

Instructions to Candidate

امیدواروں کے لیے ہدایات

अभ्यर्थियों के लिए निर्देश

1. Please read very carefully the instructions for filling up the OMR Answer Sheet.
براہ کرم ادوایم آر جواب نامہ بھرنے سے متعلق ہدایات پوری توجہ سے پڑھیے۔
कृप्या ओ० एम० आर० उत्तरावली भरने से संबंधित निर्देशों को ध्यानपूर्वक पढ़िये।
2. There is no negative marking in the test.
اس امتحان میں کوئی منفی مارکنگ نہیں ہے۔
इस जांच में कोई नकारात्मक मार्किंग नहीं है।
3. The use of calculator is not allowed.
کیلکولیٹر استعمال کرنے کی اجازت نہیں ہے۔
कैलकुलेटर उपयोग करने की अनुमति नहीं है।
4. Please hand over the OMR Sheet to the invigilator before leaving the examination hall. No pages should be torn out from the booklet.
براہ کرم امتحان گاہ چھوڑنے سے پہلے جواب نامہ نگران کے حوالے کریں۔ جواب نامے میں سے کوئی ورق پھاڑا جانا نہیں چاہئے۔
कृप्या परीक्षा कक्ष छोड़ने से पूर्व ओ० एम० आर० शीट निरीक्षक को सुपुर्द करें। ओ० एम० आर० शीट में से कोई पन्ना फाड़ा नहीं जाना चाहिए।
5. There shall be no re-checking/re-evaluation of answer sheet.
جواب ناموں کی دوبارہ جانچ/دوبارہ تحسیب نہیں کی جائے گی۔
उत्तर-पुस्तिकाओं का पुनर्निरीक्षण/पुनरांकलन नहीं किया जायेगा।

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1. Which of the following salt does not contain any water of crystallization?

- (a) Blue vitriol (b) Washing soda
(c) Baking soda (d) Gypsum

2. HCl is an Arrhenius acid because it gives :

- (a) H^+ ions in aqueous solution
(b) Cl^- ions in aqueous solution
(c) Both H^+ and Cl^- ions in aqueous solution
(d) None of these

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3. Which of the following remain unchanged on going down the group in the periodic table?

- (a) Valence electron (b) Atomic size
(c) Density (d) Metallic character

4. The major constituent of biogas is :

- (a) Propane (b) Acetylene
(c) Methane (d) Benzene

5. When copper powder is heated, it gets coated with :

- (a) Black copper oxide (b) Yellow copper oxide
(c) Red copper oxide (d) None of these

6. We store silver chloride in a dark colored bottle because it is :

- (a) A white solid (b) Undergoes redox reaction
(c) To avoid action by sunlight (d) None of these

7. Stainless steel is very useful material for our life. In stainless steel, iron is mixed with
- (a) ~~Ni~~ and Cr (b) Cu and Cr
(c) Ni and Cu (d) Cu and Au
8. Which of the following oxide(s) of iron would be obtained on prolonged reaction of iron with steam ?
- (a) FeO (b) Fe₂O₃
(c) ~~Fe₃O₄~~ (d) Fe₂O₃ and Fe₃O₄
9. Which of the following is not a mineral acid?
- (a) Hydrochloric acid (b) ~~Citric~~ acid
(c) Sulphuric acid (d) Nitric acid
10. What is used in fire extinguishers?
- (a) ~~NaHCO₃~~ (b) HCl
(c) NaCl (d) CaCl₂
11. What type of oxide would eka-Aluminium form ?
- (a) EO₃ (b) E₃O₂
(c) ~~E₂O₃~~ (d) EO
12. The byproduct of soap is
- (a) isoprene (b) ~~glycerol~~
(c) butene (d) ethylene glycol

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13. Out of Mg and Al, which has higher first ionization energy?
- (a) Mg
(b) ~~Al~~
(c) Both have same
(d) Cannot be determined.
14. Which is denatured spirit?
- (a) ethanol only
(b) ethanol and methanol (50%)
(c) ~~ethanol and methanol (5%)~~
(d) methanol only
15. Which of the following compounds is not a type of carbon compound ?
- (a) Lipids
(b) Vitamins
(c) ~~Nucleic acids~~
(d) Carbohydrates
16. Who of the following was for the first time designated as the Governor of India?
- (a) ~~Lord Clive~~
(b) Lord Cornwallis
(c) Lord Warren Hasting
(d) Lord Wellesley
17. Shahjahan built Tajmahal in the memory of
- (a) Arjumand Banu
(b) ~~Noor Jahan~~
(c) Jahan Ara
(d) Roshan Ara
18. Name the book written by Al-Biruni is
- (a) ~~Rihla~~
(b) Kitab-ul-hind
(c) Travels in Mughal Empire
(d) None of the above

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19. Which of the following is the correct significance of yellow revolution in India?

(a) Milk production

(b) Poultry production

(c) Agriculture

(d) Oilseeds Production

20. Which of the following country is known as the place of midnight sun?

(a) Canada

(b) Norway

(c) Sweden

(d) Greenland

21. Where is the Nathula pass located ?

(a) Sikkim

(b) Arunachal Pradesh

(c) Jammu and Kashmir

(d) None

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22. Who is the recipient of 2020 Rajiv Gandhi Khel Ratna Award?

(a) Bajrang Punia

(b) Deepa Malik

(c) Rohit Sharma

(d) Virat Kohli

23. Which state loses its special status under Article 370 in 2019?

(a) Jammu and Kashmir

(b) Delhi

(c) Arunachal Pradesh

(d) Assam

24. Addis Ababa is the capital of

(a) Albania

(b) Angola

(c) Ecuador

(d) Ethiopia

25. Which Covid-19 vaccine imported to India from Russia?
- (a) Covaxin (b) Covishield
(c) Moderna (d) Sputnik V
26. The number of pair (s) of sex chromosomes in the zygote of human is :
- (a) One (b) Two
(c) Three (d) Four

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27. Respiratory quotient is :
- (a) O_2 / CO_2 (b) CO_2 / O_2
(c) N_2 / CO_2 (d) CO_2 / N_2
28. Which of the following is not the function of the large intestine?
- (a) Forming faeces
(b) Absorb 90% of nutrients
(c) Defecating
(d) Absorbing some water, ions, and vitamins
29. By which name is family planning currently known as ?
- (a) Reproductive and child care
(b) Family and child care
(c) Reproductive and child health
(d) Reproductive and child health care
30. Which vitamin helps in vision ?
- (a) Vitamin A (b) Vitamin B
(c) Vitamin E4 (d) Vitamin K

31. Thrombocytes is another name for
- (a) Red corpuscles (b) ~~Platelets~~
(c) Plasma (d) White blood corpuscles
32. Oxygenated blood reaches heart by
- (a) Pulmonary artery (b) ~~Pulmonary vein~~
(c) Aorta (d) Vena cava
33. Which of the following hormone plays a major role in water reabsorption ?
- (a) Somatostatin (b) Relaxasin
(c) Oxytocin (d) ~~Vasopressin~~
34. What is the pH of the saliva?
- (a) 3 – 5 (b) 7 – 8
(c) 5.5 – 6.2 (d) ~~6.2 – 7.4~~
35. During deficiency of oxygen in tissues of humans, pyruvic acid is converted into lactic acid in
- (a) Cytoplasm (b) Chloroplast
(c) ~~Mitochondria~~ (d) Golgi body
36. The sex of human child depends on the sex chromosome present in
- (a) Egg (b) ~~Sperm~~
(c) Both (a) and (b) (d) None of these

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37. A section of DNA providing information for one protein is called

- (a) Nucleus
- (b) Chromosomes
- (c) Trait
- (d) ~~Gene~~

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38. Aponixis means

- (a) ~~Vegetative propagation~~
- (b) Asexual reproduction
- (c) Sexual reproduction
- (d) Binary fusion

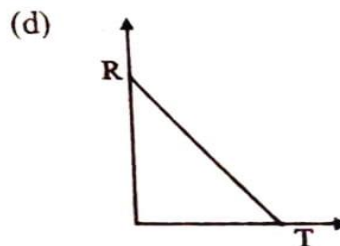
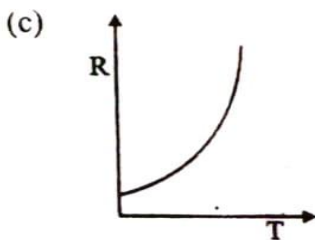
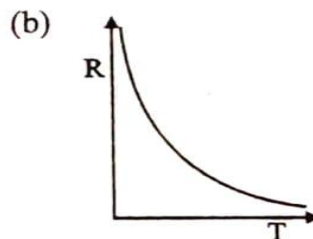
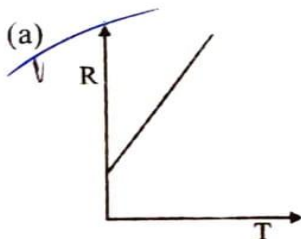
39. In birds, nitrogenous waste is :

- (a) Ammonia
- (b) Urea
- (c) Amino acids
- (d) ~~Uric acid~~

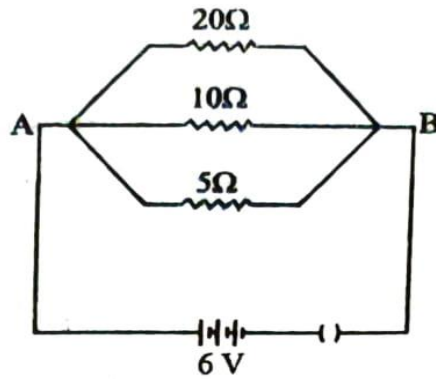
40. Which one of the following does not have a nucleus ?

- (a) WBC
- (b) ~~RBC~~
- (c) Epidermal cells
- (d) Guard cells

41. The temperature of a conductor is increased. The graph best showing the variation of its resistance is



42. Calculate the current flows through the 10Ω resistor in the following circuit.



(a) 1.2 A

~~(b) 0.6 A~~

(c) 0.2 A

(d) 2.0 A

43. To convert an AC generator into DC generator,

(a) Split-ring type commutator must be used

~~(b) Slip rings and brushes must be used~~

(c) A stronger magnetic field has to be used

(d) A rectangular wire loop has to be used

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44. Trophic level in an ecosystem represents

(a) Oxygen Level

(b) Water Level

~~(c) Energy Level~~

(d) Salt Level

45. Acid rain is caused by the oxides of

(a) Carbon

~~(b) Nitrogen only~~

(c) Sulphur only

(d) Sulphur and Nitrogen

46. The image formed by a convex lens can be

- (a) ~~virtual and magnified~~
- (b) virtual and diminished
- (c) virtual and of same size
- (d) virtual image is not formed

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47. An object at a distance of +15 cm is slowly moved towards the pole of a convex mirror. The image will get

- (a) shortened and real
- (b) enlarged and real
- (c) enlarge and virtual
- (d) diminished and virtual

48. The higher the frequency, the wavelength of a light.

- (a) Shorter
- (b) Longer
- (c) Unaffected
- (d) Variable

49. Two thin lenses of power +10D and -2D are placed in contact. The focal length of the combination is

- (a) +800 cm
- (b) +12.5 cm
- (c) +16.6 cm
- (d) +8.3 cm

50. Virtual image larger than the object can be produce by

- (a) Concave mirror
- (b) Convex mirror
- (c) Plane mirror
- (d) All of the above

51. The working of a generator is based upon

- (a) Heating effect of current
- (b) Electromagnetic induction
- (c) Chemical effect of current
- (d) Magnetic effect of current

52. Bending of partly immersed pencil in water is due to

- (a) Reflection
- (b) Refraction
- (c) Scattering
- (d) Eye defect

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53. Resistivity of a given conductor depend on

- (a) Length of conductor
- (b) Length as well as cross section
- (c) Material and dimensions of conductor
- (d) Material of conductor and temperature

54. The direction of magnetic field development around a current carrying conductor can be easily found by the use of

- (a) Right hand thumb rule
- (b) Left hand thumb rule
- (c) Fleming's left hand rule
- (d) Fleming's right hand rule

55. Factor which does not affect electromagnetic induction is

- (a) Magnetic field
- (b) Area of the loop
- (c) Orientation of coil
- (d) Material of coil

56. If the probability of an event is P , the probability of its complementary event will be :
- (a) $P - 1$ (b) P
(c) $1 - p$ (d) 1

57. The median of set of 9 distinct observations is 20.5. If each of the largest 4 observations of the set is increased by 2, then the median of the new set

- (a) is increased by 2
(b) is decreased by 2
(c) is two times of the original number
(d) Remains the same as that of the original set

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58. To draw a pair of tangents to a circle which are inclined to each other at an angle of 35° . It is required to draw tangents at the end points of those two radii of the circle, the angle between which is

- (a) 105° (b) 70°
(c) 140° (d) 145°

59. If $x \sin(90^\circ - \theta) \cot(90^\circ - \theta) = \cos(90^\circ - \theta)$, then x is equal to

- (a) 0 (b) 1
(c) -1 (d) 2

60. $\triangle ABC$ and $\triangle BDE$ are two equilateral triangles such that D is the mid point of BC . Ratio of the areas of triangle $\triangle ABC$ and $\triangle BDE$ is

- (a) 2 : 1 (b) 1 : 2
(c) 4 : 1 (d) 1 : 4

61. If the zeroes of the quadratic polynomial $x^2 + (a + 1)x + b$ are 2 and -3, then

(a) $a = -7, b = -1$

(b) $a = 5, b = -1$

(c) $a = 2, b = -6$

(d) $a = 0, b = -6$

62. The decimal form of $\frac{129}{2^2 5^7 7^5}$ is

(a) terminating

(b) non-terminating

(c) non-terminating repeating

(d) none of the above

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63. The value of $\cos \theta^0 \cos 1^0 \cos 2^0 \dots \cos 89^0 \cos 90^0$ is

(a) 1

(b) -1

(c) $\frac{1}{\sqrt{2}}$

(d) 0

64. A circle drawn with origin as the centre passes through $(13/2, 0)$. The point which does not lie in the interior of the circle is

(a) $\left(\frac{-3}{4}, 1\right)$

(b) $\left(2, \frac{7}{3}\right)$

(c) $\left(5, \frac{-1}{2}\right)$

(d) $\left(-6, \frac{5}{2}\right)$

65. $(x^2 + 1)^2 - x^2 - 0$ has

(a) Four real roots

(b) Two real roots

(c) No real roots

(d) One real roots

66. The father's age is six times his son's age. Four years hence, the age of the father will be four times his son's age. The present ages of the son and the father, in years, are respectively
- (a) 4 and 24 (b) 5 and 30
 (c) 6 and 36 (d) 3 and 24

67. If the LCM and HCF of two numbers are 182 and 13 respectively. If one of the numbers is 26, then the other number is
- (a) 52 (b) 78
 (c) 91 (d) 104

68. $(-1)^n + (-1)^{8n} = 0$, then n is

- (a) Any positive integer
 (b) Any odd natural number
 (c) Any natural number
 (d) Any negative integer

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69. A card is drawn at random from a pack of 52 cards. The probability that the drawn card is not an is

- (a) $\frac{1}{13}$ (b) $\frac{9}{13}$
 (c) $\frac{4}{13}$ (d) $\frac{12}{13}$

70. A piece of wire 20 cm long is bent into the form of an arc of a circle subtending an angle of 60° at its centre then the radius of the circle is

- (a) $\frac{40}{\pi}$ (b) $\frac{60}{\pi}$
 (c) $\frac{30}{\pi}$ (d) $\frac{20}{\pi}$

71. 11th term of the AP $-3, \frac{-1}{2}, 2, \dots$ is

(a) 28

(b) 22

(c) -38

(d) $\frac{-97}{2}$

72. If 1 is a root of quadratic equation $ax^2 - 5(a-1)x - 1 = 0$, then the value of a is

(a) -1

(b) 1

(c) $\frac{1}{2}$

(d) $\frac{-1}{2}$

73. If $2x - 3y = 5$ and $3x - 2y = 10$, then the value of $x - y$ is

(a) 3

(b) 5

(c) -3

(d) 2

74. If one zero of the quadratic polynomial $3x^2 - 10x - m$ is $\frac{5}{3}$, then the other zero is

(a) $\frac{2}{3}$

(b) $\frac{5}{3}$

(c) $\frac{-5}{3}$

(d) $\frac{-15}{2}$

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75. $1.24\overline{38}$ is

(a) An integer

(b) A rational number

(c) An irrational number

(d) None

Read the passage below and tick the correct options : (for questions no. 76 to 80)

Language is a wonderful gift given to Man. No animal possesses this gift but they have their own ways of expressing themselves. When a rabbit sees an enemy it runs away into its hole. Its tail, which is white, bobs up and down as it runs. The other rabbits see it and they run too. They know that there is a danger. When a Cobra is angry, it raises its hood and makes itself look fierce. This warns other animals. When a bee has found some food it goes back to the hive. It can't tell the other bees where the food is by speaking to them, but it does a kind of dance in the air. Some animals say things by making sounds. A dog barks when a stranger comes near.

76. A Cobra raises its hood when it is :

- (a) Happy (b) Angry
(c) Fearful (d) Sad

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77. When a rabbit sees an enemy :

- (a) It makes sound (b) It rubs its skin
(c) It laughs loudly (d) It runs away into its hold

78. A rabbit's white tail bobs up and down :

- (a) As it dances (b) As its runs
(c) As it hides underground (d) As it laughs

79. Language is a wonderful gift from God :

- (a) Given to man (b) Given to animal
(c) Given to bird (d) Given to lions

80. The word possesses means :

- (a) It is (b) Ones
(c) Owns (d) Ready

81. Identify the tense used in the given sentence. "You are always working on our laptop."
(a) Present indefinite tense
(b) Present perfect tense
(c) Present continuous tense
(d) Present perfect continuous tense
82. Fill in the blanks with future perfect tense form of the verb given in the bracket. "Marry seats for us." (saves)
(a) Ought to save
(b) Should have save
(c) Would have saved
(d) Would save
83. Identify the tense used in the underline phrase. "She has decided to distribute the duties after everyone completes their work."
(a) Past perfect tense
(b) Present perfect tense
(c) Present indefinite tense
(d) Past indefinite tense
84. The whole family for the ceremony.
(a) has been invited
(b) have been invited
(c) invites
(d) invited
85. Fill in the blank with the past perfect tense form of the verb given in the bracket. "Vikram his job." (do)
(a) Did
(b) Was doing
(c) Had done
(d) Had been doing

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In the following questions, a sentence has been given in Direct Speech. Out of the four alternatives suggested, select the one which best expresses the same sentence in Indirect Speech. (Question 86 to 90)

86. I reiterated. "I don't care about the job."
- (a) I reiterated that I did not care about the job.
(b) I repeatedly said that I cared about the job.
(c) I said again and again I didn't care about the job.
(d) I reiterated I don't care about the job.
87. The young man promised her that he would be there the next day.
- (a) The young man said, "I will be there the next day"
(b) The young man said, "I promise to be here tomorrow."
(c) The young man said, "I will try to be there the next day."
(d) The young man said, "I would be here the next day."
88. He explained that he knew the place well because he used to live there.
- (a) "I know the place well because I used to live here," he explained.
(b) "I knew the place because I used to live here," he explained.
(c) "I have known the place well because I used to live here," he explained.
(d) "I know the place well because I used to live here," he explained.
89. The old lady declared that she was going to walk where she pleased. They had the liberty.
- (a) The old lady said, "I was going to walk where I pleased. They have the liberty".
(b) The old lady said, "I am going to walk where I pleased. They had the liberty".
(c) The old lady said, "I am going to walk where I please. We have the liberty."
(d) The old lady said that "I was going to walk where I pleased. They have the liberty".

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90. I wondered how many discoveries went unheeded.
- (a) I said "Do discoveries go unheeded?"
 - (b) I said "How many discoveries go unheeded?"
 - (c) I said "How many discoveries went unheeded?"
 - (d) I said "How many discoveries have gone unheeded?"

91. Which punctuation mark should you use for an exclamatory?

- (a) .
- (b) !
- (c) ?
- (d) "

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92. Transform the given sentence in assertive :

How gorgeous the sunset is!

- (a) How is the sunset so gorgeous?
- (b) The sunset is gorgeous, isn't?
- (c) The sunset is very gorgeous.
- (d) How gorgeous the sunset is

93. Transform the sentences into negative :

Human is mortal.

- (a) Human is immortal.
- (b) Human is not immortal.
- (c) Not all humans are mortal.
- (d) Not all humans are immortal.

94. Jack and John helpful.

- (a) Be
- (b) Have been
- (c) Was
- (d) Had been

95. Choose the correct sentence :

- (a) I did not accompanied them.
(c) I do not accompany them.

- (b) I do not accompanied them.
(d) I do not accompany them.

96. What type of sentence is the following ?

It is cold outside today.

- (a) Declarative
(c) Exclamatory

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- (b) Interrogative
(d) Imperative

97. What type of sentence is the following ?

Clean your room.

- (a) Declarative
(c) Exclamatory

- (b) Interrogative
(d) Imperative

98. Tick the correct option : - An exclamatory sentence

- (a) makes a statement
(c) Shows excitement

- (b) Ask a question
(d) Gives a command

99. Would you use a or for words beginning with consonant sound?

- (a) .
(c) ?

- (b) !
(d) ”

100. Transform the given sentence into optative :

You are very intelligent.

- (a) How are you so intelligent?
(b) You are very intelligent. Aren't?
(c) You are extremely intelligent.
(d) How intelligent you are!