SAMPLE PAPER – 1
POST GRADUATE PROGRAMME IN FASHION TECHNOLOGY
I PAPER - GENERAL ABILITY TEST

Time Allowed: 2 Hours   **Max. Marks: 120**
                                                                             Total Questions: 120

This test comprises of the following sub-tests.
(1) Quantitative Ability
(2) Communication Ability
(3) English Comprehension
(4) Analytical Ability
(5) General Knowledge and Current Affairs
(6) Thematic Apperception Test
    (i)   Each question carries one mark.
    (ii) Answers are required to be marked only on the OMR/ICR Answer-sheet, which will be provided separately.
    (iii) For each question, four alternative answers have been provided out of which only one is correct. Darken the appropriate circle in the Answer-sheet by using Ball pen only on the best alternative amongst (a), (b), (c) or (d).

1. A sells an article to B at a profit of 25%; B sells it to C at a profit of 10%; C sells it to D at a profit of 40%. If D pays Rs.90 for it, what is the CP for A?
    (a) Rs. 46.75   (b) Rs. 48.25   (c) Rs. 49.50   (d) Rs. 44.25

2. The interest on Rs.1600 for 5 years at 8% simple interest is:
    (a) Rs. 520   (b) Rs. 680   (c) Rs. 640   (d) Rs. 720

3. Solve $7\log\dfrac{16}{15}+5\log\dfrac{25}{24}+3\log\dfrac{81}{80}$
    (a) log 7   (b) log 5   (c) log 2   (d) log 3

4. A rectangular garden is 96m by 84m. Gita walks around it at the rate of 3 km/hr. The time taken by Gita in making 4 rounds is:
    (a) 36.4 min   (b) 41.8 min   (c) 38.8 min   (d) 28.8 min

5. Two pipes 'A' and 'B' can separately fill a cistern in 20 min and 25 min respectively, while a third pipe 'C' can empty the cistern in 15 min. How long will it take to fill the cistern, if all the pipes are opened simultaneously?
    (a) 34 min   (b) 39 min   (c) 48 min   (d) 43 min

6. $(-26x^2y+6xy)\div 2xy$
    (a) 3x-1   (b) x-13   (c) -13x+3   (d) 13-3x

7. In what time will Rs.2400 amount to Rs.2646 at 5% CI?
    (a) 5 years   (b) 4 years   (c) 3 years   (d) 2 years

8. The length of a diagonal of a rectangle whose sides are 'l' and 'b' is:
    (a) $\sqrt{l^2+b^2}$ (b) $\sqrt{l^2-b^2}$ (c) $\dfrac{\sqrt{l^2+b^2}}{2}$ (d) $\sqrt{l+b}$

9. $\underset{x\to 4}{Lt}\dfrac{x^2-16}{x-4}=$
    (a) 0   (b) 8   (c) 4   (d) ∞

10. $\dfrac{d}{dx}(x^2)=$
    (a) $\dfrac{x}{2}$ (b) 2x   (c) $\dfrac{x^2}{2}$ (d) x

11. For the set of natural numbers additive identity does not exist because
    (a) $0\notin N$ (b) $w\notin N$ (c) $1\in N$ (d) Addition is closed

12. $?\times 25=3575, ?=$
    (a) 145   (b) 154   (c) 134   (d) 143

13. $\left[(11.33)^2 - (2.56)^2 \right] \div \left[11.33 - 2.56 \right] =$
    (a) 8.77   (b) 13.98   (c) 13.89   (d) 1.389

14. A number is equal to 125 times the square of its reciprocal. The number is
    (a) 5   (b) 25   (c) 125   (d) 0.5

15. A tree is 7.2 m tall, another is half its height and the third one is 1/3 of its height. The average height of the 3 trees
    (a) 4.4 m   (b) 3.6 m   (c) 2.5 m   (d) 5 m

16. Conjugate of 3i+10/3 is
    (a) 3i+10/3   (b) 3i-10/3   (c) -3i+10/3   (d) 9i+10

17. If $\sqrt[3]{32} = 2^x$, then x =
    (a) 3   (b) 5/3   (c) 3/5   (d) 5

18. If p: q = 3: 4 and q: r = 8: 9 then p: r =
    (a) 2:3   (b) 3:2   (c) 3:1   (d) 1:2

19. 21% of 21% is
    (a) 0.2121   (b) 4.41   (c) 0.0441   (d) 0.441

20. If 36 men can do a job in 25 days, in how many days will 15 men do it?
    (a) 60   (b) 20   (c) 15   (d) 40

21. Find the time taken by a train 180m long running at 72 kmph in crossing an electric pole.
    (a) 9 sec   (b) 20 sec   (c) 10 sec   (d) 3 sec

22. At the rate of 9% per annum S.I. claimed at the end of 5 years by a sum of Rs. 5000
    (a) Rs. 2500   (b) Rs. 2600   (c) Rs. 2000   (d) Rs. 2250

23. A man buys an article for Rs. 27.50 and sells it for Rs. 28.60. The gain percent is
    (a) 3   (b) 1.2   (c) 6   (d) 4

24. The sides of a triangle are 7, 8 and 10 units. The area is
    (a) 15/4   (b) $\dfrac{15}{4}\sqrt{55}$ (c) $15\sqrt{55}$ (d) $\dfrac{4}{15}\sqrt{55}$

25. Two circular cylinders of equal volumes have their heights in the ratio 1:2. The ratio of their radii is
    (a) $\sqrt{2}:1$ (b) 1:2   (c) 2:1   (d) 1:3

26. In an examination, 80% of students passed in Biology, 85% in Physics and 75% in both Biology and Physics. If 40 students failed in both the subjects, the total number of students is:
    (a) 100   (b) 200   (c) 300   (d) 400

27. The value of $\cfrac{18}{2+\cfrac{3}{\cfrac{5}{3} \div \cfrac{\frac{3}{15}}{\frac{2}{5} \times \frac{1}{3}}}} =$
    (a) $2\dfrac{3}{19}$ (b) $3\dfrac{3}{19}$ (c) $5\dfrac{3}{19}$ (d) $4\dfrac{3}{19}$

28. $\sqrt{\dfrac{16}{36}+\dfrac{1}{4}} =$
    (a) 3/2   (b) 5/6   (c) 1/6   (d) 1/5

29. 20 pens of different colours are to be arranged. In how many ways can they be arranged?
    (a) 10!   (b) 20!   (c) 18!   (d) 19!

30. If $\log_3 x = -2,$ then x =
    (a) -9   (b) 9   (c) 1/9   (d) -1/3

31. The difference of two numbers is 106. The smallest number is 253. The other number is
    (a) 395   (b) 147   (c) 212   (d) 359

32. The average weight of three men P, Q and R is 78 kg. A fourth man S joins them and average weight of the four becomes 80kg. If T whose weight is 4 kg more than S replaces P, then the average weight of Q, R, S and T becomes 79 kg. Find the weight of P.
    (a) 68   (b) 76   (c) 88   (d) 94

33. $\dfrac{1}{6} + \dfrac{1}{6^2} + \dfrac{1}{6^3}$ is equal to

    (a) 0.316   (b) 0.199   (c) 1.015   (d) 0.423

34. One -fourth of one - third of two – fifth of a number is 15. What will be 60% of that number?

    (a) 190   (b) 170   (c) 270   (d) 200

35. $\left[\dfrac{1}{512}\right]^{-\frac{2}{3}} \div \left[\dfrac{1}{64}\right]^{-\frac{4}{3}} = ?$

    (a) 1   (b) ¼   (c) 4   (d) 1/6

36. If the price of milk is increased by 30%, find by how much percent must a householder reduce her consumption of milk so as not to increase the expenditure?

    (a) 24%   (b) 25%   (c) 23.07%   (d) 26%

37. The difference between the compound interest and the simple interest on a sum of money for 2 years at 12 ½ % p.a. is Rs 150. The sum is

    (a) Rs. 9000   (b) Rs. 4800   (c) Rs. 9600   (d) Rs. 9060

38. A can do a piece of work in 30 days while B alone can do it in 40 days. In how many days can A and B working together do it?

    (a) $7\dfrac{1}{7}$ (b) 27   (c) $17\dfrac{1}{7}$ (d) 70

39. A scooterist covers a certain distance at 36 kmph. How many meters does he cover in 2 minutes.

    (a) 1000 m   (b) 1200 m   (c) 3000 m   (d) 500 m

40. The average weight of 12 men decreases by 2 kg when a new man replaces one of them weighing 84 kg. The weight of the new man is:

    (a) 60   (b) 82   (c) 86   (d) cannot be determined

41. The diameter and the slant height of a conical tomb are 28 cm and 50 m respectively. The cost of white washing its curved surface at the rate of Rs.1.10 per square meter is:

    (a) Rs. 1860   (b) Rs. 2420   (c) Rs. 2828   (d) Rs. 3066

42. If log3 = 0.4771, the number of digits in 3^{24} is

    (a) 24   (b) 11   (c) 12   (d) 4

Direction (Q. Nos. 43-47): Each of the following sentences has been divided into 4 parts-(a).(b),(c),(d).One of them has an error. Choose the one with the error.

43. Being a strategist / he planned the theft / and executed it, to the plan / No error.

    (a)   (b)   (c)   (d)

44. We should share / our wealth / and blessings to others./ No error

    (a)   (b)   (c)   (d)

45. Even if the wound is very small / it should not be left / open, without band-aid. /. No error

    (a)   (b)   (c)   (d)

46. A lot many shots / were played on the offside / without any boundary/ No error.

    (a)   (b)   (c)   (d)

47. A large number of garment Industries / are to coming / in and around Hyderabad. / No error.

    (a)   (b)   (c)   (d)

Direction (Q. Nos. 48-52): Fill in the blanks with words/phrases that best completes the sentence.

48. The conditions …….. to travel

    (a) are not favourable   (b) not favourable   (c) are very favourable   (d) none of these

49. I have to finish the work …. four days.

    (a) by   (b) within   (c) at   (d) on

50. There is no dearth of drivers who …… at night.

    (a) can drive   (b) would driven   (c) does drive   (d) none of these

51. You may wonder about the mystery the author had …..

    (a) concocted   (b) inadequately build   (c) failure   (d) spacious

52. Subrato was ……….. when he met with an accident.

    (a) aghast   (b) not awaken   (c) not seeing   (d) in deep slumber

Direction (Q. Nos. 53-57): Each of the following words in capitals is followed by four choices. Choose the one nearest to it in meaning.

53.   RUDIMENTARY
       (a) rude   (b) basic   (c) powerful   (d) odd
54.   COLLATE
       (a) dissemble   (b) describe   (c) ascribe   (d) assemble
55.   LATENT
       (a) hard   (b) visible   (c) cruel   (d) display
56.   INSOLENT
       (a) assertive   (b) proud   (c) disrespectful   (d) nervous
57.   RELUCTANCE
       (a) doubt   (b) joy   (c) inclination   (d) belief

Direction (Q. Nos. 58-62): Each of the following words in capitals is followed by four choices. Choose the one opposite in meaning to it.

58.   POIGNANT
       (a) penetrating   (b) moving   (c) touching   (d) unmoving
59.   IGNOMINY
       (a) shame   (b) grimace   (c) honour   (d) humiliate
60.   HUSH
       (a) calm   (b)soothe   (c) noisy   (d) gag
61.   INCOGNITO
       (a) disguise   (b) invisible   (c)conspicuous   (d) secret
62.   FLIPPANT
       (a) rude   (b) pert   (c)impertinent   (d) serious

Direction (Q. Nos. 63-72): Read the passage carefully and answer the questions based on it.

PASSAGE

Though the U.S. prides itself on being a leader in the world community, a recent report shows that it lags far behind other industrialized countries in meeting the needs of its youngest and most vulnerable citizens. The U.S. has a higher infant mortality rate, a higher proportion of low birth weight babies, a smaller proportion of babies immunized against childhood diseases and a much higher rate of adolescent pregnancies. These findings, described, as a 'quiet crisis' requiring immediate and far reaching action, appeared a report prepared by a task force of educators doctor, politicians and business people. According to the report, a fourth of the nation's 12 millions infants and toddlers live in poverty. As many as half confront risk factors that could harm their ability to develop intellectually, physically and socially. Child immunizations are too low, more children are born into poverty, and more are in substandard care while their parents work and more are being raised by single parents. When taken together, these and other risk factors can lead to educational and health problems that are much harder and more costly to reverse.

The crisis beings the womb with unplanned parenthood. Women with unplanned pregnancies are less likely to seek pre-natal care. In the U.S. 80% of teenage pregnancies and 56% of teenage pregnancies and 56% of all pregnancies are unplanned. The problems continue after birth where unplanned pregnancies and unstable partnerships often go hand in hand. Since 1950, the number of single parent families has nearly tripled. More than 25% of all births today are to unmarried mothers. As the number of single parent families grows and more women enter the work force, infants and toddlers are increasingly in the care of people other than their parents.

More disturbingly, recent statistics show that American parents are increasingly neglecting or abusing their children. In only four years 1987 - 1991, the number if children if foster care increased by over 50%. Babies under the age of one are the fastest growing category of children entering foster care. The crisis affect children under the age of three most severely, the report says. Yet, it is this period - from infancy through preschool years - that sets the stage for child's future.

63.   Which of the following statements is not true in the context of the passage?
       (a) The number of single - parent families today is approximately three times than four decades ago
       (b) In the US the number of infants living in poverty is about 3 millions

(c) The number of children in the US entering foster care has decreased after 1991

(d) About 6 million infants in the US are likely to develop educational and health problems

64. Which of the following does not constitute the 'quiet crisis' in the US as per the task force report?

(a) Larger proportion of babies who are deprived of immunization

(b) Lower proportion of newborn babies with normal weight

(c) Increasing cases of teenage couples getting divorced

(d) Lower rate of babies surviving childhood diseases

65. The number of children born to married mothers in the US is approximately how many times the number of children born to unwed mothers?

(a) 2 times   (b) 3 times   (c) 3.5 times

(d) Not mentioned in the passage

66. Children born out of unplanned pregnancies are highly vulnerable because

(a) Their parents are emotionally immature   (b) They are raised by single parents

(c) They are mostly malnourished   (d) They are less likely to receive prenatal care

67. Read the following factors A, B and C and decide which one of them is/are responsible for the physical, intellectual and social under development of infants in the US?

       (A) Illiteracy   (B) Lack of parental care   (C) Poverty

(a) Only A   (b) Only B   (c) Both A and C   (d) Both B and C

68. Children failing in which age group are most severely affected by the 'quiet crisis'?

(a) Below 3 years   (b) between 2 and 3 years

(c) Below 1 year   (d) between 1 and 3 years

69. The main focus of the passage is on the plight of

(a) Unwed mothers   (b) orphaned children

(c) Teenage mothers   (d) low birth weight babies

70. An increasing number of infants in the US are in foster care on account of

(a) An increasing number of parents who lack awareness about baby care

(b) An increasing number of women getting divorced and abandoning their babies

(c) An increasing number of employed couples who are required to stay apart

(d) An increasing number of single parent families with the female number working

71. The task force report seems to be based on the data pertaining to the period

(a) 1987 to 1991   (b) 1950 to 1991   (c) 1987 onwards till date

(d) 1950 onwards till date

72. The number of children in foster care from 1987-1991 is approximately how many times

(a) 1 times   b) 0.5 times   c) 2 times   d) 2.5 times

Direction (Q. Nos. 73-77): Read the passage carefully and answer the questions based on it.

PASSAGE

There is one salient difference between education as understood by the Greeks and the popular ideas of education in our own day. To the Greeks, education was primarily a training of the faculties that should fit man for the exercise of thought and duties of citizenship. The modern world looks rather to the acquisition of some skill or knowledge that is needed for a career; it thinks more of the product than of the process. Acquaintance with facts counts more with the moderns while mental completeness and grasp were prized by the Greeks above everything else. But mental completeness did not mean to the Greeks intellectual discipline alone; it meant also a discipline and moulding of character, training in public spirit, a suppression of the individual, a devotion to civic ends. It is, on the one hand, mental illumination, but it also implies refinement and delicacy of feeling, a scorn of what is self-seeking, ignoble, and dishonourable – a scorn bred of loving familiarity with poets and philosophers. Our nearest expression for this generous and many sided training is the word 'Culture'. Culture, however, to many minds suggests a kind of polish, a superficial refinement. Besides, it has an air of exclusiveness; it is thought of as the privilege of the favoured few.

73. What is the aim of education as understood by the ancient Greeks?

(a) to gain some skill or knowledge   (b) to prepare for a career

(c) to learn the duties of citizenship   (d) none of the above

74. What is the popular idea of education today?
   (a) to prepare for a career
   (b) mental development
   (c) physical development
   (d) both (b) and (c)

75. What did mental completeness mean to the Greeks?
   (a) intellectual development only
   (b) moulding of character
   (c) training in public spirit
   (d) both (b) and (c)

76. What does culture mean to some minds?
   (a) refinement of delicacy of feeling
   (b) scorn of poets and philosophers
   (c) a kind of polish, a superficial refinement
   (d) none of the above

77. What does Greek culture really mean?
   (a) a link between learning and citizenship
   (b) an air of exclusiveness
   (c) an acquaintance with facts
   (d) none of the above

Direction (Q. Nos. 78-82). Each problem contains a question and two statements, which give certain data. You have to select the correct answer from (a) to (b) depending on the sufficiency of the data given in the statements to answer the questions.

Mark (a): If statement A alone is sufficient to answer the question and statement B alone is not sufficient to answer the question.
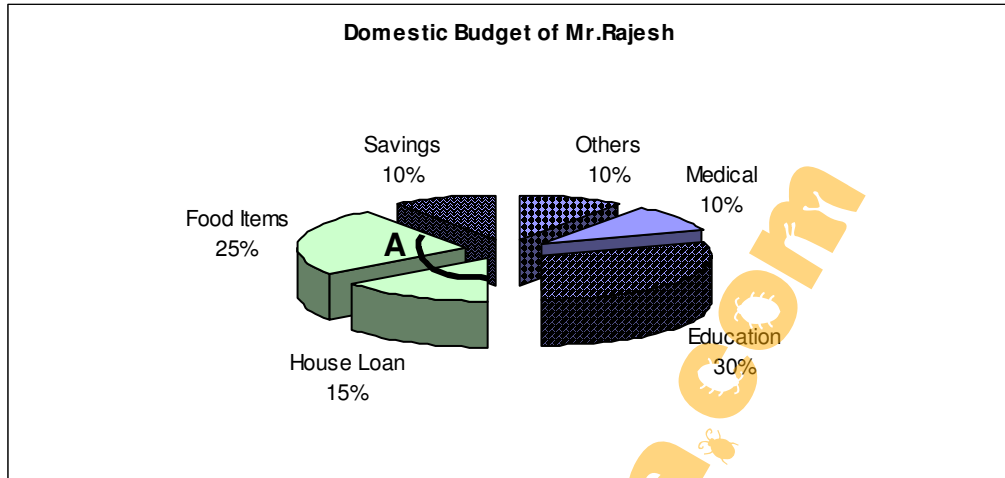
Mark (b): If statement B alone is sufficient to answer the question and statement A alone is not sufficient to answer the question.

Mark (c): If statements A and B together are sufficient to answer the question but neither statement alone is sufficient.

Mark (d): If statements A and B together are not sufficient to answer the question and additional data specific to the problem are needed.

78. What is the mode of the given data ?
   (A) Median of the data = 7
   (B) mean of the data = 12

79. Does the point (3, 5) lie on the line l_1?
   (A) l_1 is given as $5x - 4y + 20 = 0$.
   (B) Point (5, 3) lies on l_1 and is at a distance of $2\sqrt{2}$ units from (3,2).

80. What is the value of x,
   (A) $x + 3y = 15$
   (B) $2x + 5y = 22$

81. Is AB = A?
   (A) $A = \begin{bmatrix} 5 & 6 \\ 7 & 8 \end{bmatrix}$
   (B) $B = \begin{bmatrix} 1 & 0 \\ 0 & 1 \end{bmatrix}$

82. What is the geometric mean of two numbers?
   (A) Arithmetic mean of the numbers is 15
   (B) Harmonic mean of the numbers is 10.

83. One morning after Sunrise, Sagar was standing facing a pole. The shadow of the pole fell exactly to his right. Which direction was he facing?
   (a) East   (b) South   (c) West   (d) Data inadequate

Directions for Question Nos. (84-87): These questions are based on the graph given below.

Domestic Budget of Mr.Rajesh

Savings 10% Others 10% Medical 10% Food Items 25% House Loan 15% Education 30% A
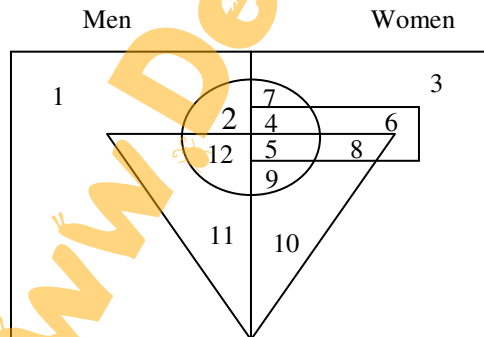
Gross income = Rs.15,000/- p.m

84.　What is the annual expenditure on House loan per month?
　　(a) Rs.2250/-　　　(b) Rs.2500/-　　　(c) Rs.2000/-　　　(d) Rs.2600/-
85.　How much will Mr. Rajesh save in 1 year if his salary increased by 20 % after 6 month? (assume that the distribution of his income over various expenditure heads remains the same even after the salary hike)
　　(a) Rs.18,900/-　(b) Rs.19,000/-　(c) Rs.19,800/-　(d)None of these
86.　If cost of food increases by 15%, by how much should be reduce consumption on others so as to meet his budget?
　　(a) 432　　　　　(b) 562　　　　　(c) 486　　　　　(d) 624
87.　In the above problem, if he receives 5% on consumption of food, how much will his savings be?
　　(a) 1522　　　　(b) 1426　　　　(c) 1590　　　　(d) 1687
88.　What is the value of angle A shown in the figure?
　　(a) 160°　　　　(a) 128°　　　　(a) 144°　　　　(a) 120°

Direction for Question Nos. 89-92: Study the figure and answer the questions given.
In the figure representing men and women, circle represents educated, the triangle represents the jobholders and the rectangle represents housewives.

Men　　　　　　　　　　Women
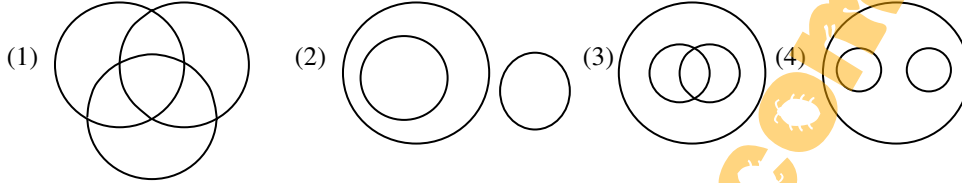

89.　The number representing the educated men without jobs is:
　　(a) 2　　　　　　(b) 3　　　　　　(c) 7　　　　　　(d) 12
90.　Which number represents educated men who have jobs?
　　(a) 4　　　　　　(b) 6　　　　　　(c) 7　　　　　　(d) 12
91.　What sector does 4 represent?
　　(a) educated men　　(b) educated housewives　(c) women jobholders　(d) none of the above
92.　Which category is represented in 5?
　　(a) women who are educated and housewives　　　(b) women who are educated and job holders

67

(c) none of the above   (d) both of the above

Directions for Question Nos. 93-97: In the following questions, four diagrams are given numbered 1, 2, 3 and 4. Below the figures, there are certain questions, which are to be answered based on these figures.
Which of the following diagrams best represents the relationship between the items given in each of the following questions?

93.   Asia, China, India
       (a) 1   (b) 2   (c) 3   (d) 4
94.   Doctors, Engineers, Men
       (a) 1   (b) 2   (c) 3   (d) 4
95.   Chair, furniture, fruits
       (a) 1   (b) 2   (c) 3   (d) 4
96.   Painters, singers, artists
       (a) 1   (b) 2   (c) 3   (d) 4
97.   Girls, students, dancers
       (a) 1   (b) 2   (c) 3   (d) 4

98.   Lecturer is related to Student in the same way as Doctor is related to ----
       (a) patient   (b) nurse   (c) operation   (d) None of these
99.   If – means / , + means x, / means -, x means +, then which of the following equation is correct?
       (a) 36 / 4 + 2 x 4 –12 = 35   (b) 12 / 4 x 9 + 12 – 6 = 42
       (c) 36 – 12 x 6 / 3 + 4 = 60   (d) 43 x 7 + 5 + 4 – 8 = 25

Directions for Question Nos. 100-102: In each of the following questions, four words have been given, out of which three are alike in same manner and the fourth one is different. Choose odd one out.
100.   (a) Brinjal   (b) Apple   (c) Plum   (d) Cherry
101.   (a) India   (b) China   (c) Pakistan   (d) USA
102.   (a) Hyderabad   (b) Bangalore   (c) Chennai   (d) Mysore

103.   Railway and telegraphic systems were introduced in India by
      (a) Lord Bentinck   (b) Lord Wellesley   (c) Lord Dalharsie   (d) Lord Cornwallis
104.   The Island of cloves' is ?
      (a) Tanganyika   (b) Thailand   (c) Zanzibar   (d) Stockholm
105.   Main bearers of the burden of indirect tax are their
      (a) Manufacturers   (b) Tax Payers   (c) Traders   (d) Consumers
106.   Who said that "Democracy is a Government of the people, for the people and by the people"
      (a) Arstotle   (b) Abraham Lincoln   (c) Roussell   (d) Woodrow Wilson
107.   The state which has no railway line is?
      (a) Arunachal Pradesh   (b) Meghalaya   (c) Tripura   (d) Nagaland
108.   Who among the south Indian dynasties was a great maritime power?
      (a) Pandyas   (b) Chalukyas   (c) Cholas   (d) Pallavas
109.   The horizontal movement of the air is called
      (a) air current   (b) wind   (c) tides   (d) measosphere
110.   The atmospheric layer nearest to the earth's surface is called
      (a) Stratosphere   (b) Troposphere   (c) Mesosphere   (d) Thermosphere
111.   The longest mountain region in the world is
      (a) Andes   (b) Alps   (c) Himalayas   (d) Panius
112.   Sofia is the Capital of
      (a) Albania   (b) Bulgaria   (c) Hungary   (d) Austria

113. Pick out the odd thing
    (a) Charminar   (b) Taj Mahal   (c) Red fort   (d) Green Park
114. The young one of a Horse is
    (a) Kitten   (b) cygnet   (c) Pony   (d) cub
115. The boundary between India and China is called
    (a) Great wall of china   (b) Parallel time   (c) Durand line   (d) Mc Mohan line

Directions for Question Nos. 116-120: Which one of the above shown figure is approximately present in the given patterns.

(a)   (b)   (c)   (d)

116.

117.

118.   119.

120.