



Question Paper
PRELIMS ALOHA GAT 2013

Class: **10th class**

Total No. of Questions: **120**

Max Marks: **120**

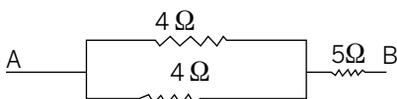
Time Allowed: **90 minutes**

- Electrons move from
 - High Potential to low Potential
 - Low Potential to high Potential
 - In the direction of current
 - Against the direction of current
- The direction of force on a current carrying conductor in a magnetic field is given by
 - Fleming's left-hand rule
 - Fleming's right-hand rule
 - Right-hand thumb rule
 - Left-hand thumb rule.
- A magnet can attract
 - Sulphur
 - Phosphorus
 - Carbon
 - Cobalt
- Which of the following is not sunlight?
 - Infra-Red Rays
 - Visible rays
 - Ultra-Violet rays
 - Microwaves.
- The moderator used in a nuclear reactor is
 - Boron
 - Carbon
 - Uranium
 - Graphite
- A point object is placed at a distance of 20cm from a convex mirror of focal length 20cm. the image will form at
 - Infinity
 - At Focus
 - Behind the mirror
 - Pole.
- Ciliary muscles can change the focal length of eye lens. This phenomenon is

responsible for

- a) Accommodation b) Persistence of vision
c) Astigmatism d) Colour blindness.

8. A cut diamond sparkles because of:
a) Hardness
b) High refractive index, total internal reflection
c) Emission of light by diamond
d) Absorption of light by diamond
9. A convex lens is of focal length of 10cm. Its power will be:
a) + 10 dioptre b) – 10 dioptre
c) + 5 dioptre d) –5 dioptre
10. The resultant resistance of the following circuit is:



- a) $5\ \Omega$ b) $7\ \Omega$ c) $8\ \Omega$ d) $4\ \Omega$
11. Which of the following statements is correct?
a) Oxidation involves gain of electrons
b) The substance which gets reduced acts as a reducing agent.
c) Exothermic reactions proceed with absorption of heat.
d) NaHCO_3 is sodium bicarbonate.
12. Which one of the following four metals would be displaced from the solution of its salt by other three metals?
a) Mg b) Ag c) Zn d) Cu.
13. Which one of the following metal do not react with cold as well as hot water?
a) Na b) Ca c) Mg d) Fe.
14. In which of the following compounds, –OH is the functional group?
a) Butanone b) Butanol c) Butanoic acid d) Butanal
15. The first member of alkyne homologous series is:
a) Ethyne b) Ethene c) Propyne d) Methane.
16. Among the element N, Mg, Al, P&S, the element having highest metallic character is
a) P b) AL c) S d) Mg.

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17. The breakdown of pyrovate to give carbon dioxide, water & energy takes place in
a) Cytoplasm b) Mitochondria c) Chloroplast d) Nucleus.
18. The filtration units of kidneys are called
a) Ureter b) Urethra c) Neurons d) Nephrons.
19. In Amoeba, ammonia is excreted by
a) Food Vacuole b) Contractile Vacuole
c) Plasma membrane d) All of these.
20. Spinal-cord originate from:
a) Cerebrum b) Medulla c) Pons d) Cerebellum
21. The substance that triggers the fall of mature leaves & fruits from plants are due to
a) Auxin b) Gibberellins c) Absciscic d) Cytokinin
22. Among the following which one is not a method of vegetative propagation?
a) Budding b) layering c) Sowing d) Tissue culture
23. Environment day falls on.
a) 28th February b) 23rd March
c) 5th June d) 16th September
24. Which form of coal is hardest & with maximum carbon content?
a) Lignite b) Peat
c) Anthracite d) pearl
25. Accumulation of non-biodegradable pesticides in the food chain in increasing amount at each higher trophic level is known as:
a) Eutrophication b) Pollution
c) Biomagnification d) Accumulation
26. If $p(x)$ is a polynomial, in variable x , such that $p(h) = 0$, then for $p(x)$, h is its.
a) Root b) factor
c) Zero d) None of above
27. The equation whose roots are $2\sqrt{3}$ & $-2\sqrt{3}$ is.
a) $x^2 - 4\sqrt{3}x - 6 = 0$ b) $x^2 - 4\sqrt{3}x - 12 = 0$
c) $x^2 - 12 = 0$ d) $x^2 - 6 = 0$
28. The circumference of a circle with diameter 14 cm is.
a) 44 cm b) 44 sq. cm
c) 88 cm d) 88 sq. cm

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29. Which of the following statements is not correct?
- a) Congruent triangles are always similar
 - b) Similar triangles are always congruent.
 - c) Similar triangles are not always equal in area.
 - d) The corresponding sides of two similar triangles are in the same ratio.
30. Two chords AB & CD of a circle intersect each other at P (inside the circle). If AP = 8cm CP = 6 cm CD = 10cm then PB is.
- a) $\frac{16}{3}$ cm
 - b) 12 cm
 - c) 3 cm
 - d) None of these
31. The distance of the tangent to a circle from its centre is always.
- a) Greater than the radius
 - b) Equal to radius
 - c) Less than the radius
 - d) Nothing can be said
32. The acute angle θ for which $\sin\theta = \cos\theta$ is
- a) 30°
 - b) 45°
 - c) 60°
 - d) 90°
33. The length of the shadow of a pole is equal to its height , then the angle of elevation of the source of light is.
- a) 30°
 - b) 45°
 - c) 60°
 - d) 90°
34. If 1 is added to two numbers, their ratio becomes 1: 2 and If 5 is subtracted from them, their ratio becomes 5:11, then the numbers are.
- a) 1,3
 - b) 35,71
 - c) 10,17
 - d) None of these
35. The probability of having at least one tail in 4 throws with a coin is.
- a) 15/16
 - b) 1/16
 - c) 1/4
 - d) 1.
36. For the given quadratic equation $x^2 + 5x + 5 = 0$, the product of roots is:
- a. 7
 - b. 8
 - c. 5
 - d. 6
 - e. 4
37. Each angle of a regular Hexagon is:
- a. 60°
 - b. 90°
 - c. 120°
 - d. 103°
 - e. 105°
38. A cylindrical tank has a capacity of 6160 cu.m. The diameter of the base is 28 m. Then its depth is :
- a. 50 m
 - b. 40 m
 - c. 30 m
 - d. 20 m
 - e. 10 m
39. Surface area of a sphere of radius 7 cm is:
- a. 616 cm^2
 - b. 308 cm^2
 - c. 4312 cm^2
 - d. 421 cm^2
 - e. 41 cm^2

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40. $\sin\theta = \dots\dots\dots$
 a. $1/\cos\theta$ b. $1/\operatorname{cosec}\theta$ c. $1/\tan\theta$ d. $1/\sin\theta$
41. $\frac{1 - \tan^2 45^\circ}{1 + \tan^2 45^\circ} =$
 a. $\tan 90^\circ$ b. 1 c. $\sin 45^\circ$ d. 0 e. None
42. The Author of the book "Book on Games of Chance" Published in 1963 is :
 a. A. N. Kolmogorn b. J. Bernoulli c. Laplace d. J. Cardan
43. Probability of an impossible event is:
 a. 1 b. 0 c. 2 d. 3
44. Determine AP whose 3rd term is 5 and the 7th term is 9 :
 a. 3, 4, 5, 6, 7, b. 1, 3, 6, 9,
 c. 1, 3, 9, 11, 15, d. Both a & b
45. Which of the following points lies in the third quadrant ?
 a. (4, 6) b. (-1, -2) c. -4, 5 d. -4, -3
46. Substitute the underline word with its most appropriate synonym from the following options:
 One should not pass indecent comments on others.
 a) bad b) ugly c) vulgar d) indelicately
47. Substitute the underline word with its most appropriate antonym from the following options:
 There were copious rains.
 a) scanty b) plenty c) sufficient d) scarcity
48. Select one word substitution for the following:
 To take secretly in small quantities
 a) robbery b) pilferage c) theft d) defalcation
49. For some time in his youth Abraham Lincoln was manager for a shop.
 P : Then a chance Customer would come.
 Q: Young Lincoln way of keeping shop was entirely unlike anyone else's
 R : Lincoln would jump up and attend to his needs and then revert to his reading.
 S: He used to lie full length on the counter of the shop eagerly reading a book.
 Never before had Lincoln had so much time for reading as had then. The Proper sequence should be:
 a) SRQP b) QSPR c) SQRP d) QPSR

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68. A chronometer measures:
- a. Colour Contrast
 - b. Sound waves
 - c. Time
 - d. Water waves
69. Jackie Chain retired from action films in?
- a. 2011
 - b. 2009
 - c. 2010
 - d. 2012
70. What are 'nest parasites'?
- a. Parasites living in nests
 - b. Birds laying eggs in other bird's nest
 - c. Birds making nests for others
 - d. None of these
71. French Revolution occurred in..... A.D
- a) 1789
 - b) 1780
 - c) 1830
 - d) 1848.
72. Suffrage means :
- a) Right to vote
 - b) Right to contest election
 - c) Right to education
 - d) Right to go to cultural club.
73. Who played the most important role in the Unification of Germany?
- a) Kaiser William I
 - b) Czar Nicholas
 - c) Otto von Bismarck
 - d) Napoleon
74. When was the first round Table conference convened by the British Government?
- a) Nov-1929 A.D
 - b) Nov 1931 A.D
 - c) Dec. 1930 A.D
 - d) Nov 1930 A.D
75. When was civil disobedience relaunched?
- a) 1932 A.D
 - b) 1933 A.D
 - c) 1934 A.D
 - d) 1931 A.D
76. What played a great role in the making of a global world?
- a) Trade
 - b) Exchange of goods
 - c) Ships
 - d) Technology
77. Which of the following was the first industrial nation of the world?
- a) Britain
 - b) Germany
 - c) France
 - d) Japan
78. The East India Company appointed to supervise weavers in India?
- a) Gomasthas
 - b) Merchants
 - c) Supervisors
 - d) Guilds

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79. When did Martin Luther write ninety five thesis?
a) 1513 A.D b) 1534 A.D
c) 1517 A.D d) 1526 A.D
80. On which river is Bhakra Dam built:
a) Satluj b) Krishna
c) Cauvery d) Mahanadi
81. The total forest area in India is:
a) 23.3% b) 17.3%
c) 33.3% d) 3.3%
82. Which is the leading producer of sugarcane in India:
a) Bihar b) UP
c) Punjab d) Haryana
83. Where are diesel engines manufactured:
a) Karnal b) Chennai
c) Jamshedpur d) Varanasi
84. The number of wild life sanctuaries at present in India is:
a) 450 b) 490
c) 525 d) 540
85. Which state has the largest number of cattle:
a) Andhra Pradesh b) Gujarat
c) Uttar Pradesh d) Delhi
86. If any bill is to be passed in a democracy it must get the support of more thanof the legislators.
a) 40% b) 50%
c) 75% d) 80%
87. The voter is free from pulls & pressures under the ----- system.
a) Election manifesto b) Secret ballot
c) Simple majority d) Election petition
88. The following has a single party system:
a) India b) USA
c) Pakistan d) China
89. The Shimla Agreement between India and Pakistan was held in.
a) 1965 b) 1968
c) 1972 d) 1975
90. What was the name of maternal grandfather of the Prophet (SAW)?
91. What was the number of forts of jews in Khyber?

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92. Who two jews of Banu Nadeer embraced Islam?
93. Mention a Hadith on saying Salam?
94. Mention a Hadith on “Salah”?
95. How long did Abu Bakr rule the muslims?
96. Who was the caliph after Ali (RA)?
97. Who caliph of Islam introduced the Navy Wing?
98. What is the actual name of Abu Hurayrah (RA)
99. Name the ever great saint and thinker of Kashmir who gave the fundamental principle of the science of ecology by saying:
“Food shall suffice only when the forests will survive.”
100. Name the most important and world renowned Muhaddith of Kashmir produced by Daeoband?
101. Rogers, Bacon and other pioneers of the Renaissance movements in Europe, all received their education in the Muslim University of
102. In his work “Europe’s debt to Islam” the author maintains that “there can be no denying that Europe is deeply in debt to Islam for all its scientific discoveries.” Name the author.
103. A woman thinker and the renowned commentator on Plato had to pay the penalty for her intellectual audacity with her life.
104. A scientist who dared to advance the Copernican theory was seized, imprisoned and at last put to death by “a fire made slow to increase the torture.”
105. In a cricket season, India defeated Australia twice, West Indies defeated India twice, Australia defeated West Indies twice, India defeated New Zealand twice and West Indies defeated New Zealand twice.
Which country has lost most number of times ?
- A. India
B. Australia
C. New Zealand
D. West Indies

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106. There are seven books one each on Psychology, Hindi, English, Sociology, Economics, Education and Accountancy, lying on a table one above the other. Sociology is on the top of all the books. Accountancy is immediately below Education which is immediately below Sociology. Economics is immediately above Psychology but not in the middle. Hindi is immediately below Psychology. Economics is between which of the following books ?
- a. Accountancy and Education b. Psychology and Hindi
c. English and Psychology d. Psychology and Sociology
107. In an examination, Raj got more marks than Mukesh but not as many as Priya. Priya get more marks than Gaurav and Kavita. Gaurav got less marks than Mukesh but his marks are not the lowest in the group. Who is second in the descending order of marks ?
- a. Priya b. Kavita c. Raj
d. Cannot be determined e. None of these
108. Ashish is heavier than Govind. Mohit is lighter than Jack. Pawan is heavier than Jack but lighter than Govind. Who among them is the heaviest ?
- a. Govind b. Jack c. Pawan
d. Ashish e. Mohit
109. If GO = 32, SHE = 49, then SOME will be equal to
- a. 56 b. 58
c. 62 d. 64
110. If PRATAP could be given the code number 1618120116, What code number can be given to NAVIN ?
- a. 14122914 b. 19274651
c. 24639125 d. 73957614
111. If MASTER is coded as 411259, then POWDER will be coded as
- a. 765439 b. 765439
c. 765459 d. 765549
112. If the positions of the first and the sixth digits of the number 2796543018 are interchanged, similarly the positions of the second and the seventh digits are interchanged and so on, which of the following will be the third to the left of seventh digit from the left end?
- a. 0 b. 1 c. 7
d. 8 e. None of these
113. A number is greater than 3 but less than 8. Also, it is greater than 6 but less than 10. The number is ;
- a. 5 b. 6 c. 7
d. 8 e. 9

