



## CEE MODEL ENTRANCE EXAM

(SET-4 Solutions)

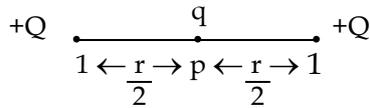
### Instructions:

- There are 200 multiple-choice questions, each having four choices of which only one choice is correct.
- Fill (●) the most appropriate one.

**Date :** 2081/09/20  
(Jan 04)

**Duration :** 3 hours  
**Time :** 7 A.M. – 10 A.M.

1. Ans:(b)  
Hint:



$$\frac{KQ \cdot Q}{r^2} + \frac{KQ \cdot q}{\left(\frac{r}{2}\right)^2} = 0$$

$$\therefore q = -\frac{Q}{4}$$

2. Ans:(b)  
3. Ans:(a)  
Hint:  $C_{\text{big}} = \eta^{1/3} \cdot C_{\text{small}}$  [  $\because \eta = 8$  ]  
4. Ans: (c)  
5. Ans: (c)

Hint:  $f = \frac{1}{2\ell} \sqrt{\frac{T}{m}}$

$$f' = \frac{1}{2\pi} \sqrt{\frac{T}{\frac{D^2}{\pi \cdot 4} \cdot \rho}} = \frac{1}{2\pi} = \sqrt{\frac{2T}{4 \left(\frac{\pi D^2}{4}\right) \cdot \frac{\rho}{2}}} = f$$

6. Ans: (a)  
Hint:  $V_s = \frac{V}{10}$  ;  $\frac{\eta'}{\eta} = ?$   
As source is moving towards the observer,  
 $\eta' = \frac{V \times \eta}{V - V_s}$  ;  $\frac{\eta'}{\eta} = \frac{V}{V - \frac{V}{10}} = \frac{10}{9}$

7. Ans:(d)  
8. Ans:(c)  
9. Ans:(c)  
10. Ans:(b)  
11. Ans:(b)

Hint:  $\eta = 1 - \frac{T_2}{T_1}$

$$\eta' = 1 - \frac{2T_2}{2T_1} = 1 - \frac{T_2}{T_1} = \eta$$

12. Ans: (c)  
Hint: When temperature is increased by 50%

$$T_2 = \frac{150}{100} T_1 = \frac{3}{2} T_1$$

$$\frac{E_2}{E_1} = \left(\frac{T_2}{T_1}\right)^4 = \left(\frac{3}{2}\right)^4 = \frac{81}{16}$$

$$\frac{E_2 - E_1}{E_1} \times 100 = \left(\frac{81 - 16}{16}\right) \times 100 = 400\%$$

13. Ans: (a)  
Hint:  $\omega_{\text{rel}} = \frac{V_{\text{rel}}}{r_{\text{rel}}} = \frac{R_s \cdot \omega_e - R_e \cdot \omega_e}{R_s - R_e} = \omega_e$

14. Ans: (d)  
15. Ans: (c)

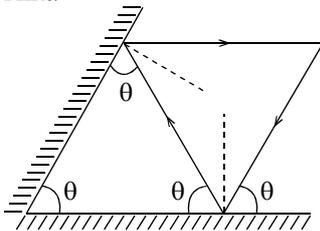
Hint:  $\vec{u} = u \cos \theta \vec{i} + u \sin \theta \vec{j}$

$$\vec{v} = u \cos \theta \vec{i} + (u \sin \theta - gt) \vec{j}$$

$$\vec{u} \cdot \vec{v} = 0$$

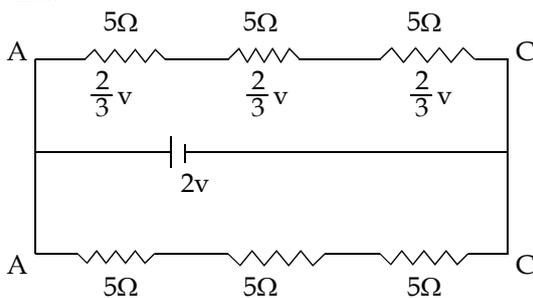
$$t = \frac{u}{g \sin \theta}$$

16. Ans: (c)  
Hint: Immersed depth is independent of acceleration.
17. Ans: (a)  
Hint:  $T = 2\pi \sqrt{\frac{R}{g}} = 84.6 \text{ min}$
18. Ans: (b)
19. Ans: (a)
20. Ans: (b)
21. Ans: (b)
22. Ans: (c)
23. Ans: (c)  
Hint:



$$3\theta = 180^\circ \Rightarrow \theta = 60^\circ$$

24. Ans: (c)  
Hint:  $\frac{360}{\theta} = \frac{360}{30} = 12$   
no. of image formed = 12 - 1 = 11
25. Ans: (d)  
Hint: In optical fibers, the phenomenon is utilized is called total internal reflection.
26. Ans: (c)  
Hint:  $\frac{\lambda_g}{\lambda_g} = \mu$   
 $\therefore$  the required ratio is  $\mu : 1$
17. Ans: (a)  
Hint: Here,  $u = f + x_1$        $v = f + x_2$   
Use,  $f = \frac{uv}{u+v}$       and solve to get  $f = \sqrt{x_2 x_1}$
28. Ans: (a)  
Hint: An air bubble in water behaves as a concave lens, diverging the rays of light falling on it.
29. Ans: (a)  
Hint: Initially,  $R = \frac{\rho \ell}{A}$   
Finally,  $R' = \frac{\rho \cdot 2\ell}{2A} = \frac{\rho \ell}{A}$   
Thus, resistance remains unchanged
30. Ans: (c)  
Hint:



Since all resistance are equal, hence potential difference across each resistor =  $\frac{2v}{3}$  therefore, potential difference between A and B is  $\left(\frac{2v}{3} + \frac{2v}{3} = \frac{4v}{3}\right)$ .

31. Ans:(d)

Hint:In electrolytes, the current is due to motion of positive and negative ions.

32. Ans:(c)

Hint: $qvB\sin 90^\circ = qvB$ . This  $\vec{f}$  acts  $\perp$  to  $\vec{v}$  and  $\vec{B}$ . If provided the required centripetal force, for circular motion of charged particle in magnetic field.

33. Ans: (d)

Hint:As point O lies on AB when extended, hence magnetic field induction at D due to current through AB is zero.

34. Ans:(d)

Hint:According to Fleming left hand rule, the direction of force will be towards west.

35. Ans:(c)

Hint:According to Gauss's theorem in magnetism, net magnetic flux through any closed surface is always zero.

36. Ans:(b)

Hint:Here,

$$A = 2m^2$$

$$dB = 4 - 1 = 3 \text{ wb/m}^2$$

$$dt = 2s$$

$$e = ?$$

$$e = A \frac{dB}{dt} = \frac{2 \times 3}{2} = 3v$$

37. Ans:(a)

Hint:Conductance,  $K = \frac{1}{R} = \frac{1}{10} = 0.1 \text{ mho}$

38. Ans:(a)

Hint:Specific charge =  $\frac{e}{m}$ . Its value is least for  $\alpha$ -particle than other given particle.

39. Ans:(d)

Hint: $\phi_0 = 2ev = 2 \times 1.6 \times 10^{-19} \text{ J}$

$$\phi_0 = \frac{hc}{\lambda_0} \Rightarrow \lambda_0 = \frac{hc}{\phi_0} = \frac{6.6 \times 10^{-34} \times 3 \times 10^8}{2 \times 1.6 \times 10^{-19}} = 6188 \text{ \AA}$$

40. Ans:(c)

41. Ans:(d)

Hint:We know,

$$\lambda = \frac{h}{mv} = \frac{h}{p} \Rightarrow p = \frac{h}{\lambda}$$

Since  $\lambda$  is equal,  $p$  is also equal

42. Ans:(a)

Hint:Balmer  $\rightarrow$  visible

Lyman  $\rightarrow$  UV

Other  $\rightarrow$  Infrared

43. Ans:(a)

Hint:As  $R = R_0 A^{1/3}$ , where  $R_0$  is constant

$$R^3 \propto A$$

$$\text{and } v = \frac{4}{3} \pi R^3 \propto A$$

44. Ans:(c)

45. Ans:(b)

Hint:A semiconductor doped with a donor impurity (i.e., a material of valence five) will act as n-type semi-conductor

46. Ans:(b)

47. Ans:(d)

Hint:Here,

$$\alpha = 0.95 \text{ and}$$

$$\beta = \frac{\alpha}{\alpha - 1} = \frac{0.95}{1 - 0.95} = 19$$

48. Ans:(b)

Hint: As the output is low when either of input is high, the gate must be negated of OR gate, i.e., the gate should be NOR gate

49. Ans:(c)

Hint: When a comet approaches the Sun, the substance like water etc. on the comet gets heated and vapourized due to heat of Sun. The radiation pressure forces the vapours away from the Sun, resulting the tail of comet.

50. Ans:(c)

Hint: K.E. of particle =  $mc^2 - m_0c^2 = 2m_0c^2$

$$\Rightarrow mc^2 = 3m_0c^2$$

$$\text{or, } m = 3m_0$$

$$\text{or, } \frac{m_0}{\sqrt{1 - \frac{v^2}{c^2}}} = 3m_0$$

$$\text{or, } 1 - \frac{v^2}{c^2} = \frac{1}{9}$$

$$\text{or, } \frac{v^2}{c^2} = 1 - \frac{1}{9} = \frac{8}{9}$$

$$\therefore v = \frac{2\sqrt{2}c}{3}$$

51.	b)	Element	%	At. wt.% / At/ wt/	Ratio
		X	50	50/10 = 5	2
		Y	50	50/20 = 2.5	1

Simplest formula =  $X_2Y$

52. a) When  $n = 3$ ,  $l=0$  to  $n-1=0,1,2$ . Hence  $l \neq 3$ .

53. a) Among the isoelectronic species (10 electrons), the anion having more negative charge would be the largest.

54. c)  $K^+ - C \equiv N$  contains both ionic and covalent bonds

55. a)  $H_2S \rightarrow S$ , The O.N. of S increases from -2 in  $H_2S$  to 0 in elemental sulphur and hence  $H_2S$  gets oxidised.

56. b) 13  $Cl^-$  ions means that they are present at the edge centres and body-centre. Hence,  $Na^+$  ions are present at the corners and face-centres. Total  $Na^+$  ions =  $8 + 6 = 14$ .

57. c) In a finely divided state, the catalyst is more efficient as it has a large surface area.

58. c) Blood is found to be isotonic with 0.91% NaCl solution.

59. b) On increasing the temperature, the volume of the solution increase. Hence molarity decreases.

60. a) Greater the value of K, the more it goes toward completion.

$$61. \text{ b) Eq. mass} = \frac{\text{Weight (g)}}{\text{No. of equiv}} = \frac{0.45}{20 \times 0.5 \times 10^{-3}} = 45$$

$$\text{Basicity of the acid} = \frac{\text{Mol. mass}}{\text{Eq. mass}} = \frac{90}{45} = 2$$

62. b)  $NH_2^{2-} + H^+ \rightleftharpoons NH_3$ .

63. b) 0.1 M  $CH_3COOH$  has  $H^+ < 10^{-1}$ . Hence  $pH > 1$ .

64. d)

65. c) When B is in excess, it becomes a pseudo-unimolecular reaction.

66. b) 1 mole of  $H_2SO_4 = 2$  g eq. of  $H_2SO_4$

i.e.,  $4 \times 40 - 3 \times 80 = 0.60$  kcal.

67. a) Cu reacts with  $AgNO_3$  sol. to give  $Cu^{2+}$  ions.

68. b) Neutrino are neutral particles with negligible mass like  $\beta$ -particles.

69. b)

70. b)

Clark's method [using  $Ca(OH)_2$ ] is used for softening of temporary hardness of water

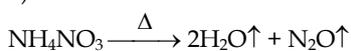
71. a)

$KO_2$  acts as a source of  $O_2$  and removes  $CO_2$

72. b)

$BaO$  is Baryta while  $BaSO_4$  is Barytes

73. b)



74. b)

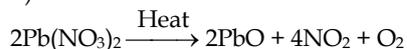
75. a)

Boron does not react with water because it is chemically less active.

76. b)

77. d)

78. Stability of +2 oxidation state increases down the group  
d)



79. d)

80. b)



81. b)

He is used in air ship due to non-inflammable nature

82. a)

83. c)



1-aminomethanamide (urea)

84. c)

In tert-butyl alcohol, all C-atoms are  $\text{sp}^3$  hybridised

85. c)

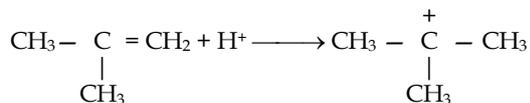
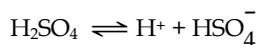
It is a substituted diene (allene) which is not superimposable on its mirror image

86. d)

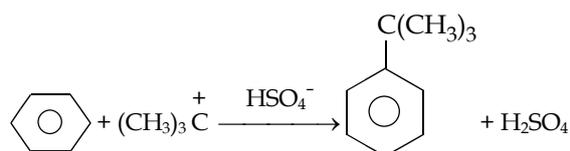
87. a)



88. b)



(Markownikov's addition)



89. c)

$\text{CH}_3\text{I}$  has maximum density due to lowest carbon content and heavy halogen atom

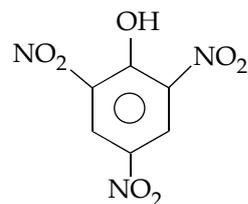
90. a)

Aryl halides undergo nucleophilic substitution with difficulty due to  $\text{sp}^2\text{C}$  of C-Cl bond in aryl halide i.e. more electronegativity of  $\text{sp}^2\text{C}$  and thus resembles with vinyl chloride

91. d)

Four isomeric alcohol + three isomeric ethers

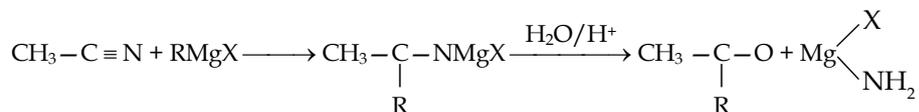
92. c)



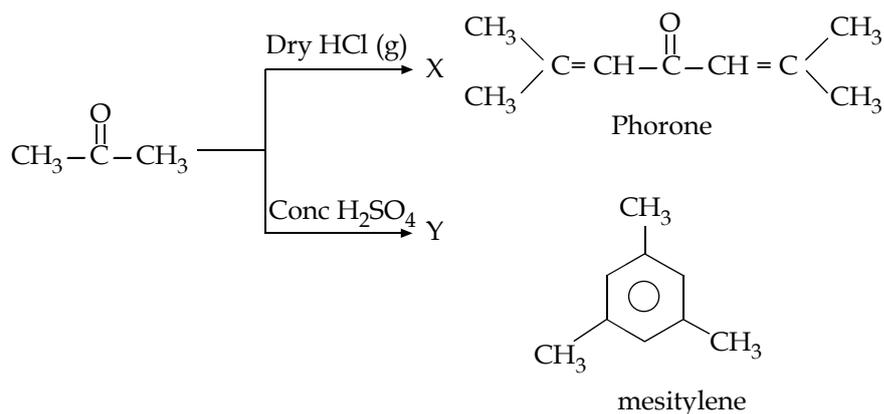
Picric acid (2, 4, 6-trinitrophenol)

93. a)

94. b)



95. b)



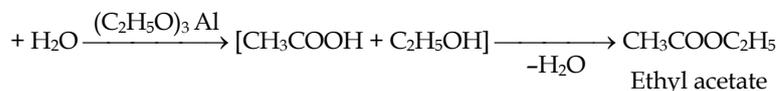
96. a)

97. c)

Carboxylic acid with  $\text{HN}_3$  from primary amine with one carbon less (Schmidt reaction)



98. a)



99. c)

100. d)

Nylon-66 is not a homopolymer.

101. b)

102. b) Carbon dioxide produced in the body is transported either in the plasma, in the form of bicarbonate ions or in the form of carbamino haemoglobin. The maximum amount of  $\text{CO}_2$  is transported in the form of bicarbonate ions formed in the erythrocytes

103. b)

104. b) Parotid salivary glands Stensen's duct Submaxillary salivary glands - Waston's duct

105. c) Archenteron cavity is formed in pre-gastrual stage

106. a) If we just want to look at stratified squamous keratinized epithelium, we look at skin from one of the few areas of the body that does not have hair. This tissue is from the palm of the hand (palmar skin).

107. a) Volkman's canals are the small horizontal channels in the long bones of mammals which connects the Haversian canals,

108. c) Adipose tissue or fat tissue is considered as a connective tissue even though it does not have fibroblasts or is real matrix and has only a few fibres.

109. b) Homo erectus made tools made of stones and bones and made fire using primitive stone tools. Java ape man or Homo erectus lived in caves and knew use of fire for hunting, defense and cooking

110. a)

111. a)

112. c) Bidder's present in kidney but sperm only flow.

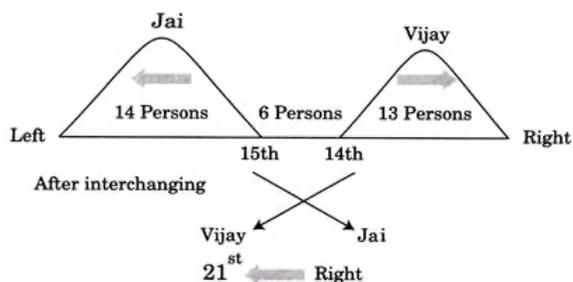
113. c) Conus arteriosus is ventral chamber of truncus arteriosus.

114. c) It connect 3rd and 4th ventricle.

115. a) Mesozoic era is known as golden age for reptiles because in this era reptiles became dominant on Earth. The era spans from about 252 million years ago to about 66 million years ago.
116. b) Calcarea is the class of phylum porifera Gastro-vascular cavity present in coelenterata.
117. b) *Periplanta americana* - commonly called cockroach. Belongs to insecta of phylum arthropoda.
118. d) Members of Cnidaria are commonly called Cnidarians due to presence of Nematoblasts. Coelenteron body cavity of Cnidarians
119. a) Mesoderm gives rise to skeletal and muscle tissues, blood, lymph and connective tissues. Ectoderm give rise to epidermis, hair, mammary glands and CNS. Endoderm gives rise to organs like stomach, pancreas, urinary bladder and intestines.
120. d) Non-chordata: heart dorsal in position  
Chordata: heart ventral in position
121. d) Cuttle fish and devil fish - mollusca, cray fish - arthropoda Flying fish - class: osteichthyes of super class pisces.
122. d) *Ascaris lumbricoides* is monogenetic parasite. Primary or intermediate host in human but secondary or intermediate host is absent.
123. b) Cestodes are commonly called tapeworms.  
Trematodes are commoly called flukes  
Turbellarians are commonly called eddy worms
124. c) Typhlosole increase absorptive surface area of intestine.
125. b) In earthworm, mouth is crescentic shaped, located in 1st segment. The mouth bearing 1st segment is called peristomium.
126. b) Genital papillae: 2 pairs (17th and 19th segments).
127. b) Sporozoites first attack liver cell.
128. a) Cryptozoites are formed in pre-erythrocytic schizogony.  
Metacryptozoites are formed in exo-erythrocytic schizogony.
129. b) Anadromous migrate: Sea to fresh water eg: Salivary, Hilsa  
Catadromous migrate: Eg, *Anguila* (Eel)
130. b) Plantigrade: animals walking on palm or sole.  
Digitigrade: animals walking on digits (fingers or toes).
131. c) Thrush is caused by the overgrowth of a type of fungus called candida. throat thrush is called oropharyngeal candidiasis.
132. d) TB is a common opportunistic infection associated with HIV. Worldwide, TB is the leading cause of death among people with AIDS
133. d) Psychedelics (also known as hallucinogens) are a class of Psychoactive substances. that produce changes in perception, mood and cognitive processes.
134. b) In head, golgi bodies are modified to form acrosome Acrosome secrete enzyme called Hyaluronidase for penetration of ovum
135. b)
136. a) The cristae of the semicircular ducts, which form one of the two sensory organs of balance (the second being the maculae of the utricle and saccule), respond to rotational.
137. c)
138. c) Sympathetic nerves in mammals arise from thoracic-lumbar region. Nerves of the sympathetic system originate within the spinal cord of the thoracic and lumbar segments but beyond the vertebrae each departs from the cord and turns ventrally in a short, white ramus to enter a sympathetic ganglion
139. b) Adult frog is ureotelic but tadpole is ammonotelic  
Note: During hibernation and aestivation frogs are uricotelic.
140. a) Glucose and amino acid are totally or mostly reabsorbed from the nephric filtrate in the blood capillaries.
141. c) First simple microscope was discovered by Robert Hooke (1665).
142. d) The germ theory of diseases (bacteria or germ can cause diseases) was first proposed by Luis Pasteur and later proved and evidenced by Robert Koch.
143. d) Virus like bacteriophage cannot be cultured outside living host or culture media.
144. a) Mycology or mycetology is the study of fungi.
145. a) *Agaricus* (mushroom) show heterotrophic with saprophytic mode of nutrition.
146. d) Bryophytes are considered as first plant with embryo without vascular tissues.
147. c) Mesarch xylem elements (protoxylem lies at centre of metaxylem) is common character of leaves of angiosperms and rhizome of ferns.
148. c) Sago palm is the common name given to *Cycas pectinata*.
149. c) Phylloclade is modified stem which bears nodes, internodes, spines and scaly leaves.
150. b) The plant which can produce fruits just once in their life cycle is called monocarpic plants, e. g. maize, rice, wheat, grasses.
151. c) Berry is multiseeded fruit found in members of family Solanaceae like potato, chilies, brinjal, tomato, etc.
152. d) Large number of floral whorls are found in members of family Malvaceae.
153. d) Cold ecosystem is tundra or alpine or arctic ecosystem.

154. c) Edaphic factor of ecosystem includes soil and its associated factors.
155. b) Oxylophytes (plants of acidic soil) are most adaptive stress or physiological xerophytes.
156. d) DDT is a type of persistent organic pollutant and affects air, water and soil ecosystem
157. b) Chloroplast has grana with quantasome as functional unit containing 280 pigments (Chlorophyll - 230 and Carotenoids-50)
158. c) Kolliker first discovered mitochondria from flight muscle cells of insects.
159. c) The narrow constriction of chromosome is centromere which bear kinetochore for attachment of spindle fibre during cell division.
160. b) Amitosis is direct division of cell which does not involve successive step of karyokinesis and cytokinesis.
161. d) According to Chargaff molecular rule of DNA, the molecular amount of A is equivalent with T and G with C. It means that both strands have purine of one strand that equals with pyrimidine of another strand.
162. d) DNA polymerase I is the enzyme of proof-reading DNA during its replication.
163. b) Cross of pure homozygous parent produce hybrid having dominant traits.
164. a) Linkage group is equal to the haploid number of chromosomes.
165. d) Nucleoside composed of nitrogen base with pentose sugar (without phosphate) while nucleotide is phosphorylated nucleosides.
166. b) The holandric genes are found in Y chromosome and transfer from male parent to male offspring.
167. b) Restriction endonucleases are molecular scissors and widely used in genetic engineering to cut specific segments of DNA.
168. b) Radish (*Raphanus sativa*), mustard (*Brassica campestris*), cauliflower and cabbage (*Brassica oleracea*) and turnip (*Brassica rapa*) are distantly related.
169. d) Phloem and xylem are conducting tissues which don't bear medullary rays.
170. b) Root hair can be used to measure osmosis.
171. b) Red drop enhancement experiment of Emerson et al. justified the presence of two pigment system for the absorption of light of longer and shorter wavelength.
172. d) Anthocyanin is pigment present in vacuole of plant cells which gives attractive colouration to flowers and other parts of plants and not involved in photosynthesis.
173. a) Mesosome is bacterial mitochondria involved in aerobic respiration.
174. c) Glycolysis is anaerobic event which never need molecular oxygen.
175. c) Cytokinin is the hormone of flowering short day plants. Gibberellin promotes flowering in long days plants.
176. b) Syngamy is alternately called fertilization
177. b) Anemophily is the pollination assisted by air or wind.
178. d) The tapetum is the innermost nutritive tissues of microsporangium.
179. d) Biofertilizers are microscopic organisms like bacteria, fungi, algae, cyanobacteria that help to increase soil fertility or productivity of soil.
180. d) The Correct Answer is Vaccine. Vaccines are a biotechnological product. Chemical engineering operations necessitate the preservation of a microbial-free environment. Only the chosen organism can thrive in this environment. As a result, large-scale production of the organism for biotechnological goods such as antibiotics, vaccines, and enzymes is possible.
181. b) From fig. a:  $6 + 4 + 8 = 18$  and  $18 + 2 = 20$   
 From fig. b:  $7 + 9 + 8 = 24$  and  $24 + 2 = 26$   
 From fig. c:  $6 + 5 + 12 = 23$  and  $23 + 2 = 25$   
 Hence the number 25 will replace the question mark.
182. d) Given,  $45 + 9 - 3 \times 15 \div 2$   
 Replacing the proper signs in the given expression, we have,  
 $45 \div 9 \times 3 + 15 - 2 = 5 \times 3 + 15 - 2 = 15 + 15 - 2 = 30 - 2 = 28$

183. b)



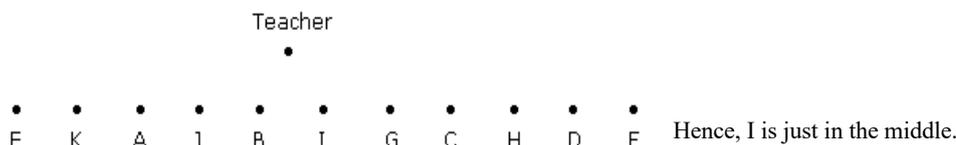
So, Jai's position from the left after interchanging =  $15 + 6 + 1 = 22$ .

184. b) 1 hour 30 minute = (60 + 30) minute = 90 minute  
 Required angle =  $(1/2)^\circ \times 90 = 45^\circ$  (Angle made in 1 min is  $(1/2)^\circ$  by hour hand.)

185. c) By using the letters of the given word, HEARTY can't be formed because in the given word, letter Y is absent.

186. c) Such number should only lie in rectangle not in circle and triangle. So, the number of artists who are neither players nor doctors is 30.

187. b)



188. d) The statement I is talking about a condition with the lawyer that they marry only fair girls. But it is not talking about any condition with Samikshya. So, Samikshya can marry either a lawyer or anyone else.

189. d) The earthworms are good for agriculture. They make soil soft and porous by creating burrows. It allows more water and air to enter in the soil which is good for agriculture.

190. d)

$$\begin{aligned} \text{A's 1 day's work} &= 1/15 \\ \text{B's 1 day's work} &= 1/20 \\ \text{(A + B)'s 1 day's work} &= (1/15 + 1/20) = 7/60 \\ \text{(A + B)'s 4 day's work} &= (7/60 * 4) = 7/15 \\ \text{Therefore, Remaining work} &= (1 - 7/15) = 8/15 \end{aligned}$$

191. d) Since one of the numbers on the dial of a telephone is zero, so the product of all the numbers on it is 0.

192. b)

Total number of digits

$$\begin{aligned} &= (\text{No. of digits in 1- digit page nos.} + \text{No. of digits in 2-digit page nos.} + \text{No. of digits in 3- digit page nos.}) \\ &= (1 \times 9 + 2 \times 90 + 3 \times 267) = (9 + 180 + 801) = 990. \end{aligned}$$

193. c)

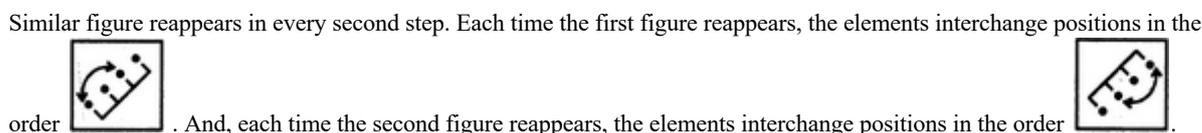
Let the 7 consecutive numbers be  $x, x + 1, x + 2, x + 3, x + 4, x + 5$  and  $x + 6$ ,  
 As per the given condition;  
 $[x + (x + 1) + (x + 2) + (x + 3) + (x + 4) + (x + 5) + (x + 6)] / 7 = 20$   
 $\Rightarrow 7x + 21 = 140$   
 $\Rightarrow 7x = 119$   
 $\Rightarrow x = 17$   
 The largest number =  $x + 6 = 23$ .

194. a)

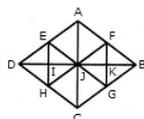
$$\begin{aligned} 80 \times 2 &= 32 \text{ liter water} \\ 80 \times 3 &= 48 \text{ liter water} \end{aligned}$$

So,  $48/(32+x) = (2/3)$  Let, x be amount of water further added.  
 $\Rightarrow 64 + 2x = 144$   
 $\Rightarrow 2x = 80$   
 $\Rightarrow x = 40$

195. b)



196.



The simplest triangles are AFJ, FJK, FKB, BKG, JKG, JGC, HJC, HIJ, DIH, DEI, EIJ and AEJ i.e. 12 in number.  
 The triangles composed of two components each are JFB, FBG, BJG, JFG, DEJ, EJH, DJH and DEH i.e. 8 in number.  
 The triangles composed of three components each are AJB, JBC, DJC and ADJ i.e. 4 in number.  
 The triangles composed of six components each are DAB, ABC, BCD and ADC i.e. 4 in number.

Thus, there are  $12 + 8 + 4 + 4 = 28$  triangles in the figure.

197. d)

198. a) In fig. (X), one of the dots lies in the region common to the square and the triangle only, another dot lies in the region common to the circle and the triangle only and the third dot lies in the region common to the triangle and the rectangle only. In fig. (2), there is no region common to the square and the triangle only. In fig. (3), there is no region common to the circle and the triangle only. In fig. (4) there is no region common to the triangle and the rectangle only. Only fig. (1) consists of all the three types of regions.

199. c) The third figure in each row comprises of parts which are not common to the first two figures.

200. c) SA- Trick: For SA trick to find Water image of letter or figure visit:  
[https://www.youtube.com/watch?v=ZNCMI057FY&ab\\_channel=DreamDoctor%F0%9F%A9%BA](https://www.youtube.com/watch?v=ZNCMI057FY&ab_channel=DreamDoctor%F0%9F%A9%BA)