (C) They help each other work better
 - (D) They turn off automatically
7. What is an important feature of IoT routing ?
- (A) It needs lots of power
 - (B) It works with few messages
 - (C) It only works during daytime
 - (D) It requires constant human help
8. Which is a common problem in IoT networks ?
- (A) Devices moving too fast
 - (B) Battery life running low
 - (C) Devices being too heavy
 - (D) Networks being too colorful
9. How do IoT devices know where to send information ?
- (A) They guess randomly
 - (B) They ask a person
 - (C) They follow routing tables
 - (D) They always send to the same place
10. What makes a good IoT network ?
- (A) Using lots of power
 - (B) Working reliably with little energy
 - (C) Having very few devices
 - (D) Making loud beeping sounds

11. What is a sensor used for ?
- (A) To play video games
 - (B) To detect changes in the environment
 - (C) To make phone calls
 - (D) To write messages
12. Which of these is an example of a sensor we use every day ?
- (A) A pencil
 - (B) A paper clip
 - (C) A thermometer
 - (D) A rubber band
13. Where might you find a motion sensor ?
- (A) In automatic doors at the supermarket
 - (B) Inside a pencil case
 - (C) Under a desk
 - (D) Inside a book
14. What does a temperature sensor help us know ?
- (A) What time it is
 - (B) How loud something is
 - (C) How hot or cold something is
 - (D) What color something is
15. Which sensor helps keep us safe at home ?
- (A) TV remote
 - (B) Light switch
 - (C) Smoke detector
 - (D) Door handle

16. What can a light sensor do ?
- (A) Make sounds
 - (B) Turn lights on when it gets dark
 - (C) Cook food
 - (D) Clean rooms
17. Which device uses sensors to know when you touch it ?
- (A) A regular book
 - (B) A wooden table
 - (C) A tablet screen
 - (D) A paper notebook
18. What might a weather sensor tell us ?
- (A) What movies are playing
 - (B) If it's going to rain
 - (C) What time to go to bed
 - (D) What to eat for lunch
19. How do sensors help our homes be "smart" ?
- (A) They do our homework
 - (B) They make our lunch
 - (C) They detect when we need help
 - (D) They paint our walls
20. Which sensor helps cars park safely ?
- (A) Distance sensor
 - (B) Time sensor
 - (C) Color sensor
 - (D) Sound sensor

21. What is IoT ?
- (A) Internet of Trees
 - (B) Internet of Things
 - (C) Internet of Time
 - (D) Internet of Television
22. Which device helps make a home "smart" ?
- (A) A regular light bulb
 - (B) A smart thermostat
 - (C) A regular doorbell
 - (D) A standard clock
23. What can a smart doorbell do ?
- (A) Only ring when pressed
 - (B) Show who is at your door on your phone
 - (C) Make coffee
 - (D) Clean the floor
24. How do smart lights help at home ?
- (A) They never need to be replaced
 - (B) They can only turn on and off
 - (C) They can change colors and brightness
 - (D) They work without electricity
25. What is a common use of IoT in schools ?
- (A) Smart attendance tracking
 - (B) Making lunch
 - (C) Cleaning windows
 - (D) Painting walls

26. Which is an example of IoT in healthcare ?

- (A) Paper charts
- (B) Regular thermometers
- (C) Smart health monitors
- (D) Regular watches

27. How can IoT help keep a home safe ?

- (A) By painting the walls
- (B) Through security cameras
- (C) By cleaning windows
- (D) By watering plants

28. What can smart kitchen appliances do ?

- (A) Tell you when food is running low
- (B) Cook food by themselves
- (C) Clean the house
- (D) Drive a car

29. How do motion sensors work in a smart home ?

- (A) They make coffee
- (B) They detect movement
- (C) They cook food
- (D) They clean floors

30. What is a smart thermostat used for ?

- (A) Making phone calls
- (B) Playing music
- (C) Controlling home temperature
- (D) Washing dishes

31. How can IoT help in farming ?
- (A) By controlling water and temperature
 - (B) By painting fences
 - (C) By driving tractors
 - (D) By cleaning barns
32. What is a benefit of smart lighting ?
- (A) It never breaks
 - (B) It saves energy
 - (C) It cooks food
 - (D) It cleans rooms
33. How can IoT help with pet care ?
- (A) It walks the dog
 - (B) It trains pets
 - (C) It monitors pet food and water
 - (D) It grooms pets
34. What can smart watches do ?
- (A) Cook meals
 - (B) Track health and exercise
 - (C) Clean houses
 - (D) Drive cars
35. How do smart refrigerators help ?
- (A) They make ice cream
 - (B) They drive to the store
 - (C) They track food items
 - (D) They wash dishes

36. What is a voice assistant ?
- (A) A robot that cleans
 - (B) A device that follows voice commands
 - (C) A machine that cooks
 - (D) A tool that paints
37. How can IoT help save energy ?
- (A) By turning off unused lights
 - (B) By cooking faster
 - (C) By cleaning better
 - (D) By painting walls
38. What is a smart garden system ?
- (A) A robot that pulls weeds
 - (B) A system that waters plants automatically
 - (C) A machine that picks flowers
 - (D) A tool that cuts grass
39. How do smart cameras help in security ?
- (A) They cook food
 - (B) They clean windows
 - (C) They watch for unusual activity
 - (D) They paint walls
40. What is a smart door lock ?
- (A) A lock that needs a key
 - (B) A lock you can control with your phone
 - (C) A lock that paints itself
 - (D) A lock that makes noise

41. What does MAC stand for in computer networks ?
- (A) Machine Access Code
 - (B) Multiple Access Control
 - (C) Medium Access Control
 - (D) Mobile Access Connection
42. Which of these is most like how MAC protocol works ?
- (A) Taking turns talking in class
 - (B) Everyone shouting at once
 - (C) Only one person allowed to talk all day
 - (D) Writing notes instead of talking
43. What is the main job of MAC protocol in IoT devices ?
- (A) To make devices faster
 - (B) To help devices share the network fairly
 - (C) To make the internet work
 - (D) To save battery power only
44. When IoT devices want to send messages at the same time, what happens ?
- (A) All messages get lost
 - (B) They take turns using MAC protocol
 - (C) The biggest device goes first
 - (D) They wait for the internet to work better
45. Which is an example of a simple MAC protocol rule ?
- (A) Listen before talking
 - (B) Talk as loud as possible
 - (C) Never stop talking
 - (D) Ignore other devices

46. How does MAC protocol help IoT devices save energy ?
- (A) By making them work faster
 - (B) By turning them off completely
 - (C) By letting them sleep when not sending messages
 - (D) By using more battery power
47. What happens if IoT devices don't follow MAC protocol rules ?
- (A) Nothing changes
 - (B) Messages might crash into each other
 - (C) The internet stops working
 - (D) Devices work better
48. Which is most important for MAC protocol in IoT ?
- (A) Making devices more expensive
 - (B) Using more energy
 - (C) Helping devices work together nicely
 - (D) Making devices bigger
49. How is MAC protocol like a traffic light ?
- (A) It makes everything go faster
 - (B) It helps control when devices can send messages
 - (C) It uses green and red lights
 - (D) It stops all messages
50. What makes a MAC protocol good for IoT devices ?
- (A) It uses lots of power
 - (B) It's very complicated
 - (C) It's simple and saves energy
 - (D) It only works with big devices

51. What is IoT ?
- (A) A type of robot
 - (B) Internet of Things-devices connected to the internet
 - (C) A computer game
 - (D) A type of telephone
52. Which device below is NOT usually an IoT device ?
- (A) Smart doorbell
 - (B) Smart light bulb
 - (C) Paper notebook
 - (D) Smart thermostat
53. What do IoT devices need to work ?
- (A) Paint and crayons
 - (B) An internet connection
 - (C) A television
 - (D) A radio
54. What helps IoT devices talk to each other ?
- (A) A platform or system
 - (B) A microphone
 - (C) A camera
 - (D) A speaker
55. Why do we use IoT devices ?
- (A) To play video games only
 - (B) To make life easier and save time
 - (C) To watch movies
 - (D) To read books

56. Which is an example of an IoT device at home ?
- (A) A regular light switch
 - (B) A wooden chair
 - (C) A smart refrigerator
 - (D) A regular doorknob
57. What can IoT devices help us do ?
- (A) Only play music
 - (B) Only turn on lights
 - (C) Only open doors
 - (D) Many different helpful tasks
58. What is important for IoT devices to work safely ?
- (A) They need to be painted blue
 - (B) They need to be very big
 - (C) They need good security
 - (D) They need to make noise
59. How do people control IoT devices ?
- (A) By dancing
 - (B) Using apps on phones or tablets
 - (C) By singing
 - (D) By jumping
60. What is a benefit of using IoT devices ?
- (A) They make houses prettier
 - (B) They only work outside
 - (C) They need on electricity
 - (D) They can save energy

61. What is IoT mainly about ?
- (A) Playing video games
 - (B) Connecting everyday objects to the internet
 - (C) Writing stories
 - (D) Making phone calls
62. Which device below is NOT typically an IoT device ?
- (A) Smart thermostat
 - (B) Paper notebook
 - (C) Smart doorbell
 - (D) Smart light bulb
63. What is the main purpose of sensors in IoT devices ?
- (A) To make music
 - (B) To collect information
 - (C) To play games
 - (D) To draw pictures
64. Which is an example of how IoT helps at home ?
- (A) Turning lights on/off with your voice
 - (B) Writing with a pencil
 - (C) Reading a paper book
 - (D) Playing with toys
65. What does a smart home device need to work properly ?
- (A) Batteries only
 - (B) Internet connection
 - (C) Paint
 - (D) Water

66. How do IoT devices usually communicate with each other ?
- (A) Through mail
 - (B) By making sounds
 - (C) Through wireless networks
 - (D) Using string
67. Which is a benefit of using IoT devices ?
- (A) They never need power
 - (B) They make life easier by automating tasks
 - (C) They work without internet
 - (D) They only work during daytime
68. What is an important part of IoT security ?
- (A) Using strong passwords
 - (B) Leaving doors open
 - (C) Sharing passwords with everyone
 - (D) Never changing passwords
69. Which is a common IoT device in many homes ?
- (A) Wooden chair
 - (B) Paper calendar
 - (C) Smart speaker
 - (D) Regular pencil
70. How do people usually control their IoT devices ?
- (A) By writing letters
 - (B) Using smoke signals
 - (C) By yelling loudly
 - (D) Using smartphones or tablets

71. What does M2M stand for in technology ?
- (A) Machine-to-Mouse
 - (B) Machine-to-Machine
 - (C) Mouse-to-Machine
 - (D) Message-to-Message
72. Which of these is an example of M2M communication ?
- (A) A person sending a text message to another person
 - (B) A smart thermostat automatically adjusting the temperature
 - (C) Writing a letter to a friend
 - (D) Talking on the phone
73. Why is M2M communication important in our daily lives ?
- (A) It helps machines work together without human help
 - (B) It makes video games more fun
 - (C) It helps people write faster
 - (D) It makes computers bigger
74. Which device below uses M2M communication ?
- (A) A regular pencil
 - (B) A paper notebook
 - (C) A smart watch tracking your steps
 - (D) A regular wristwatch
75. In a smart home, what might M2M communication control ?
- (A) Paper books
 - (B) Wooden furniture
 - (C) Smart lights
 - (D) Regular windows

76. How does M2M communication help in weather stations ?
- (A) It makes rain fall faster
 - (B) It helps collect and send weather data automatically
 - (C) It makes clouds move
 - (D) It changes the temperature outside
77. What is one benefit of M2M communication ?
- (A) It makes computers heavier
 - (B) It uses more electricity
 - (C) It needs more human workers
 - (D) It saves time and reduces errors
78. Which of these is NOT an example of M2M communication ?
- (A) A vending machine reporting its inventory
 - (B) A person writing with a pencil
 - (C) A security camera sending alerts
 - (D) A smart meter reading electricity usage
79. What do machines need to communicate with each other ?
- (A) Special sensors and internet connection
 - (B) Paint and brushes
 - (C) Paper and pencils
 - (D) Books and magazines
80. How does M2M communication help in schools ?
- (A) It makes textbooks heavier
 - (B) It helps attendance systems work automatically
 - (C) It makes chairs more comfortable
 - (D) It makes walls stronger

81. What helps devices talk to each other ?
- (A) Magic spells
 - (B) The internet
 - (C) Paper airplanes
 - (D) Loud noises
82. Which of these is a smart device ?
- (A) A regular light bulb
 - (B) A wooden chair
 - (C) A smart speaker
 - (D) A regular pencil
83. What do we call it when tow devices share information ?
- (A) Connection
 - (B) Dancing
 - (C) Walking
 - (D) Jumping
84. Which device helps us connect to the internet at home ?
- (A) Toaster
 - (B) Router
 - (C) Lamp
 - (D) Clock
85. What do smart devices need to work ?
- (A) Sunshine
 - (B) Water
 - (C) Electricity
 - (D) Paint

86. Which is an example of devices working together ?
- (A) A book on a shelf
 - (B) A smart light turning on when you get home
 - (C) A pencil in a drawer
 - (D) A plant in the garden
87. What helps keep our smart devices safe ?
- (A) A blanket
 - (B) A password
 - (C) A hat
 - (D) A door
88. What do we call a group of connected devices ?
- (A) A network
 - (B) A family
 - (C) A team
 - (D) A crowd
89. Which device can control other smart devices ?
- (A) Regular watch
 - (B) Paper notebook
 - (C) Smartphone
 - (D) Regular doorbell
90. What do smart devices use to understand our commands ?
- (A) Mind reading
 - (B) Special software
 - (C) Guessing
 - (D) Drawing pictures

91. What is a digital sensor used for ?
- (A) To play video games
 - (B) To detect and measure changes in the environment
 - (C) To make phone calls
 - (D) To watch movies
92. Which of these is an example of an actuator ?
- (A) A thermometer
 - (B) A camera
 - (C) An electric motor
 - (D) A microphone
93. What does RFID stand for ?
- (A) Really Fast Internet Device
 - (B) Radio Frequency Information Display
 - (C) Radio Frequency Identification
 - (D) Really Fun Interactive Device
94. Where might you find RFID tags being used ?
- (A) In library books to track them
 - (B) In video games consoles
 - (C) In pencil cases
 - (D) In paper notebooks
95. Which statement about sensors is TRUE ?
- (A) Sensors only work during daytime
 - (B) Sensors can only measure temperature
 - (C) Sensors can detect different types of changes
 - (D) Sensors are only used in smartphones

96. What is the main purpose of a wireless sensor network ?
- (A) To play video games
 - (B) To collect and share information about the environment
 - (C) To make phone calls
 - (D) To watch television shows
97. Which of these could a wireless sensor help monitor in your school ?
- (A) The temperature in different classrooms
 - (B) What students had for lunch
 - (C) The color of students' shoes
 - (D) What games students play at recess
98. What is one thing that makes wireless sensors special ?
- (A) They need lots of wires to work
 - (B) They only work indoors
 - (C) They can work without being plugged in
 - (D) They must be used underwater
99. In a wireless sensor network, how do the sensors share information ?
- (A) Through paper messages
 - (B) By making loud noises
 - (C) Through radio waves
 - (D) By flashing lights
100. Which of these is an example of where wireless sensors might be used ?
- (A) In a toy store to count toys
 - (B) In a forest to detect fires
 - (C) In a library to read books
 - (D) In a kitchen to cook food

4. Four alternative answers are mentioned for each question as – A, B, C & D in the question booklet. The candidate has to choose the correct answer and mark the same in the OMR Answer-Sheet as per the direction :

Example :

Question :

- Q. 1 (A) ☒ (B) ☐ (C) ☐ (D) ☐
 Q. 2 (A) ☐ (B) ☒ (C) ☐ (D) ☐
 Q. 3 (A) ☒ (B) ☐ (C) ☐ (D) ☐

Illegible answers with cutting and over-writing or half filled circle will be cancelled.

5. Each question carries equal marks. Marks will be awarded according to the number of correct answers you have.
6. All answers are to be given on OMR Answer Sheet only. Answers given anywhere other than the place specified in the answer sheet will not be considered valid.
7. Before writing anything on the OMR Answer Sheet, all the Instructions given in it should be read carefully.
8. After the completion of the examination candidates should leave the examination hall only after providing their OMR Answer Sheet to the invigilator. Candidate can carry their Question Booklet.
9. There will be no negative marking.
10. Rough work, if any, should be done on the blank pages provided for the purpose in the booklet.
11. To bring and use of log-book, calculator, pager and cellular phone in examination hall is prohibited.
12. In case of any difference found in English and Hindi version of the question, the English version of the question will be held authentic.

Impt. On opening the question booklet, first check that all the pages of the question booklet are printed properly. If there is any discrepancy in the question booklet, then after showing it to the invigilator, get another question booklet of the same series.

4. प्रश्न-पुस्तिका में प्रत्येक प्रश्न के चार सम्भावित उत्तर- A, B, C एवं D हैं। परीक्षार्थी को उन चारों विकल्पों में से एक सही उत्तर छांटना है। उत्तर को OMR आन्सर-शीट में सम्बन्धित प्रश्न संख्या में निम्न प्रकार भरना है :

उदाहरण :

प्रश्न :

- प्रश्न 1 (A) ☒ (B) ☐ (C) ☐ (D) ☐
 प्रश्न 2 (A) ☐ (B) ☒ (C) ☐ (D) ☐
 प्रश्न 3 (A) ☒ (B) ☐ (C) ☐ (D) ☐

अपठनीय उत्तर या ऐसे उत्तर जिन्हें काटा या बदला गया है, या गोले में आधा भरकर दिया गया, उत्तर निरस्त कर दिया जाएगा।

5. प्रत्येक प्रश्न के अंक समान हैं। आपके जितने उत्तर सही होंगे, उन्हीं के अनुसार अंक प्रदान किये जायेंगे।
6. सभी उत्तर केवल ओ. एम. आर. उत्तर-पत्रक (OMR Answer Sheet) पर ही दिये जाने हैं। उत्तर-पत्रक में निर्धारित स्थान के अलावा अन्यत्र कहीं पर दिया गया उत्तर मान्य नहीं होगा।
7. ओ. एम. आर. उत्तर-पत्रक (OMR Answer Sheet) पर कुछ भी लिखने से पूर्व उसमें दिये गये सभी अनुदेशों को सावधानीपूर्वक पढ़ लिया जाये।
8. परीक्षा समाप्ति के उपरान्त परीक्षार्थी कक्ष निरीक्षक को अपनी OMR Answer Sheet उपलब्ध कराने के बाद ही परीक्षा कक्ष से प्रस्थान करें। परीक्षार्थी अपने साथ प्रश्न-पुस्तिका ले जा सकते हैं।
9. निगेटिव मार्किंग नहीं है।
10. कोई भी रफ कार्य, प्रश्न-पुस्तिका के अन्त में, रफ-कार्य के लिए दिए खाली पेज पर ही किया जाना चाहिए।
11. परीक्षा-कक्ष में लॉग-बुक, कैलकुलेटर, पेजर तथा सेल्युलर फोन ले जाना तथा उसका उपयोग करना वर्जित है।
12. प्रश्न के हिन्दी एवं अंग्रेजी रूपान्तरण में भिन्नता होने की दशा में प्रश्न का अंग्रेजी रूपान्तरण ही मान्य होगा।

महत्वपूर्ण : प्रश्नपुस्तिका खोलने पर प्रथमतः जाँच कर देख लें कि प्रश्न-पुस्तिका के सभी पृष्ठ भलीभाँति छपे हुए हैं। यदि प्रश्नपुस्तिका में कोई कमी हो, तो कक्षनिरीक्षक को दिखाकर उसी सिरिज की दूसरी प्रश्न-पुस्तिका प्राप्त कर लें।