

ATOMIC ENERGY CENTRAL SCHOOL No. 4 (RAWATBHATA)

Multiple Choice Question (MCQ) Test

Month - NOVEMBER & DECEMBER (2018-19)

Class : X

- 1 The area of two concentric circles are 962.5 cm^2 and 1386 cm^2 respectively. The width of the ring is
A) 3.5 cm B) 4.5 cm C) 5.6 cm D) None
- 2 The perimeter of a sector of a circle of radius 5.2 cm is 16.4 cm. The area of the sector is
A) 15.8 cm^2 B) 15.6 cm^2 C) 16.8 cm^2 D) None
- 3 The diameter of the driving wheel of a bus is 140 cm. How many revolutions per minute must the wheel make in order to keep a speed of 66 km/hr
A) 240 B) 250 C) 200 D) 220
- 4 The ratio of the areas of the incircle and circumcircle of an equilateral triangle is
A) 1:2 B) 1:3 C) 1:9 D) 1:4
- 5 If the area of a circle be equal to that of a square, then the ratio of the side of the square and radius of the circle is
A) $\sqrt{\pi} : 1$ B) $1 : \sqrt{\pi}$ C) $1 : \pi$ D) $\pi : 1$
- 6 If the radius of a circle is increased by 50%, then its area will be increased by
A) 50% B) 100% C) 125% D) 150%
- 7 If the radius of a circle is decreased by 50%, then its area will be increased by
A) 25% B) 50% C) 75% D) 60%
- 8 The area of the square that can be inscribed in a circle of radius 8 cm is
A) 256 cm^2 B) 128 cm^2 C) $64\sqrt{2} \text{ cm}^2$ D) 64 cm^2
- 9 The area of the circle that can be inscribed in a square of a side 6 cm is
A) $36 \pi \text{ cm}^2$ B) $18 \pi \text{ cm}^2$ C) $12 \pi \text{ cm}^2$ D) $\pi \text{ cm}^2$
- 10 The area of the largest circle that can be drawn inside a square of side 6 cm in length is
A) $36 \pi \text{ cm}^2$ B) $9 \pi \text{ cm}^2$ C) $18 \pi \text{ cm}^2$ D) $12 \pi \text{ cm}^2$
- 11 If an arc forms 72° at the centre of the circle, then the ratio of its length to circumference of circle is
A) 1:5 B) 1:2 C) 1:3 D) 1:4
- 12 The perimeter of a sector of a circle of radius 4.5 cm is 25 cm. The area of the sector will be
A) 18 cm^2 B) 36 cm^2 C) 9 cm^2 D) 27 cm^2
- 13 A chord of a circle of radius 10 cm subtends a right angle at the centre. The area of the corresponding minor segment will be ($\pi = 3.14$)
A) 28.5 cm^2 B) 57 cm^2 C) 23.5 cm^2 D) 27.5 cm^2
- 14 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. The radius of the circle will be
A) $60/\pi$ B) $30/\pi$ C) $45/\pi$ D) none
- 15 The perimeter of a sector of a circle of radius 5.2 cm is 16.4 cm. The area of the sector will be
A) 15.6 cm^2 B) 156 cm^2 C) 31.2 cm^2 D) 7.8 cm^2

- 16 The perimeter of a semicircular region of radius r is
 A) $2\pi r$ B) πr C) $2\pi r + r$ D) $\pi r + r$
- 17 If the perimeter of circle is equal to that of a square, then ratio of their area is
 A) 22 : 7 B) 14 : 11 C) 7 : 22 D) 11 : 14
- 18 The outer and inner diameters of a circular ring are 34 cm and 32 cm respectively, then the area of the ring is
 A) 66π B) 60π C) 33π D) 29π
- 19 The ratio of the areas of a circle and an equilateral triangle whose diameter and side are respectively equal is
 A) $\pi : \sqrt{2}$ B) $\sqrt{2} : \pi$ C) $\sqrt{3} : \pi$ D) $\pi : \sqrt{3}$
- 20 If the sum of the circumference of two circles with the radii R_1 and R_2 is equal to the circumference of a circle of radius R , then
 A) $R_1 + R_2 = R$ B) $R_1 + R_2 > R$ C) $R_1 + R_2 < R$ D) none
- 21 What were the Corn Laws?
 A) They were passed by the British Government to restrict the import of corn.
 B) They were passed by the British Government to restrict the export of corn.
 C) They were passed by the French Government to export corn to Canada.
 D) They were passed by the America to import corn from other countries.
- 22 Name the people who did not contribute in making the human societies more interlinked?
 A) Travelers B) Traders C) Imperialists D) Priests
- 23 Who were the first Europeans to conquer America?
 A) The French B) The Portuguese C) The Italian D) The Germans
- 24 Where was the Chutney music popular?
 A) China B) Japan C) North America D) South America
- 25 What is Rinderpest?
 A) A cattle disease in Africa
 B) A cattle disease in China
 C) A cattle disease in U.S.A.
 D) A cattle disease in Russia
- 26 Which one country was not a part of Central Powers in the First World War?
 A) Germany B) Austria- Hungary C) Turkey D) U.S.A.
- 27 Globalization does not involve which one of the following?
 A) Rapid integration between countries
 B) More goods and services moving between countries.
 C) Increased taxes on imports.
 D) Movement of people between countries for jobs, education etc.
- 28 The routes which knitted together, vast regions of Asia with Europe and Northern Asia?
 A) Silk route B) Royal route C) Golden Quadrilateral D) National Corridor
- 29 From which country did noodles travel to west?
 A) India B) Germany C) China D) Russia
- 30 Which of the following continent's original inhabitants had no immunity against diseases due to their long isolation?
 A) Africa B) America C) Asia D) Europe

- 31 Who was the well known pioneer of mass production ?
 A) Michele Jones B) Henry Ford C) Abraham Lincon D) James Paul
- 32 Which countries organized a group called G-77?
 A) Developing Countries B) Developed Countries C) Undeveloped Countries D) African Countries
- 33 Which of the following is not a feature of Multinational Company?
 It owns or controls production in more than one nation
 A) It sets up factories where it is close the market
 B) It organizes production in a complex way.
 C) It employs labour only from its own country.
 D)
- 34 Investment made by Multinational Companies is called?
 A) Trade Barriers B) Foreign Investment C) Grants D) Enterprise
- 35 When did ford motors come to India?
 A) 1995 B) 1922 C) 1990 D) 1900
- 36 In which year, the Indian government decided to remove barriers on foreign trade and foreign investment?
 A) 1991 B) 1995 C) 1990 D) 2003
- 37 Name the organization which lays emphasis on liberalization of foreign trade and investments .
 A) WTO B) UNDP C) UNESCO D) UNICEF
- 38 What is SEZS?
 Special Economic Zone
 A) Special Export zones B) Special Excise zones C) Special employment zones D)
- 39 Which of these is an Indian MNC?
 A) Infosys B) Ranbaxy C) Tata Motors D) All of these
- 40 What is the main feature of new economic policy?
 A) Privatisation B) Globalisation C) Liberalisation D) All of these
- 41 A person cannot see distinctly objects kept beyond 2 m. This defect can be corrected by using a lens of power
 A) + 0.5 D B) - 0.5 D C) + 0.2 D D) - 0.2 D
- 42 A student sitting on the last bench can read the letters written on the blackboard but is not able to read the letters written in his text book. Which of the following statements is correct?
 (A) The near point of his eyes has receded away (B) The near point of his eyes has come closer to him
 (C) The far point of his eyes has come closer to him (D) The far point of his eyes has receded away
- 43 At noon the sun appears white as
 (A) light is least scattered (B) all the colours of the white light are scattered away
 (C) blue colour is scattered the most (D) red colour is scattered the most
- 44 Which of the following phenomena of light are involved in the formation of a rainbow?
 (A) Reflection, refraction and dispersion (B) Refraction, dispersion and total internal reflection
 (C) Refraction, dispersion & internal reflection (D) Dispersion, scattering and total internal reflection
- 45 Twinkling of stars is due to atmospheric
 (A) dispersion of light by water droplets
 (B) refraction of light by different layers of varying refractive indices
 (C) scattering of light by dust particles (D) internal reflection of light by clouds

- 46 The danger signals installed at the top of tall buildings are red in colour. These can be easily seen from a distance because among all other colours, the red light
 (A) is scattered the most by smoke or fog (B) is scattered the least by smoke or fog
 (C) is absorbed the most by smoke or fog (D) moves fastest in air
- 47 Lightest metal is
 A) Cr B) H C) Al D) Li
- 48 Which one of the following does not increase while moving down in a group?
 A) Atomic radius B) Metallic character C) Valency D) Number of shells
- 49 The elements A, B, C, D, E have atomic numbers 9, 11, 17, 12, and 13 respectively. Which pair of elements belongs to the same group?
 A) A & B B) B & D C) A & C D) D & E
- 50 Which of the following outermost shell for elements of second period?
 A) K shell B) M shell C) L shell D) N shell
- 51 Which among the following elements has the largest atomic radii?
 A) Na B) Mg C) K D) Ca
- 52 Which of the following elements does not lose electrons easily?
 A) Na B) F C) Mg D) Al
- 53 Arrange the following elements in order of their decreasing metallic character : Na, Si, Cl, Mg, Al
 A) Cl > Si > Al > Mg > Na B) Na > Mg > Al > Si > Cl C) Na > Mg > Al > Cl > Si D) Al > Na > Si > Ca > Mg
- 54 Arabari forest of Bengal is dominated by
 A) Teak B) Sal C) Bamboo D) Mangrove
- 55 In the given food chain, suppose the amount of energy of fourth trophic level is 5kJ, what will be the energy available at producer level?
 A) 5 kJ B) 50kJ C) 500kJ D) 5000kJ
- 56 Evolutionary history of a group of organisms is called?
 A) Heredity B) Genetics C) Phylogeny D) Evolution
- 57 In nature pea plants are
 A) Self pollinated B) Insect pollinated C) Bird pollinated D) Pollinated by humans
- 58 How many copy / copies of a gene are there in a gamete?
 A) One B) Two C) Many D) None
- 59 In traits selected by Mendel which one is / are dominant?
 A) Tall height B) Seed shape round C) Seed colour yellow D) All of these
- 60 Independent inheritance of two traits can be proved by
 A) Monohybrid cross B) Dihybrid cross C) Both monohybrid and dihybrid cross D) Molecular phylogeny

Answer Key (Class X)

1	2	3	4	5	6	7	8	9	10
A	B	B	D	A	C	C	B	D	B
11	12	13	14	15	16	17	18	19	20
A	B	A	A	A	D	B	C	D	A
21	22	23	24	25	26	27	28	29	30
A	C	B	D	A	D	C	A	C	A
31	32	33	34	35	36	37	38	39	40
B	A	D	B	A	A	A	A	D	D
41	42	43	44	45	46	47	48	49	50
B	A	B	B	B	B	D	C	C	C
51	52	53	54	55	56	57	58	59	60
C	B	B	B	D	C	A	A	D	B