

**University of Central Punjab**  
**Sample Paper**

**Total Marks: 120**

**Time Duration: 2 Hours**

**English**

1. Where did you go \_\_\_\_\_ holiday last year? (MCQ - CHOOSE ONE)  
 for  
 on  
 to
  
2. She was so upset that she burst \_\_\_\_\_ tears. (MCQ - CHOOSE ONE)  
 into  
 out  
 with
  
3. You should explain this \_\_\_\_\_ them. (MCQ - CHOOSE ONE)  
 to  
 at  
 with
  
4. He has been absent \_\_\_\_\_ Monday. (MCQ - CHOOSE ONE)  
 from  
 for  
 since
  
5. Tomorrow's a holiday, so we \_\_\_\_\_ go to work. (MCQ - CHOOSE ONE)  
 have to  
 have not  
 don't have to
  
6. My friend Siena \_\_\_\_\_ to Russia last year. (MCQ - CHOOSE ONE)  
 went  
 has gone  
 has been
  
7. If I \_\_\_\_\_ well in my exams, I \_\_\_\_\_ to university. (MCQ - CHOOSE ONE)  
 will do; will go  
 will do; go  
 do; will go
  
8. My cousin \_\_\_\_\_ getting a job in Bahrain. (MCQ - CHOOSE ONE)  
 would like  
 is planning  
 is thinking of

9. I wish I \_\_\_\_\_ have an exam tomorrow! (MCQ - CHOOSE ONE)

- don't
- didn't
- won't

10. Why on earth isn't Josh here yet? \_\_\_\_\_ for him for over an hour! (MCQ - CHOOSE ONE)

- I'm waiting
- I've been waiting
- I've waited

11. Daniel's hair is getting far too long; he should \_\_\_\_\_ soon. (MCQ - CHOOSE ONE)

- cut it
- have cut it
- have it cut

12. "I've got a headache." "Maybe you \_\_\_\_\_ to take an aspirin." (MCQ - CHOOSE ONE)

- should
- ought
- don't

13. I'm surprised you didn't get upset. If someone said that to me, \_\_\_\_\_ really angry. (MCQ - CHOOSE ONE)

- I'm
- I was
- I'd be

14. Do you want \_\_\_\_\_ the match tonight? (MCQ - CHOOSE ONE)

- watching
- watch
- to watch

15. When I was a child, I never \_\_\_\_\_ about the future. (MCQ - CHOOSE ONE)

- have worried
- used to worry
- was worrying

16. I borrowed \_\_\_\_\_ pencil from your pile of pencils and pens. (MCQ - CHOOSE ONE)

- a
- an
- the

17. My daughter is learning to play \_\_\_\_ violin at her school. (MCQ - CHOOSE ONE)

- a
- an
- the

18. I bought \_\_\_\_\_ umbrella to go out in the rain. (MCQ - CHOOSE ONE)

- a
- an
- the

19. One of the students said, " \_\_\_\_ professor is late today." (MCQ - CHOOSE ONE)

- a
- an
- the

20. Our neighbours have \_\_\_\_ cat and \_\_\_\_ dog. (MCQ - CHOOSE ONE)

- a
- an
- the

21. This exercise is \_\_\_\_\_ than that one. (MCQ - CHOOSE ONE)

- boring
- more boring
- most boring

22. The offer was too \_\_\_\_\_ to be true. (MCQ - CHOOSE ONE)

- good
- better
- best

23. Earning money has always been the thing that pleases him most. The \_\_\_\_\_ he becomes, the \_\_\_\_\_ he is. (MCQ - CHOOSE ONE)

- richer - happier
- more rich - happier
- rich - happier

24. The old woman lived alone, with \_\_\_\_\_ to look after \_\_\_\_\_. (MCQ - CHOOSE ONE)

- someone / her
- anyone/ herself
- no one / her

25. A baby learns the meaning of words as \_\_\_\_\_ are spoken by others and later uses \_\_\_\_\_ in sentences. (MCQ - CHOOSE ONE)

- Their / they
- they / them
- they / it

26. Some of these clothes are \_\_\_\_\_, and the rest of \_\_\_\_\_ belong to Zack. (MCQ - CHOOSE ONE)

- mine / them
- me /they
- hers /their

27. They decided to buy the house because \_\_\_\_\_ location would allow \_\_\_\_\_ to get to work very easily. (MCQ - CHOOSE ONE)

- theirs / them
- its / them
- they / us

28. It isn't too cold today, \_\_\_\_\_. (MCQ - CHOOSE ONE)

- It is.
- Is it?
- Isn't it.

29. He was at the concert, \_\_\_\_\_. (MCQ - CHOOSE ONE)

- Wasn't it
- Wasn't he
- Didn't he

30. Henry and Juliet have just arrived, \_\_\_\_\_. (MCQ - CHOOSE ONE)

- They have
- have they
- haven't they

31. There has been strong competition; \_\_\_\_\_, the new company has made great profits. (MCQ - CHOOSE ONE)

- instead
- despite
- nonetheless

32. The weather report predicts it will rain \_\_\_\_\_ become colder. (MCQ - CHOOSE ONE)

- and
- neither
- nor

33. The new agent has experience \_\_\_\_\_ not expertise. (MCQ - CHOOSE ONE)

- but
- with
- however

34. I did not go to the show \_\_\_\_\_ I had already seen it. (MCQ - CHOOSE ONE)

- until
- because
- so

35. Read over your answers \_\_\_\_\_ correct all mistakes before you submit. (MCQ - CHOOSE ONE)

- and
- or
- while

36. Susie \_\_\_\_\_ phoned \_\_\_\_\_ wrote after she left home. (MCQ - CHOOSE ONE)

- while, and
- either, or
- neither, nor

37. Hi Noreen, Thanks for your email. I'd love to meet for dinner some time. I know you said you'd like to meet \_\_\_\_\_ the week. (MCQ - CHOOSE ONE)

- while
- inside
- between
- during

38. Choose the options with the correct order of sentences that forms a coherent paragraph. 1. It was just after midnight on July 17th last year. 2. James was driving home from work. 3. The road was clear and he was driving carefully. 4. Suddenly a young girl stepped out into the road in front of him.

5. He tried to stop but it was too late. Options: (MCQ - CHOOSE ONE)

- 1, 2, 5, 3, 4
- 5, 1, 4, 2, 3
- 1, 2, 3, 4, 5
- 4, 1, 5, 3, 2

39. Choose the best topic sentence for the given paragraph: \_\_\_\_\_ In Death Valley, some wildflower seeds sprout only when it rains. The Sonoran Desert's velvet mesquite has roots that can extend over fifty yards to water sources. The creosote bush can thrive in dry areas like the Sonoran and Mojave Deserts by cloning itself. \_\_\_\_\_ (MCQ - CHOOSE ONE)

- Plants in Death Valley and the Sonoran and Mojave Deserts thrive despite the heat
- Deserts are home to a strange and beautiful array of plant life
- Desert plants have adaptations that enable them to survive despite their limited access to water

40. Choose the best concluding sentence for given paragraph: \_\_\_\_\_ In Death Valley, some wildflower seeds sprout only when it rains. The Sonoran Desert's velvet mesquite has roots that can extend over fifty yards to water sources. The creosote bush can thrive in dry areas like the Sonoran and Mojave Deserts by cloning itself. \_\_\_\_\_ (MCQ - CHOOSE ONE)

- There is a wide variety of plant life in a desert
- Desert plants die easily
- Desert plants ensure their survival by adjusting to their environment and lack of water

### **Analytical**

41. 64 is to 8 , ? is to 4 (MCQ - CHOOSE ONE)

- 16
- 3
- 4
- 5

42. Ink is to pen, paint is to? (MCQ - CHOOSE ONE)

- colour
- artist
- brush
- rubber

43. AFKP is to BGLQ , CHMR is to ? (MCQ - CHOOSE ONE)

- DINS
- DFKP
- DNIS
- EJOT

44. Ahmad started his home and traveled 10km towards North. Then he traveled 5km towards East. Then, he traveled 10km towards South. Finally, he traveled 5km towards West and reached at his destination. How far he is from his home. (MCQ - CHOOSE ONE)

- 30km
- 20km
- 15km
- 0km

45. Maria walks straight 300m and then turns left and walks 400m. Finally, she turns left and travel 300m. How far Maria is from her starting point? (MCQ - CHOOSE ONE)

- 400m
- 700m
- 1000m
- 1400m

46. A series is given with one number missing. Choose the correct alternative from the given that will complete the series. 138, 142, 146, 150, ?, 142, 138 (MCQ - CHOOSE ONE)

- 148
- 140
- 146
- 144

47. A series is given with one number missing. Choose the correct alternative from the given that will complete the series. 2, 4, 8, ?, 32 (MCQ - CHOOSE ONE)

- 6
- 36
- 16
- 46

48. A series is given with one number missing. Choose the correct alternative from the given that will complete the series. 0,1, 2, 3 , 5, 8, 13,? (MCQ - CHOOSE ONE)

- 19
- 13
- 21

) 22

49. A series is given with one number missing. Choose the correct alternative from the given that will complete the series. 3, 8, 15, 24, 35, ? (MCQ - CHOOSE ONE)

) 48

) 42

) 49

) 50

50. A series is given with one number missing. Choose the correct alternative from the given that will complete the series. 2, 6, 12, 20, 30, ?, 56, 72 (MCQ - CHOOSE ONE)

) 42

) 34

) 36

) 46

51. Which set of letters fill the gaps of the given letter series? UCP\_ESTU\_PTESTUC\_T\_ST (MCQ - CHOOSE ONE)

) TCPE

) TETE

) TCPC

) BCPT

52. Which set of letters fill the gaps of the given letter series? LEAR\_M\_THLEA\_NMATH\_EAR\_MATH (MCQ - CHOOSE ONE)

) NATNT

) TARLT

) TATLN

) NARLN

53. Which set of letters fill the gaps of the given letter series? \_ALCULUSC\_LCULU\_CAL\_ULU\_ (MCQ - CHOOSE ONE)

) CUSCS

) QASQS

) CASC

) QUSCS

54. A milkman has 75 liters milk in one can and 45 liters in another. The maximum capacity of container, which can measure milk of either container exact number of times, is \_\_\_ liters: (MCQ - CHOOSE ONE)

) 10

) 15

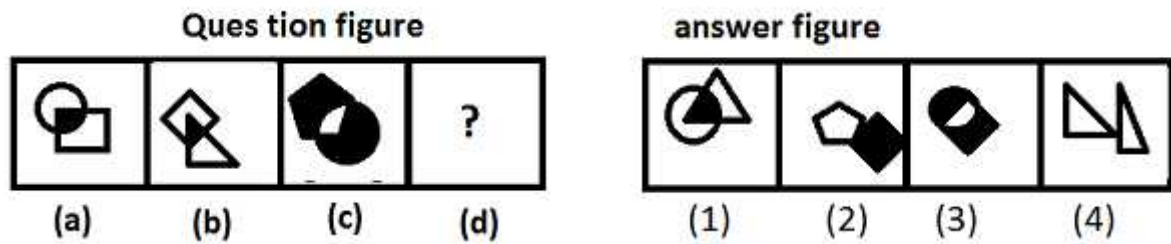
) 20

) 25

55. A batsman has a certain average of runs for 11 innings. In the 12th inning, he makes a score of 90 runs, thereby increasing his average by 5. His average after the 12th inning is: (MCQ - CHOOSE ONE)

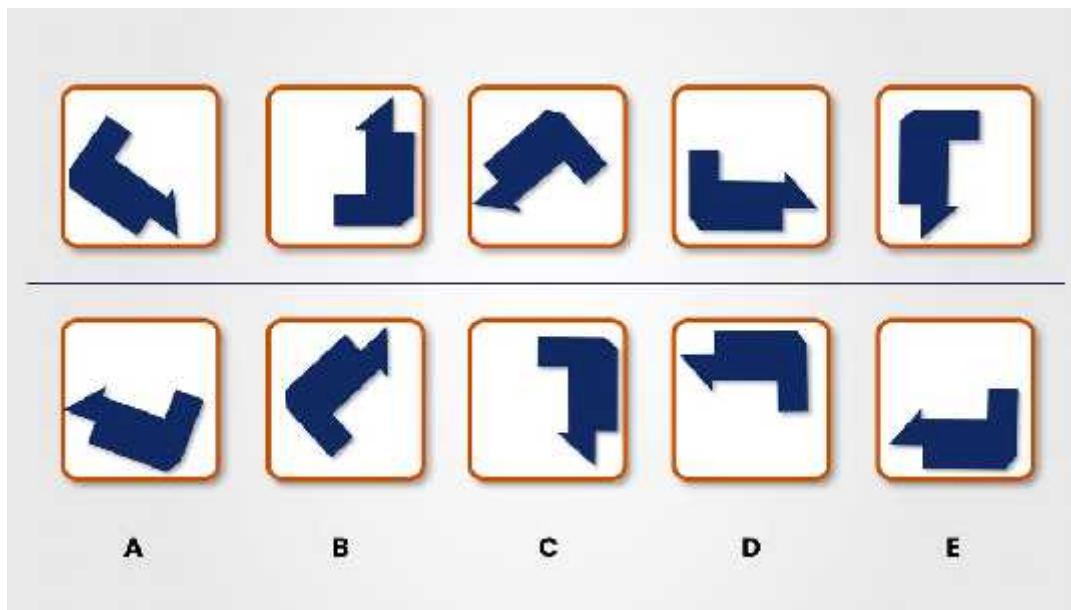
- ) 30
- ) 35
- ) 40
- ) 45

56. Please see the question figure and answer figure carefully. Find the most suitable answer. Answer figure from alternatives, which are numbered from 1 to 4 by using the sequence of set of figures given in question figure.



- a) 1
- b) 2
- c) 3
- d) 4

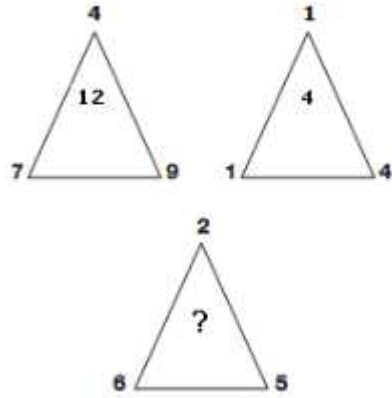
57. Please see the following boxes carefully. Which box contains the identical shape as the upper series?



- ) A
- ) B
- ) C
- ) D

58. Which number replaces the question mark?





- ) 9
- ) 8
- ) 4
- ) 1

Years of Experience	Fitness Trainer	Client 1 (100-125kg)	Client 2 (125-150kg)	Client 3 (150-250kg)	Final Score
1	Susan	10	20	35	20.5
3	Megan	14	22	45	25.7
4	Tom	25	35	70	41.5
4	Brad	20	25	66	35.3
2	Peter	22	28	49	31.9
1	Melissa	25	33	62	38.5
3	Nick	16	18	52	27.4
2	Russel	14	15	39	21.8
2	Patty	8	12	22	13.4

59. Answer the following statements in either Yes or No:

1. In calculating the final score for the contest, the weight loss for a fitness trainer's third client (Client 3) had equal weighting as the weight loss on Client 2.
2. The median final score for all fitness trainers was 27.40
3. In the data set for "Client 1" clients who worked with a fitness trainer having four years of experience, the range was 8.

- ) Yes, Yes, Yes
- ) No, No, No
- ) No, No, Yes
- ) Yes, Yes, No

60. A is father is B. B is mother of C. C is daughter of D. What is A to D? (MCQ - CHOOSE ONE)

- ) Father-in-Law
- ) Son-in-Law

- Sister-in-Law
- Brother-in-Law

## **Chemistry**

61. Law of octaves was stated by: (MCQ - CHOOSE ONE)

- Dobereiner
- Moseley
- Newland
- Mendeleev

62. Which of the following periods contains 32 elements? (MCQ - CHOOSE ONE)

- 6
- 3
- 5
- 7

63. Keeping in view the size of atoms, which order is correct one? (MCQ - CHOOSE ONE)

- Mg > Sr
- Lu > Ce
- Bs > Mg
- Cl > I

64. Which of the following elements has maximum 1st ionization energy in the periodic table? (MCQ - CHOOSE ONE)

- He
- N
- Ar
- F

65. Across the short period melting point and boiling point of elements: (MCQ - CHOOSE ONE)

- Increases
- Decreases
- First increases then decreases
- Remain constant

66. Hydration energy depends on: (MCQ - CHOOSE ONE)

- Charge on Ion
- Size of Ion
- Number of unpaired electron in the ions
- Both a and b

67. All the following elements show variable oxidation state except: (MCQ - CHOOSE ONE)

- Mn
- Fe
- Cr
- Zn

68. Which of the following oxide is acidic in nature? (MCQ - CHOOSE ONE)

- Na<sub>2</sub>O
- MgO
- CO<sub>2</sub>
- Al<sub>2</sub>O<sub>3</sub>

69. Plaster of Paris is used for the followings except: (MCQ - CHOOSE ONE)

- plaster walls
- casts of statuary
- surgery for bandage
- basic soil

70. The mineral CaSO<sub>4</sub>.2H<sub>2</sub>O has the general name: (MCQ - CHOOSE ONE)

- Gypsum
- Calcite
- Dolomite
- Epsom salt

71. Magnesium burns in air to form: (MCQ - CHOOSE ONE)

- MgO
- Mg<sub>3</sub>H<sub>2</sub>
- MgO and Mg<sub>3</sub>N<sub>2</sub>
- MgCO<sub>3</sub>

72. Lithium only forms: (MCQ - CHOOSE ONE)

- Sub oxide
- Normal oxide
- Superoxide
- Peroxide

73. The colour of Pb<sub>3</sub>O<sub>4</sub> is: (MCQ - CHOOSE ONE)

- Black
- Red
- Yellow

- White

74.  $\text{Na}_2\text{SiO}_3$  is also known as: (MCQ - CHOOSE ONE)

- Water glass
- Soda lime glass
- Pyrex glass
- Flint glass

75. Which statement is incorrect for Nitrogen? (MCQ - CHOOSE ONE)

- It has the smallest size
- It can form multiple bonds
- It has the highest electronegativity
- It is paramagnet in nature

76. Which of the following reaction of  $\text{HNO}_3$  is true? (MCQ - CHOOSE ONE)

- $3\text{Cu(s)} + \text{dil } 8\text{HNO}_3 \rightarrow 3\text{Cu(NO}_3)_2(\text{aq}) + 2\text{NO} + 4\text{H}_2\text{O}$
- $3\text{Cu(s)} + \text{dil } 8\text{HNO}_3 \rightarrow 3\text{Cu(NO}_3)_2(\text{aq}) + 2\text{NO}_2 + 3\text{H}_2\text{O}$
- $3\text{Cu(s)} + \text{dil } 8\text{HNO}_3 \rightarrow 3\text{Cu(NO}_3)_2(\text{aq}) + \text{N}_2\text{O} + 4\text{H}_2\text{O}$
- $\text{Cu(s)} + \text{dil } 4\text{HNO}_3 \rightarrow 3\text{Cu(NO}_3)_2(\text{aq}) + 2\text{N}_2\text{O}_3 + 4\text{H}_2\text{O}$

77. All of the elements of group V A have allotropic forms except: (MCQ - CHOOSE ONE)

- N
- As
- P
- Sb

78. The formula of Stibnite ore is: (MCQ - CHOOSE ONE)

- $\text{PbS}$
- $\text{Sb}_2\text{S}_3$
- $\text{ZnS}$
- $\text{HgS}$

79. Consider the reaction:  $\text{C} + \text{H}_2\text{SO}_4 \rightarrow \text{CO}_2 + \text{SO}_2 + \text{H}_2\text{O}$ ; In this reaction carbon acts as: (MCQ - CHOOSE ONE)

- Reducing agent
- Oxidizing agent
- Both a and b
- Difficult to predict

80. Which of the following is anhydride of  $\text{H}_2\text{SO}_4$ ? (MCQ - CHOOSE ONE)

- SO<sub>2</sub>
- H<sub>2</sub>S<sub>2</sub>O<sub>7</sub>
- SO<sub>3</sub>
- H<sub>2</sub>SO<sub>3</sub>

## **Biology**

81. Branch of biology which deals with the study of chemical components and chemical processes in living organisms is called (MCQ - CHOOSE ONE)

- Physiology
- Biochemistry
- Atomic biology
- Molecular biology

82. \_\_\_\_\_ is the potential source of chemical energy for cellular activities (MCQ - CHOOSE ONE)

- C-H bond
- C-O bond
- C-N bond
- P-O-C bond

83. Control of organisms by using living organisms is called (MCQ - CHOOSE ONE)

- Bioremediation
- Integrated disease management
- Antisepsis
- Biological control

84. Unbroken series of organisms arranged from ancestor to descendant sequence is (MCQ - CHOOSE ONE)

- Biodiversity
- Phyletic lineage
- Connecting link
- Evolutionary line

85. Out of total organisms on earth, \_\_\_\_\_ are vascular plants (MCQ - CHOOSE ONE)

- 53.10%
- 19.90%
- 17.60%
- 9.40%

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- C-O bond
- C-N bond
- P-O-C bond

89. Percentage of water in brain cells is (MCQ - CHOOSE ONE)

- 20 %
- 65 %
- 85 %
- 89 %

90. Breakdown of large molecules into smaller ones utilizing water molecules is (MCQ - CHOOSE ONE)

- Hydration
- Hydrolysis
- Dehydration synthesis
- Electrolysis

91. The phenomenon of osmosis is opposite to that of (MCQ - CHOOSE ONE)

- Effusion
- Diffusion
- Effusion
- coagulation

92. The most active site of protein synthesis is the (MCQ - CHOOSE ONE)

- Nucleus
- Ribosome
- Mitochondrion
- Cell sap

93. The cellular organelles called "suicide bags" are (MCQ - CHOOSE ONE)

- Lysosomes
- Ribosomes
- Nucleolus
- Golgi's bodies

94. From the biological viewpoint, solutions can be grouped into (MCQ - CHOOSE ONE)

- Isotonic solution
- Hypotonic solutions
- Hypertonic solution
- All of these

95. Transport of solid material across cell membrane is accomplished by (MCQ - CHOOSE ONE)

- Phagocytosis
- Pinocytosis
- Extrusion
- All of these

96. The ability of the cell membrane to act as a selective barrier depends upon (MCQ - CHOOSE ONE)

- The lipid composition of the membrane
- The pores, which allows small molecules
- The special mediated transport systems
- All of these

97. Carrier protein can (MCQ - CHOOSE ONE)

- Transport only one substance
- Transport more than one substance
- Exchange one substance to another
- Perform all of these functions

98. A lipid bilayer is permeable to (MCQ - CHOOSE ONE)

- Urea
- Fructose
- Glucose
- Potassium

99. Enzymes catalyzing electron transport are present mainly in the (MCQ - CHOOSE ONE)

- Ribosomes
- Endoplasmic reticulum
- Lysosomes
- Inner mitochondrial membrane

100. Genetic information of nuclear DNA is transmitted to the site of protein synthesis by (MCQ - CHOOSE ONE)

- rRNA

- mRNA
- tRNA
- Polysomes

101. Which of the following is correct for isoantigens? (MCQ - CHOOSE ONE)

- They are antigens found in all members of different species
- They are antigens found in some members of a species
- They are antigens found in all members of a species
- They are antigens found in some members of different species

102. Numerous antibodies can be prepared, against one antigen, each binds to unique epitopes.

How is this antibody diversity generated? (MCQ - CHOOSE ONE)

- By rearrangements of the DNA encoding the variable regions of the heavy and light chains
- By the combination of different heavy and light chains that form the antigen binding site
- Antibody proteins can physically change their shape to bind different epitopes
- Both A & B

103. The class of immunoglobulin which can cross the placenta is (MCQ - CHOOSE ONE)

- IgM
- IgG
- IgA
- IgD

104. Self-reactive antibodies are not found in significant concentration in normal serum because (MCQ - CHOOSE ONE)

- It is impossible to generate a self-reactive antibody
- Self-reactive B cells are killed by CD8 T cells
- B cells that are stimulated via their surface bound antibody in the absence of T cell help to commit suicide
- Self-reactive B cells switch to IgA which is all secreted and not present in serum

105. Simulation of which of the following will lead to appearance of first antibody to appear following stimulation by an antigen? (MCQ - CHOOSE ONE)

- IgM
- IgA
- IgE
- IgG

## **Physics**

106. Physical quantities are divided into (MCQ - CHOOSE ONE)

- Two categories
- Three categories
- Four categories



107. As many as we can

In equation  $F = ma$ , mass  $m$  is (MCQ - CHOOSE ONE)

- Gravitational mass
- Variable mass
- Inertial mass\*
- None of the above

108. If a brick of mass 2.0 Kg is dropped from rest position 5 m above the ground, then its velocity at height of 3 m above the ground is (MCQ - CHOOSE ONE)

- 36 m/s
- 63 m/s
- m/s
- 6.3 m/s

109. When a body moves in a circle, the angle between its linear velocity and angular velocity is (MCQ - CHOOSE ONE)

- $0^\circ$
- $30^\circ$
- $45^\circ$
- $90^\circ$

110. One torr is equal to (MCQ - CHOOSE ONE)

- 13.33 N/m<sup>2</sup>
- 760 N/m<sup>2</sup>
- 760 mm hg
- 133.3 N/m<sup>2</sup>

111. For air medium the value of  $\epsilon$  is (MCQ - CHOOSE ONE)

- 1.6
- 1.2
- 1.0
- 1.17

112. If a transverse wave travelling in a rare medium is incident on a denser medium, it is reflected such that it undergoes a change of (MCQ - CHOOSE ONE)

- $0^\circ$
- $90^\circ$
- $135^\circ$
- $180^\circ$

113. The frequency of stretched string when it vibrates in two loop is (MCQ - CHOOSE ONE)

- Equal to that when it vibrates in one loop
- Double than when it vibrates in one loop
- Triple than when it vibrates in one loop
- Four times than when it vibrates in one loop

114. A light wave produced by oscillating charge consists of a periodic vibration of (MCQ - CHOOSE ONE)

- Electric field
- Magnetic field
- Either of them
- Both of them

115. The light which has components in all directions is called (MCQ - CHOOSE ONE)

- Polarized light
- Intense light
- Unpolarized light
- None of them

116. Law of octaves was stated by: (MCQ - CHOOSE ONE)

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- Moseley
- Newland
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117. Which of the following periods contains 32 elements? (MCQ - CHOOSE ONE)

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