STAFF SELECTION COMMISSION

COMBINED GRADUATE LEVEL

TIER - I PREVIOUS PAPER - 2016

GENERAL INTELLIGENCE

1. Select the related word from the given alternatives.

Bird : Aeroplane : : Fish : ?

1) Fisherman 2) Sofa 3) Boat 4) Glasses

2. Select the related letters from the given alternatives.

DCBA : WXYZ : : IJKL : ?

1) SRQP 2) QPON 3) RQPO 4) PONM

3. Select the related number from the given alternatives : 381 : 160 : : 478 : ?

1) 347 2) 357 3) 247 4) 257

4. Find the odd word from the given alternatives.

1) Affluent 2) Rich 3) Prestigious 4) Well - to - do

5. Find the odd letters from the given alternatives.

1) OMQ 2) TPR 3) TRV 4) VTX

6. Find the odd word number - pair from the given alternatives.

1) 8 – 11 2) 1 – 4 3) 7 – 10 4) 3 – 5

7. Arrange the following words as per order in the dictionary.

1) Launch 2) Laugh 3) Lattice 4) Latent 5) Latitude

1) 4, 5, 3, 2, 1 2) 4, 3, 5, 1, 2 3) 4, 5, 1, 2, 3, 4) 4, 5, 1, 3, 2

8. A series is given, with one term missing. Choose the correct alternative from the given ones that will complete the series.

XFB, UGD, RIG, OLK ?

1) OLJ 2) LNK 3) LPP 4) OLM

9. A series is given, with one term missing. Choose the correct alternative from the given ones that will complete the series.

1, 2, 4, 7, 2, 16

1) 14 2) 8 3) 11 4) 15

10. A & B are married couple. X and Y are brothers. X is the brother of A. How is Y related to B?

1) Brother – in – law 2) Brother

3) Son – in – law 4) Cousin

11. A is shorter than B but taller than C. D is shorter than A but taller than C and E is shorter than B but taller than A. The shortest person is?

1) B 2) C 3) A 4) D

12. From the given word, select the word which can not be formed using the letters of the given word.

DISSERTATION Option:

1) SISTER   2) STATION   3) DIRECTION   4) RATION

13. If A = 1, E = 5, then HEAR = ?

1) 38   2) 32   3) 31   4) 30

14. If P denotes +, Q denotes -, R denotes '÷', and S denotes X, then : 18S36R12Q6P7 = ?

1) 115   2) 65   3) 55   4) 25

15. Some equations have been solved on the basis of certain system. Find the correct answer for the unsolved equation on that basis. If 98 – 39 – 27 = 31, 87 – 38 – 34 = 20, then 79 – 25 – 12 = ?

1) 51   2) 22   3) 42   4) 15

16. Select the missing number from the given responses:

7	14	4
4	12	9
6	24	?

1) 14   2) 16   3) 21   4) 22

17. Rahul walks 30 metres towards south. Then turns to his right and starts walking straight till he completes another 30 metres. Then again turning to his left he walks for 20 metres. He then turns to his left and walks for 30 metres. How far is he from his initial position?

1) 50 metres   2) 30 metres   3) 10 metres   4) 60 metres

18. Some statements are given followed by four conclusions numbered I, II, III & IV. You have to consider the statement to be true, even if it seems to be at variance from commonly known facts. You have to decide which of the given conclusions, if any, follow from the given statements.
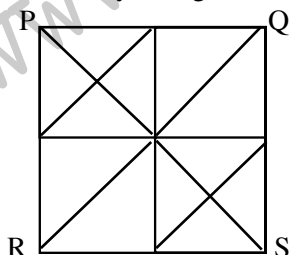
Statements:

    1. All teachers are actors.

    2. Some actors are women.

Conclusions:

    I. All teachers are women.

    II. Some women are teachers.

    III. Some women are actors.

    IV. All actors are teachers.

1) Only conclusion I follows   2) Only conclusion II & IV follows

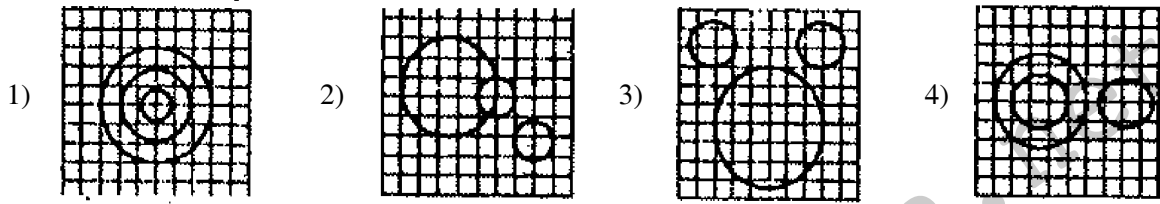3) Only conclusion III follows   4) None of the conclusion follows.

19. How many triangles are there in the following figure PQRS?
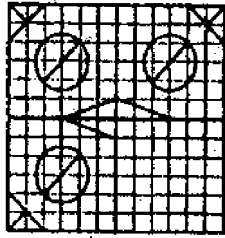

1) 12   2) 20

3) 24   4) 28

20. Identify the diagram that best represents the relationship among classes given below.
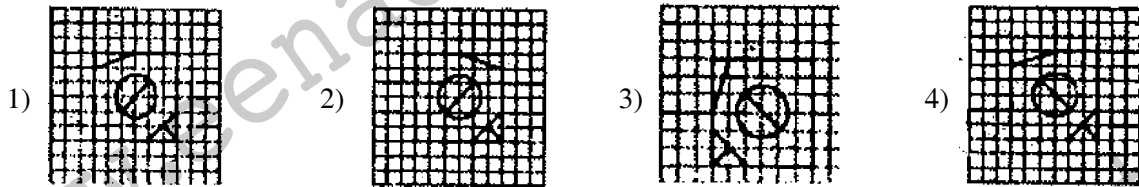
Stationery items, Pencils, Potatoes

1)   2)   3)   4)

21. Which answer figure will complete the pattern in the question figure?

Question Figure:
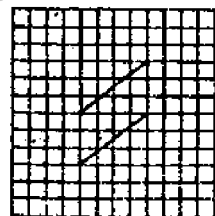

Answer Figure:

1)   2)   3)   4)

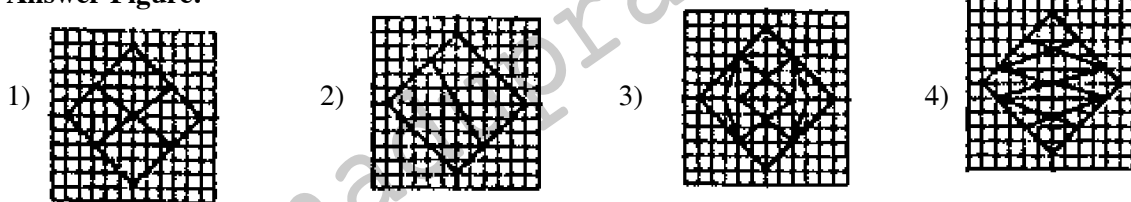**22.** From the given answer figures, select the one in which the question figure is hidden/ embedded.

Question Figure:

Answer Figure:

1)   2)   3)   4)

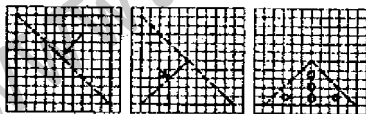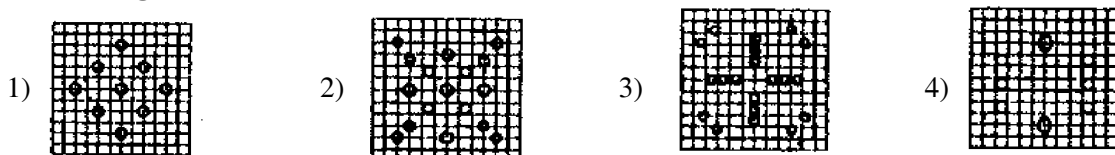**23.** A piece of paper if folded and cut as shown below in the question figures. From the given answer figures, indicate how it will appear when opened.
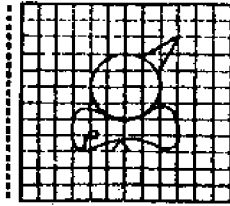
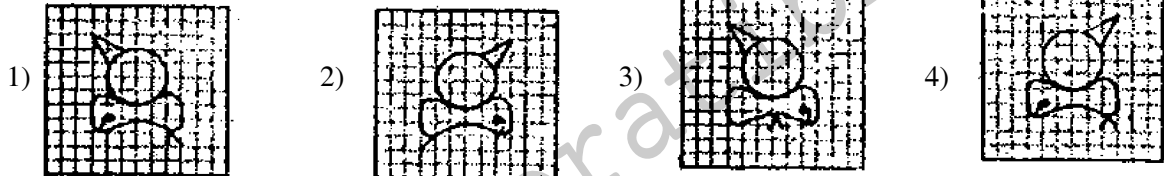**Question Figure:**

Answer Figure:

1)   2)   3)   4)

24. If a mirror is placed on the line MN, then which of the answer figures is the right image of the given figure?

Question Figure:

Answer Figure:

1)   2)   3)   4)

25. In this question, a word is represented by only one set of numbers as given in any one of the alternatives. The sets of numbers given in the alternatives are represented by two classes of alphabet as in two matrices given below. The columns and rows of Matrix I are numbered from 0 to 4 and that of Matrix II are numbered from 5 to 9. A letter from these matrices can be represented first by the row and next by its column, e.g., A can be represented by 02, 14, etc., and 'O' can be represented by 55, 67, etc., Similarly you have to identify the set for the word 'LEMD'.

Matrix-I

	0	1	2	3	4
0	E	S	A	L	M
1	L	M	E	S	A
2	S	A	L	M	E
3	M	E	S	A	L
4	A	L	M	E	S

Matrix-II

	5	6	7	8	9
5	O	D	U	N	F
6	N	F	O	D	U
7	D	U	N	F	O
8	F	O	D	U	N
9	U	N	F	O	D

1) 34, 43, 40, 56
2) 10, 31, 77, 99
3) 41, 12, 41, 59
4) 22, 14, 65, 75

GENERAL AWARENESS

26. Intensive cultivation refers to

1) production with intensive use of labour

2) production with intensive use of fertilizer

3) raising production by intensive use of existing land

4) raising production by large scale use of imported inputs

27. Upon winning Wimbledon Women's Tennis Tournament 2016, Serena Williams equalled record 22 Grand Slam wins of

1) Martina Navratilova
2) Steffi Graf

3) Martina Hingis
4) Maria Sharapova

28. A universal recipient has the blood group

    1) B   2) AB   3) A   4) O

29. Amir Khusrow was a

    1) Poet   2) Play writer   3) Painter   4) Architect

30. The members of All India Services serve the

    1) Central Government only   2) State Government only

    3) Union Territories only   4) Both the Union and State Government

31. The term of office of the Vice – President of India is

    1) 4 years   2) 5 years   3) 2 years   4) 6 years

32. Who was responsible for the integration of princely states into the Indian Union after Independence?

    1) Sri Rajagopalachari   2) Pt. Jawaharlal Nehru

    3) Sardhar Vallabh Bhai Patel   4) Maulama Abul Klam Azad

33. Why does the west coast of Indian receive more rainfall from southwest monsoon than the east coast?

    1) Unlike the east coast this coast is straight

    2) The Western Ghats obstruct the winds causing rainfall

    3) The east coast is broader than the west coast

    4) The Eastern Ghats extend parallel to winds direction

34. The plateau that has both West and East flowing drainage system is

    1) Malwa   2) Chota Nagpur   3) Ranchi   4) Hazaribagh

35. Symbiotic Bacteria responsible for the fixation of atmospheric nitrogen are present in

    1) Peas   2) Wheat   3) Corn   4) Oats

36. Children especially in western countries who receive very little sunshine suffer from

    1) Rickets   2) Dermatitis   3) Scurvy   4) Kwashiorkor

37. In water treatment plant, use of chloramines ensures-

    1) Taste and, odour control

    2) Weed control in reservoirs

    3) Disinfection

    4) Removal of permanent hardness

38. Super cooling stands for cooling of a liquid

    1) At freezing point   2) Below freezing point

    3) At melting point   4) Above melting point

39. Alcohol is more volatile than water because......is lower than water

    1) its a boiling point   2) its a density

    3) its a viscocity   4) its surface tension

40. Which of the following is used to protect objects in computer system, in the absence of more complete protection schemes?

    1) Digital certificate   2) Digital signature   3) Passwords   4) Tokens

41. Which one is not included in Non - Banking Financial Institutions (NBFIs) ?

    1) EXIM   2) SIDBI   3) NABARD   4) BOI

42. Which method will be employed to test the hardness of water?

    1) Boiling   2) Distillation

    3) Formation of lather with soap   4) None of these

43. Who is the first Indian Gold Medal Winner in individual category in Olympic games?

    1) Abhinav Bindra   2) Sushil Kumar   3) R.V.S. Rathore   4) Leander Paes

44. Which is the warmest layer of the atmosphere?

    1) Thermosphere   2) Troposphere

    3) Stratosphere   4) Mesosphere

45. A universal donor has the blood group

    1) B   2) AB   3) A   4) O

46. The Siachen Glacier's melting water are the main source of which of the following rivers

    1) Beas   2) Sutlej   3) Shyok   4) Nubra

47. Thomas Cup is associated with which of the following sports?

    1) Cricket   2) Football   3) Basketball   4) Badminton

48. The famous work 'Anandmath' was written by

    1) Sri Aurobindo   2) Sri Bankim Chandra Chatterjee

    3) Sri Rabindranath Tagore   4) Sri Arti Choudhary

49. Who introduced the term 'Hindu rate of growth'?

    1) Amartya sen   2) Raj Krishna   3) V.K.R.V. Rao   4) Kaushik Basu

50. The BRICS New Development Bank (NDB) has been set up for

    1) Funding infrastructure project in emerging economics for sustainable development

    2) Funding non-infrastructure projects in emerging economics for sustainable development

    3) Funding infrastructural projects in developed countries

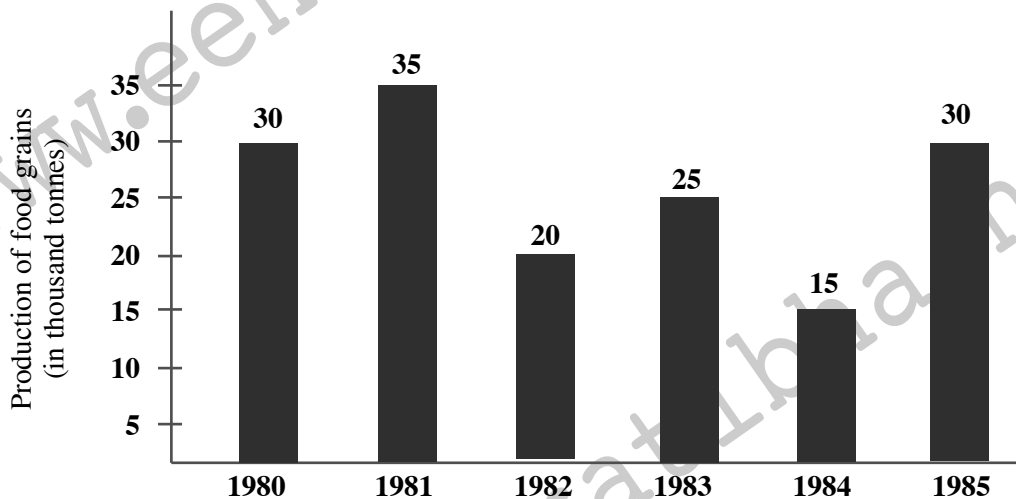   4) Funding infrastructural projects in BRICS countries only

QUANTITATIVE APTITUDE

51. A can do a piece of work in 9 days while B can do it in 12 days. A and B together can do the work in

    1) $5\dfrac{1}{7}$ days   2) $5\dfrac{2}{7}$ days   3) $6\dfrac{1}{7}$ days   4) $6\dfrac{2}{7}$ days

52. A retailer gets a discount of 40% on the printed price of an article. The retailer sells it at the printed price. His gain percent is

    1) 40%   2) 55%   3) $66\dfrac{2}{3}$ 4) 75%

53. A mixture contains spirit and water in the ratio of 3 : 2. If it contains 3 Litres more spirit than water, the quantity of spirit in the mixture is

    1) 12 litres   2) 10 litres   3) 9 litres   4) 8 litres

54. If the cost price of 25 pens is equal to the selling price of 20 pens, then the profit percent is

1) 20% 2) 25% 3) 15% 4) 5%

55. A number is decreased by 10% and resulting number is again decreased by 20%. What is the final percentage of decrease?

1) 25% 2) 26% 3) 27% 4) 28%

56. The distance between two places A and B is 60 km. Two cars start at the same time from A and B, travelling at the speeds of 35km/h and 25km/h, respectively. If the cars run in the same direction, then they will meet after (in hours)

1) 6.5 2) 6.2 3) 6 4) 6.52

57. The sum of money that will yield Rs. 60 as simple interest at the rate of 6% per annum in 5 years is

1) 200 2) 225 3) 175 4) 300

58. If x, y and z are real numbers such that $(x - 3)^2 + (y - 4)^2 + (z - 5)^2 = 0$ then $(x + y + z)$ is equal to

1) –12 2) 0 3) 8 4) 12

59. If $2x + \dfrac{1}{3x} = 5$, the value of $\dfrac{5x}{6x^2 + 20x + 1}$ is

1) $\dfrac{1}{4}$ 2) $\dfrac{1}{6}$ 3) $\dfrac{1}{5}$ 4) $\dfrac{1}{7}$

60. The ortho centre of a triangle is the point where

1) The medians meet

2) The altitudes meet

3) The right biscectors of the sides of the sides meet

4) The bisectors of the angles.

61. ABCD is a cyclic trapezium in which AD ∥ BC. If ∠ABC = 70°, then ∠BCD is

1) 110° 2) 80° 3) 70° 4) 90°

62. If cos 27° = X, the value of tan 63° is

1) $\dfrac{x}{\sqrt{1 - x^2}}$ 2) $\dfrac{x}{\sqrt{1 + x^2}}$ 3) $\dfrac{\sqrt{1 - x^2}}{x}$ 4) $\dfrac{\sqrt{1 + x^2}}{x}$

63. The sum of 10 terms of the arithmetic series is 390. If the third term of the series is 19. Find the first term.

1) 3 2) 5 3) 7 4) 8

64. The average of marks obtained by 100 candidates in a certain examination is 30. If the average marks of passed candidates is 35 and that of the failed candidates is 10, what is the number of candidates who passed the examination?

1) 60 2) 70 3) 80 4) 90

65. If a + b = 10 and ab = 21, then the value of $(a - b)^2$ is

1) 15 2) 16 3) 17 4) 18

66. If $(x - 4) (x^2 + 4x + 16) = x^3 - P$, then P is equal to

1) 27 2) 8 3) 64 4) 0

67. G is the centroid of Δ ABC. If AG = BC, then measure of ∠BGC is

1) 45°   2) 60°   3) 90°   4) 120°

68. In a circle, a chord, $5\sqrt{2}$ cm long, makes a right angle at the centre. Then the length of the radius of the circle will be

1) 2.5 cm   2) 5 cm   3) 7.5 cm   4) 10 cm

69. If $\cos^2 x + \cos^4 x = 1$, then $\tan^2 x + \tan^4 x =$

1) 0   2) 1   3) $2 \tan^2 x$ 4) $2 \tan^4 x$

70. The angle of elevation of an aeroplane from a point on the ground is 45°. After flying for 15 seconds, the elevation changes to 30°. If the aeroplane is flying at a height of 2500 metres, then the speed of the aeroplane in km/hr. is

1) 600   2) $600(\sqrt{3} + 1)$ 3) $600\sqrt{3}$ 4) $600(\sqrt{3} - 1)$

71. Thousand solid metallic spheres of diameter 6 cm are melted and recast in to a new solid sphere. The diameter of the new sphere (in cm)

1) 30   2) 90   3) 45   4) 60

Directions(72 – 75): The graph shows the production of food grains of a country in different years. Study the graph and answer the questions.

72. The sum of the production of food grains in the years 1982 and 1984 is equal to that in the year

1) 1980   2) 1981   3) 1983   4) 1985

73. The difference between the production of food grains in the years 1981 and 1985 is

1) 500 tonnes   2) 1000 tonnes   3) 5000 tonnes   4) 10000 tonnes

74. The percentage increase in production from 1984 to 1985 was

1) 15   2) 30   3) 50   4) 100

75. The two consecutive years in which rate of change of production of food grains is minimum are.

1) 1980 and 1981   2) 1982 and 1983

3) 1984 and 1985   4) 1983 and 1984

ENGLISH COMPREHENSION

76. In the following question, out of the four alternatives, choose the word which best expresses the meaning of the given word **NONPLUSSED.**

    1) INJURIOUS   2) ABUSIVE   3) PUZZLED   4) ENORMOUS

77. In the following question, out of the four alternatives, choose the word which is opposite in meaning to the given word **VISIONARY.**

    1) REALIST   2) ARTIST   3) IDEALIST   4) SOCIALIST

78. Four words are given, out of which only one word is spelt correctly. Choose the correctly spelt word and click the button corresponding to it.

    1) Desorientation   2) Disorientetion

    3) Dysorientation   4) Disorientation

Directions(79 – 81): In the following questions, one part of the sentence may have an error. Find out which part of the sentence has an error and choose the alternative corresponding to it. If the sentence is free from error, choose the 'No error' option.

79. I Will not(1)/ stay here another minute (2)/ if i can help it! (3)/ No Error (4).

80. Roger dressed (1)/ in is best shirt, (2)/ silver tie and black jacket. (3)/ No Error (4).

81. They are looking forward (1)/ to meet (2)/ their parents. (3)/ No Error (4).

Directions (82 – 84): The sentences given with blanks are to be filled with an appropriate word(s). Four alternatives are suggested for each question. For each question, choose the correct alternative.

82. You are .... common sense.

    1) lacking   2) devoid in   3) devoid of   4) dull on

83. He ran so fast........

    1) that he fell   2) so he fell   3) he fell   4) that he is falling

84. The doctor has been ...... to attend to an urgent case

    1) called   2) called in   3) called by   4) call over

Directions(85 – 87): In each of the questions, four alternatives are given for the Idiom/ Phrase. Choose the alternatives which best expresses the meaning of the Idiom/ Phrase.

85. **To nip in the bud**

    1) To stop some thing at the start   2) To trim the flowers

    3) To pluck the flowers   4) To steal from

86. **To put a spoke in one's wheel**

    1) To repair one's cycle   2) To hinder

    3) To trip a rider   4) To add an extra wheel

87. **To clip one's wings**

    1) To stop one from flying   2) To trim the leaves

    3) To deprive one of power   4) To hurt a bird

Directions (88 – 90): Out of the four alternatives, choose the one which can be substituted for the given words/ sentences.

88. An act of travelling from one place to another

    1) series   2) journey   3) sequence   4) programme

89. The thing no longer in use

    1) obstacle   2) obsolete   3) obsidian   4) obstruction

90. Misappropriation of money

    1) embezzlement   2) robbery   3) theft   4) fraud

Directions (91 – 95): In each of the following questions, a sentence/ a part of the sentences is printed in bold. Four alternatives are given to the **Bold** part which will improve the sentence. Choose the correct alternative corresponding to it. In case no improvement is needed, choose the alternative corresponding to 'No improvement'.

91. The Vice Chancellor congratulated the blind student **for his** success in the examination

    1) in his   2) on his   3) over his   4) no improvement

92. I am sorry but **I will not believe** the story you have told me

    1) do not believe   2) am not believed

    3) have not believed   4) no improvement

93. Due to the fall in real estate prices builders have **stopped from constructing** multistoreyed office buildings

    1) at constructing   2) to constructing

    3) stopped constructing   4) no improvement

94. Not having practiced his lines he **cut an angry figure** on the stage

    1) cut a confused figure   2) cut a sorry face

    3) cut a sorry figure   4) no improvement

95. My brother **would gladly given** you his car if you had ask him.

    1) would gladly give   2) would have gladly given

    3) would gladly gave   4) no improvement

Direction(96 – 100): A passage is given with 5 questions following it. Read the passage carefully and choose the best answer to each question out of the four alternatives

    Ants have been living on the earth for more than 100 million years and can be found almost anywhere on the planet. It is estimated that there are about 20000 different species of ants. For this reason ants have been called Earth's most successful species. If you watch ants for any length of time you will see that they really do communicate with each other and very effectively too. Ants communicate by touching each other with their antennae. Ants also use chemicals called pheromones to leave scent trails for other ants to follow. Ants build many different types of homes. Many ants build simple little mounds out of dirt or sand. Other ants use small sticks mixed with dirt and sand to make a stronger mound that offers protection from rain. Western Harvester ants make a small mound on top, but then tunnels up to 15 feet straight down to hibernate during winter. Ant mounds consist of many chambers connected by tunnels. Different chambers are used for nurseries, food storage, and resting places for the worker ants. Some ants live in wood like termites.

Army ants don't make a home at all but travel in large groups searching for food. Ants are social insects which means they live in large colonies or groups. Some colonies consist of millions of ants. There are three types of ants in each species, the queen, the sterile female workers and males. The male ants only serve one purpose, to mate with future queen ants and do not live very long. The queen grows to adulthood, mates, and then spends rest of her life laying eggs. A colony may have only one queen, or there may be many queens depending on the species. Ants go through four stages of development: egg, larva, pupa and adult.

96. Why are ants called the 'Earth's' most successful species?

1) Because they have been on earth for more than a 100 million years

2) Because they can be found anywhere on earth

3) Because they have been on earth for more than a 100 million years and because they can be found anywhere on earth

4) Because there are 20000 different species of ants on earth

97. Antennae are used by ants to

1) Leave a trail for other ants

2) Communicate

3) Find direction

4) Touch and feel each other

98. What does the Western Harvester do in winter?

1) It travels

2) It builds different types of homes

3) It hibernates

4) It searches for food

99. What kind of homes do the army of ants build?

1) Simple little mounds made out of dirt or sand

2) Stronger mounds of small sticks mixed with dirt and sand

3) Small mounds on top but with tunnels upto 15 feet below

4) They do not make homes but travel in search of food

100. What is the purpose of male ants?

1) To lay eggs   2) To protect the colony

3) To mate with future queen ants   4) To live a long life

ANSWERS

1-3; 2-3; 3-4; 4-3; 5-2; 6-4; 7-1; 8-3; 9-3; 10-1; 11-2; 12-3; 13-2; 14-3; 15-1; 16-2; 17-1; 18-3; 19-4; 20-4; 21-1; 22-3; 23-3; 24-3; 25-2; 26-3; 27-2; 28-2; 29-1; 30-4; 31-2; 32-3; 33-2; 34-1; 35-1; 36-1; 37-3; 38-2; 39-1; 40-3; 41-3; 42-3; 43-1; 44-1; 45-4; 46-4; 47-4; 48-2; 49-2; 50-1; 51-1; 52-3; 53-3; 54-2; 55-4; 56-3; 57-1; 58-4; 59-4; 60-2; 61-3; 62-1; 63-1; 64-3; 65-2; 66-3; 67-3; 68-2; 69-2; 70-4; 71-4; 72-2; 73-3; 74-4; 75-1; 76-3; 77-1; 78-4; 79-4; 80-2; 81-2; 82-3; 83-1; 84-2; 85-1; 86-2; 87-3; 88-2; 89-2; 90-1; 91-2; 92-2; 93-3; 94-3; 95-2; 96-3; 97-2; 98-3; 99-4; 100-3.