

ECIL Technical and Aptitude Questions:

1. The chemical bond in germanium crystal is

- a) Metallic
- b) co-valent-Ans
- c) electro-valent
- d) Van der Waals

2. A ball is thrown upward in vacuum at 49 m/sec. The time taken by the ball to reach the highest point is

- a) 2.5 seconds
- b) 7.5 seconds
- c) 5 seconds-Ans
- d) 15 seconds

3. The majority charge carriers in p-type semiconductors are

- a) electrons
- b) holes-Ans
- c) both electrons and holes
- d) None of these

4. A body is projected at an angle with the horizontal. The time of flight is given by

- a) $\frac{u \sin^2 \theta}{g}$
 - b) $\frac{2u \sin^2 \theta}{3g}$
 - c) $\frac{2u \sin^2 \theta}{g}$ -Ans
 - d) $\frac{4u \sin^2 \theta}{2g}$
5. If the distance between two masses be doubled, the gravitational force of attraction between them will be
- a) doubles
 - b) four times
 - c) halved
 - d) one-fourth-Ans

6. The ratio of the length and breadth of a rectangle is 4:3. The area of the rectangle is 193 cm². What will be its perimeter?

- a) 56 cm
- b) 46 cm
- c) 28 cm
- d) 36 cm-Ans

7. A force provides an acceleration of 0.5 m/sec² to a body of mass 2 kg. What acceleration will it produce when acting on a body of mass 10 kg?

- a) 0.1 m/sec²-Ans
- b) 0.2 m/sec²
- c) 0.5 m/sec²
- d) 1.0 m/sec²

8. Cathode rays are

- a) streams of electrons-Ans
- b) streams of positively charged particles
- c) streams of neutral particles
- d) electromagnetic waves

9. In the most popular abbreviation in the field of banking sectors, CBS, the letter C stands for

- a) Core
- b) Credit
- c) Complete
- d) continent

10. Which group of inhabitants is targeted to be connected by seasonal roads during 2008-09?

- a) Population of 1000 to 2000
- b) Population of 5000 to 10000
- c) Population of 500 to 100-Ans
- d) Population of 2500 to 5000

11. Which of the following economists has been conferred with the Nobel Prize?

- a) G. Swaminathan
- b) Amartya Sen
- c) M. L. Seth
- d) R. Linguswamy

12. In notation <http://WWW.prenhall.com>,http stands for

- a)host
- b)region
- c)pre-contact
- d)Set of rules-Ans

13. During a period of time you see so many websites and pages exhibited by

- a)status bar
- b)history bar
- c)task bar-Ans
- d)tool bar

14. where does the digestive and respiratory routes encroach each other

- a)Trachea-Ans
- b)Food canal
- c)respiratory tube
- d)Vocal cord

15. The state government gets maximum revenue form

- a)sales tax-Ans
- b)corporate tax
- c)excise tax
- d)custom duty

16 On internet in no charge the repair of generally known software bug is called

- a)version
- b)patch-Ans
- c)tutorial
- d)FAQ

17. Maria sharpova won Australian Opne Tennis-2008 by defeating

- a)Victoria Azarenka
- b)Alona Bondarenko
- c)Ana Ivanovic-Ans
- d)Kateryna Bondarenko

18. The planning commission of India has formed 12 members financial; sectors The chairman of the committee is

- a)Janaki Raman-Ans
- b)Raksesh Mohan
- c)Raghuram Rajan
- d)KV Kamth

19) The thickness of troposphere can increase during

- a)winter
- b)summer-ans
- c)spring
- d)None of these

20 the lightest gas in the atmosphere is

- a)hydrogen-Ans
- b)nitrogen
- c)oxygen
- d)None of these

21 White phrospherous is stored in

- a)water
- b)supphuric acid
- c)alchol
- d)kerosene-Ans

22 Find the least number by which 8640 is divided and the quotient obtained becomes a perfect cube

- a)6
- b)5-Ans
- c)7
- d)8

23 evaluate $(-216 \cdot 1728)^{1/3}$

- a) -72-Ans
- b) 27
- c) 72
- d) 8

24 Which of the following features/provisions did the framers of India constitution take from the US constitution

- a) judicial review
- b) fundamental rights
- c) Removal of the Judges of Supreme court
- d) All the above-Ans

25 The golden period of India culture was during

- a) Rajput period
- b) Gupta period-Ans
- c) Chola period
- d) Maurya period

26. Artificial dialysis is used in the form of

- a) liver substitution
- b) intestine substitution
- c) kidney substitution-Ans
- d) abdomen substitution

27. Evaluate

$$16 \cdot 2^n - 1 - 4 \cdot 2^n / 16 \cdot 2^n + 2 - 2 \cdot 2^n + 2$$

- a) $1/2$ -ans
- b) 0
- c) 4
- d) $1/3$

28 If $(25)^x = (125)^{2x-3}$, then x is equal to

- a) $2/3$
- b) $3/2$
- c) $3/4$ -ans
- d) $1/4$

29 $9x^2 - 24xy + 16y^2 / 3x - 4y = ?$

- a) $3x + 4y$
- b) $3x - 4y$ -ans
- c) $4x + 3y$
- d) $4x - 3y$

30 When polynomial $x^4 - 3x^2 + 2x + 5$ is divided by $(x-1)$ the remainder is

- a) 2
- b) 3
- c) 4
- d) 5

31 What will be the ratio of amount and the principal in n years at 5% p.a. rate of compound interest?

- a) $(22)^n L21^n$

32 A freely suspended bar magnet always remains in the direction

- A) NORTH-SOUTH
- b) east-west
- c) south-west
- d) not certain

33 Directions (Qns.33 to 37) Choose the correct synonyms of each of the following words at questions places

33. prudent

- a) Cautious-Ans
- b) Honest
- c) Polite
- d) wise

34. Feeble
a)disable
b)Docile
c)Rough
d)weak-Ans

35.Coarse
a)haughty
b)fair
c)rough-Ans
d)childish

36Calamity
a)upset
b)disaster-Ans
c)gloomy
d)dilemma

37.Diligent
a)moderate
b)energetic
c)intelligent
d)industries-Ans

38.The angle subtended at the center of circle by a major are will be
a)right angle
b)acute angle
c)obtuse angle-Ans
d)complementary angle

39A body dropped from a tower with zero velocity reaches the ground in 4 seconds. The hieght of the tower is about
a)80 m -Ans
b)20 m
c)160m
d)40m

40Aman in a train moving with a constant velocity drops a abll on the platform. The path of the ball as seen by an observer standing on the platform is a)straight line
b)a circle
c)a parabola-Ans
d)none of these

41Who among the following economists has done pioneering work on national income?
a)Jagdish Bhagwati
b)ML Seth
c)Amartya Sen
d)VKRV Rao-Ans

42 Monopoly means
a)single buyer
b)many sellers
c)single seller-Ans
d)many buyers

43Who introduced the silver coin called Taka or Rupia
a)sher Shah Suri-Ans
b)Akabar
c)Timur
d)Humayun

44 What is the International Date Line?
a)Equator
b)longitude
c)90 degree East Longitude

d)180 degree Longitude -Ans

45.The lines joining places experiencing a thunder stream at the same time is known as a)isohyets
b)Isochrones
c)Ishoronts-Ans
d)Isophenes

46 when a metal is heated its resistance
a)decreases
b)increases-Ans
c)may increase or decrease
d)remains constant

47The resistance of a wire of length 20 cm is 5?.It is stretched uniformly to a length of 40 cm.The resistance now becomes.
a)5 ?
b)10?
c)20?
d)200?

48 Which among the following countries is NOT a permanent member of UN Security council?
a)The US
b)The UK
c)France
d)Spain-Ans

48 Which among the following is an air-to ground missile?
a)Nag_Ans
b)Aakash
c)Agni
d)Prithvi

49The profit earned after selling an article for Rs.878 is the same as loss incurred after selling the article for Rs. 636. What is the cost price of the article?
a)Rs.797
b)Rs.787
c)Rs.767
d)Rs.757-Ans

50Which of the following is NOT a Navratna PSU
a)SAIL
b)BHEL
c)NTPCeir ages will be 3:4
d)Bank of India-Ans

51 The ages of Khushi and Jagriti are in the ratio of 5:8 After 8 years the ratio of their ages will be 3:4What is the difference in their ages
a)16 years
b)8 years
c)6 years-Ans
d)10 years

52 In how many different ways can the letters of the word □PUNCTUAL□be arranged?
a)64
b)40320
c)960
d)20160-Ans

53Mohan decides to attend to some urgent work on a particular day in the month of august 2008. What is the probability that the day chosen by Mohan to attend to his work is Saturday?
a)6/31
b)5/31-Ans
c)2/15
d)1/6

54 While selling a watch a shopkeeper gives a discount of 20% he earns Rs.51 less as profit What is the original

price of the watch?

- a)Rs.920
- b)Rs.985
- c)Rs.1,125
- d)Rs.1,020-Ans

56 The length breadth and height of a school auditorium are 10m,30m, and 10m respectively The density of air is 1.3 kg per cubic metre, the mass of the air inside the auditorium

- a)39 kg
- b)390kg
- c)3900kg-ans
- d)39000kg

57 The mushroom which we eat as vegetable is a /an

- a)algae
- b)Fungus-Ans
- c)Fern
- d)Moss

58If the numerator of a fraction is increased by 300% and the denominator is increased by 500%,t he resulton is 5/12 What was the original fraction?

- a)5/8 -Ans
- b)5/11 c)12/5
- d)12/5

59 12 men and do a piece of work in 10 days. How many men would be required to do the same work in 8 days?

- a)14
- b)18
- c)16
- d)15_Ans

60 Monazire is an ore of

- a)Gerconium
- b)Titanium
- c)Iron
- d)Therium

61The God of the Konark temple in Orissa is

- a)Sun-Ans
- b)Shiva
- c)Krishna
- d)Brahma

62 In the following the spice obtained from the root is

- a)turmeric
- b)clove
- c)linseed
- d)None of these

63The first woman Prime Minister in the world was

- a)Indira Gandhi
- b)S.Bhandarnaike-Ans
- c)Arunthaty Rai
- d)M.Linside

64The model of DNA structure was propounded by Watson and Crick

65 Vitamin E is chiefly found in

- a)pulses
- b)butter
- c)germinated grains-Ans
- d)oil of liver of fishes

66 Which article of the Indian constitution directs the state government to form a Village Panchayath

- a)Article 40-Ans

- b)Article 32
- c)Article-48
- d)Article 78

67 Which of the following Grand Slams is played on grass courts?

- a)French Open
- b)Wimbledon Open-Ans
- c)US Open
- d)Australian

68 Which of the following medicines is used in the treatment of typhoid?

- a)Sulfabdrugs
- b)Vitamina
- c)Chlorquin
- d)chlomycetin_Ans

69 Urea is

- a)sodium fertilizer
- b)Phosphorous fertilizer
- c)potassium fertilizer
- d)nitrogen fertilizer-Ans

70 Archipelago is a

- a)plateau
- b)island-Ans
- c)lake
- d)mountain

71 For photosynthesis energy is obtained from

- a)Sunlight
- b)water
- c)chlorophyll
- d)vitamin

72 We see before actual sunrise or after sunset due to

- a)reflection
- b)scattering
- c)refraction-ans
- d)diffraction

73 Who started the Saka era?

- a)Kanishka-Ans
- b)Vikramaditya
- c)Ashoka
- d)None of these

74 A sector of a circle subtending angle 36 degree has an area 3.85cm². The length of the arc is

- a)2.2cm
- b)2.5cm-ans
- c)2.7cm
- d)None of these