

PHYSICS

- Q.1 If a man measured distance between Nahan and Chandigarh. What can be his answer?
- (a) 87000 m
(b) 8700 m
(c) 870 m
(d) 87 m
- Q.2 A force can
- (A) Move a body from rest
(B) Change the direction of a moving body
(C) Increase the mass of a body
- (a) only A is true
(b) only B is true
(c) only A and B are true
(d) only A and C are true
- Q.3 The speed of light is :
- (a) 330 m/s
(b) 300,000,000 m/s
(c) 30,000 m/s
(d) 300,000,000 km/s
- Q.4 Which of the following is a reflector of light ?
- (a) Sun
(b) Moon
(c) Star
(d) Filament

- Q.5 SI unit of Energy is
- (a) Newton
(b) Joule
(c) Joule/kg
(d) all of these
- Q.6 White light spectrum contains-
- (a) 5 colours
(b) 7 colours
(c) 6 colours
(d) No colour
- Q.7 Magnification glass is a
- (a) Concave lense
(b) Convex lens
(d) Plane glass
(d) plane fiber glass
- Q.8 Which planet appears to be yellowish?
- (a) Asteroids
(b) Mars
(c) Uranus
(d) Saturn
- Q.9 The tilting of the earth is responsible for
- (a) Change of days
(b) Change of the sun's rays
(c) Change of the season
(d) None

- Q.10 What is true about shadows and images?
- (a) Shadows are always black in colour
(b) Shadows are formed because light travels in straight line
(c) Images shows the colour of the objects
(d) All the above

CHEMISTRY

- Q.11 What type of natural resource are you using when you fly a kite?
- (a) Air
(b) Water
(c) Plants
(d) Thread.
- Q.12 Rainfall patterns depend on
- (a) The underground water bodies
(b) The number of water bodies in an area
(c) The density pattern of human population in an area
(d) The prevailing season in an area

- Q.13 Particles of matter in gas are_____
- (a) Stationary
(b) Vibrating in one position
(c) Continuously moving
(d) Rotating about axis.
- Q.14 Which state of matter is the easiest to compress?
- (a) Solid
(b) Liquid
(c) Gas
(d) All of these.
- Q.15 Ice needs _____to convert into water.
- (a) Bucket
(b) Heat
(c) Sound
(d) None of the above.
- Q.16 The process of setting down of particles of a solid in a liquid is -
- (a) Decantation
(b) Sublimation
(c) Sedimentation
(d) Filtration.
- Q.17 A commonly used chemical for loading is ____
- (a) Hydrogen
(b) Alum

- (c) Sulphur
(d) Common salt.
- Q.18 Which of these is not a natural fibre?
(a) Leather
(b) Jute
(c) Cotton
(d) Wool.
- Q.19 The correct sequence to get cloth is _____
(a) Fibre → fabric → Yarn
(b) Fibre → Yarn → Fabric
(c) Fabric → Yarn → Fibre
(d) Yarn → Fibre → Fabric.
- Q.20 A liquid which contains the dissolved material is known as _____
(a) Solvent
(b) Solute
(c) Solution
(d) Water.

MATHEMATICS

- Q.21 Write in number and add: Three million forty five thousand five hundred six and

forty lakh fifty five thousand five hundred sixty six ?

- (a) 700172
(b) 7101712
(c) 7101072
(d) 70010712
- Q.22 A chair cost Rs. 1350 and a table cost Rs 2375. What will be the cost of 15 chairs and 35 tables altogether?
(a) 100375
(b) 103375
(c) 104375
(d) 103475
- Q.23 The five day forecast the south pole list the low temperature as $-24^\circ, -25^\circ, -28^\circ, -29^\circ$ and -30° . Which choice shows the temperature in order from the lowest to the highest?
(a) $-24^\circ, -25^\circ, -28^\circ, -29^\circ, -30^\circ$
(b) $-30^\circ, -28^\circ, -29^\circ, -25^\circ, -24^\circ$
(c) $-30^\circ, -29^\circ, -28^\circ, -25^\circ, -24^\circ$
(d) $-30^\circ, -29^\circ, -28^\circ, -24^\circ, -25^\circ$
- Q.24 Read the statement given below and choose the correct answer

Statement 1: Numbers having more than two factors are known as composite numbers.

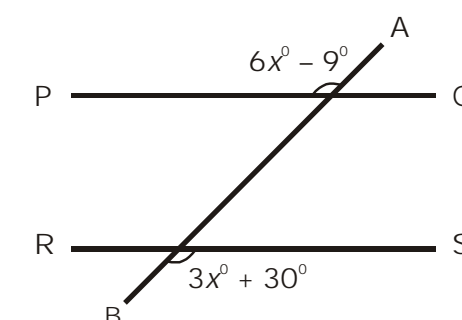
Statement 2: A number for which sum of all its factors is equal to twice the number is called a perfect number.

- (a) Statement 1 is true statement 2 is false
(b) Statement 1 is false statement 2 is true
(c) Both statement are true
(d) Both statement are false
- Q.25 The population of a city is 2,09,32,714 out of these 90,47,314 are men, 84,35,784 are women and rest are children. Find the number of children in the city?
(a) 34,94,616
(b) 34,49,616
(c) 34,49,681
(d) 34,94,661
- Q.26 Sidak bought $13\frac{5}{8}$ m of cloth and Sanchi bought $13\frac{3}{4}$ m cloth who bought more cloth and how much
(a) Sanchi $\frac{7}{8}$ m
(b) sidak $\frac{1}{8}$ m

(c) sanchi $\frac{1}{8}$ m

(d) Sidak $\frac{7}{8}$ m

- Q.27 Three or more points in a plane are said to be collinear, if they lie on the
(a) same plane
(b) same line
(c) different lines
(d) none
- Q.28 A boy along with his father walked near Career Academy. Suddenly he saw CATSE Banner (CATSE organised by Career Academy, Nahan) and he asked his father the information regarding the CATSE – Examination. Further about the length and breadth of the CATSE – Banner. His father told him an approximate value of length and breadth about 5m and 3.5m respectively. Finally the father asked respectively. Finally the father asked him son about the area of the rectangular banner. So what answer is given by his son?
(a) $17.5 m^2$
(b) $15 m^2$
(c) $7.5 m^2$
(d) $20 m^2$
- Q.29 The value of x° that will make PQ parallel to RS is



- (a) 17°
 (b) 50°
 (c) 13°
 (d) 27°

- Q.30 In ABC, $B = 5C$ and $A = 3C$, then the angles of the triangle are
 (a) $A = 60^\circ, B = 20^\circ, C = 100^\circ$
 (b) $A = 60^\circ, B = 100^\circ, C = 20^\circ$
 (c) $A = 20^\circ, B = 60^\circ, C = 100^\circ$
 (d) $A = 100^\circ, B = 20^\circ, C = 60^\circ$

BIOLOGY

- Q.31 Animal products are rich in –
 (a) Proteins
 (b) Calcium
 (c) Carbohydrates
 (d) Minerals
- Q.32 Which of the following food items is rich in Iron?
 (a) Sea fish
 (b) Spinach
 (c) Milk
 (d) Almonds

- Q.33 The _____ Pairs of ribs make a cone-shaped cage.
 (a) 11
 (b) 10
 (c) 12
 (d) 2

- Q.34 The mineral which controls the functioning of thyroid is-
 (a) Phosphorus
 (b) Calcium
 (c) Magnesium
 (d) Iodine

- Q.35 Deficiency of proteins and carbohydrates in infants leads to-
 (a) Marasmus
 (b) Goitre
 (c) Obesity
 (d) Typhoid

- Q.36 A plant potted in one of the Career Academy's gallery is green in colour due to presence of which pigment
 (a) Anthocyanin
 (b) Lycopene
 (c) Chlorophyll
 (d) Haemoglobin

- Q.37 In Cactus plant _____ are reduced to spines.
 (a) Leaves
 (b) Stem
 (c) Roots
 (d) Flowers

- Q.38 Fishes have scale on their body. This helps them to _____
 (a) Remain in the same place in water
 (b) Balance themselves in water
 (c) Change direction in water
 (d) Swim in water

- Q.39 Which is a correct set of parts of a pistil?
 (a) Ovary, Style and filament
 (b) Ovary, Style and Stigma
 (c) Ovary, Anther and filament
 (d) Filament and anther

- Q.40 Sanctuary is a place where-
 (a) Animals are protected
 (b) Plants are protected
 (c) Office of forest department
 (d) Humans are protected

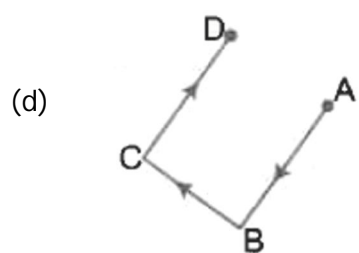
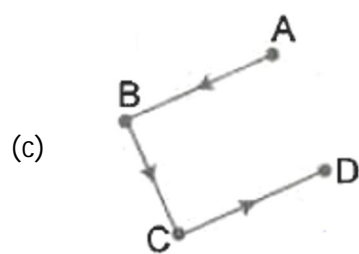
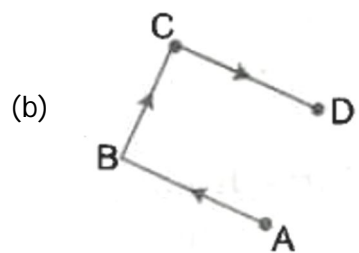
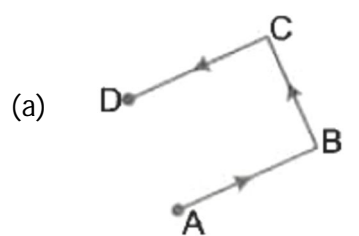
I.Q

- Q.41 If "TEAM" is coded as 'VGCO', then 'LIFE' will be coded as
 (a) NJGE
 (b) NLIH
 (c) NKHH
 (d) NKHG
- Q.42 If the word "TRADE" is coded as 'XVEHI', how the word 'PUBLIC' should be coded?
 (a) TYFMPG
 (b) SXEOLF
 (c) TYFPMG
 (d) SXLLOP
- Q.43 Arrange the given words in the sequence in which they occur in the dictionary and then choose the correct sequence.
 (a) Page
 (b) Palisade
 (c) Pageant
 (d) Parrot
 (e) Peacock.
 (A) (a), (c), (b), (e), (d)
 (B) (a), (b), (c), (d), (e)

(C) (a), (c), (b), (d), (e)

(D) (e), (d), (a), (b), (c)

Q.44 Raju from A moved North- West side 2 km to B from there he turned 90° clockwise and moved 2 km to C. From there, he turned 90° clockwise and travelled 2 km to D. Which of the answer figures shows he exact path he traced?



Q.45 Anuj started walking positioning his back towards the Sun. After sometime, he turned left, then turned right and then

towards the left again. In which direction is he going now?

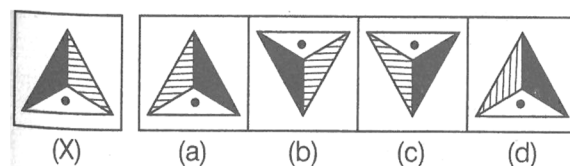
(a) North or South

(b) East or West

(c) North or West

(d) South or West.

Q.46 Choose the correct mirror image of the (X) from amongst the four alternatives (a), (b), (c) and (d) given along with it.



Q.47 Choose the alternative which most closely resembles the mirror image of the given combination

CAREER ACADEMY

(a) **YWEDVAV RREBVA**

(b) **YMEBACA CAREER**

(c) **CAREER ACADEMY**

(d) **YMEBACA RREBVA**

Q.48 Complete the given series.

5, 9, 17, 29, 45,

(a) 60

(b) 65

(c) 70

(d) 68.

Q.49 Find out the wrong/incorrect term.

11, 22, 44, 77, 122

(a) 22

(b) 122

(c) 77

(d) 44.

Q.50 Complete the given series.

OTE, PUF, QVG, RWH,

(a) SYJ

(b) TXI

(c) SXJ

(d) SXI

Answer Key

1.(a) 2. (c) 3.(b) 4.(b) 5.(b)

6.(b) 7.(b) 8.(d) 9.(c) 10.(b)

11.(a) 12.(b) 13. (c) 14.(c) 15.(b)

16.(c) 17.(b) 18.(a) 19.(b) 20.(a)

21.(c) 22.(b) 23.(c) 24.(a) 25.(b)

26.(c) 27.(b) 28.(a) 29.(c) 30.(b)

31.(a) 32.(b) 33.(c) 34.(d) 35.(a)

36.(c) 37.(a) 38.(c) 39.(b) 40.(a)

41.(d) 42.(c) 43.(c) 44.(b) 45.(a)

46.(a) 47.(b) 48.(b) 49.(b) 50.(d)