## SECTION1. ENGLISH LANGUAGE USAGE AND READING COMPREHENSION

## (50 QUESTIONS)

**Directions (For Questions 1 to 6) : Read the passage and answer the questions that follow.**

How Facebook is changing the way we consume news. Greg Marra's team designs the code that drives Facebook's News Feed – the stream of updates, photographs, videos and stories that users see. The 26-year-old Facebook engineer is also fast becoming one of the most influential people in the news business. Facebook now has a fifth of the world – about 1.3 billion people – logging on at least monthly. It drives up to 20 percent of traffic to news sites, according to figures from the analytics company SimpleReach. On mobile devices, the fastest-growing source of readers, the percentage is even higher, SimpleReach says. About 30 percent of adults in the U.S. get their news on Facebook, according to a study from the Pew Research Center. Though other services, like Twitter and Google News, can also exert a large influence, Facebook is at the forefront of a fundamental change in how people consume journalism. Most readers now come to news not through the print editions of newspapers and magazines or their home pages online, but through social media and search engines driven by an algorithm, a mathematical formula that predicts what users might want to read. It is a world of fragments, filtered by code and delivered on demand. For news organizations, said Cory Haik, senior editor for digital news at *The Washington Post*, the shift represents "the great unbundling" of journalism. "People won't type in washingtonpost.com anymore," Ms. Haik said. "It's search and social."

In an interview at Facebook's sprawling headquarters here, Mr. Marra said he does not think too much about his impact on journalism. "We try to explicitly view ourselves as not editors," he said. "We don't want to have editorial judgment over the content that's in your feed. You've made your friends, you've connected to the pages that you want to connect to and you're the best decider for the things that you care about." Mr. Marra said, "We're saying 'We think that of all the stuff you've connected yourself to, this is the stuff you'd be most interested in reading.'"

Roughly once a week, he and his team of about 16 adjust the complex computer code that decides what to show a user when he or she first logs on to Facebook. The code is based on "thousands and thousands" of metrics, Mr. Marra said, including what device a user is on, how many comments or likes a story has received and how long readers spend on an article. The goal is to identify what users most enjoy, and its results vary around the world. In India, he said, people tend to share what the company calls the ABCDs: Astrology, Bollywood, Cricket and Divinity.

1. According to the passage, about 30% of adults in the U.S. get their news on
   A) Twitter
   B) Google News
   C) Facebook
   D) None of the options

2. The ABCDs mentioned in the passage refer to
   A) Astrology, Bollywood, Cricket, Divinity
   B) Astrology, Bollywood, Cricket, Diversity
   C) Astronomy, Bollywood, Cricket, Divinity
   D) Astronomy, Bollywood, Cricket, Democracy

3. Presently, most of the readers prefer to read news through
   A) Print editions of newspapers and magazines
   B) Home pages, of newspapers and magazines, online
   C) Social media and search engines
   D) All the options

4. Why do Marra and his team adjust the complex computer code once a week?
   A) It shows Marra and his team as to what Facebook users enjoy most.
   B) It decides what to show a user when he/she first logs on to Facebook.
   C) It displays a wide range of programs that Facebook users log on for the first time.
   D) It takes stock of the likes and dislikes of Facebook users.

5. Choose the SYNONYM of 'fragments' as used in the passage.
   A) Pages    B) Editions    C) Figures    D) Pieces

6. What does Greg Marra's team do?
   A) They write about the latest current events.
   B) They publish Facebook's news updates.
   C) They design the code that drives Facebook's NewsFeed.
   D) They devise the methodology of writing codes for News Feed.

**Directions (For Questions 7 to 9) : Fill in the blank with the correct Article**

7. _____ Newton is a great scientist.

   A) No Article required
   B) A
   C) The
   D) An

8. _____ frozen snow crushed under the wheels of our car.

   A) An
   B) No Article required
   C) The
   D) A

9. We decided to go boating on _____ Dal lake.
   A) An
   B) No Article required
   C) A
   D) The

**Directions (For Questions 10 to 13) : Fill in the blank with the correct form of the verb**

10. She _____ ten years ago.
    A) Die
    B) Dies
    C) Has died
    D) Died

11. Plutonium is a fuel used to _____ nuclear energy.
    A) Produced
    B) Produces
    C) Produce
    D) Producing

12. Vegetarianism _____ very popular these days.
    A) Are
    B) Is
    C) Has been
    D) Were

13. She _____ the television on continuously.
    A) Have
    B) Is having
    C) Has had
    D) Has

**Directions (For Questions 14 to 16) : Fill in the blank with the correct option**

14. She went out without _____ money.
    A) Lot
    B) A lot
    C) Some
    D) Any

15. Last week, we went out with _____ friends.
    A) Some
    B) Much
    C) Lot
    D) No

16. He has travelled _____.
    A) Some
    B) A lot
    C) Many
    D) Lot

**Directions (For Questions 17 to 22) : Identify the error in the following sentences. The error, if any, will be in one part of the sentence, the number of that part is your answer. If there is no error, mark your answer as 4. Ignore punctuation errors.**

17. (1) There is plenty of / (2) water in the lakes, / (3) despite the drought this year. / (4) No error.

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

18. (1) One of my cousin, / (2) who is studying in Canada, / (3) married an American. / (4) No error.

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

19. (1) As soon as the Prime Minister / (2) entered the Hall, / (3) all the foreign delegates stand up. / (4) No error.

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

20. (1) We asked him / (2) to return back the book / (3) but he refused to do so. / (4) No error

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

21. (1) The cricket ball hit him / (2) on the head and / (3) he curl up at once. / (4) No error

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

22. (1) They decided to carry on / (2) with their journey / (3) despite of the inclement weather. / (4) No error

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

**Directions (For Questions 23 to 26) : Fill in the blanks with the appropriate preposition**

23. The closing date _____ applications is the end _____ this month.

    A) Of, of
    B) On, by
    C) For, in
    D) For, of

24. The children sat silent _____ the carpet, entranced _____ the puppet show.

    A) No Preposition required, on
    B) Above, around
    C) On, by
    D) In, with

25. The actor's entry _____ the world _____ politics surprised most people.

    A) In, of
    B) On, with
    C) Into, No Preposition required
    D) Into, of

26. I was just enjoying a daydream _____ winning the Nobel Prize for literature.

    A) For
    B) In
    C) About
    D) With

Directions (For Questions 27 to 30) : Choose the appropriate synonym of the word underlined in the sentences given below from the options that follow that can replace it (underlined word)

27. It is often difficult to discern the truth of an event from a newspaper report.

    A) Follow
    B) Recognize
    C) Read
    D) Spread

28. She was greatly piqued when they refused her invitation.

    A) Hurt
    B) Irritated
    C) Delighted
    D) Honoured

29. He is in a pensive mood.

    A) Jovial
    B) Perfect
    C) Contemplative
    D) Bad

30. They prevailed over their enemies in the battle.

    A) Triumphed
    B) Panicked
    C) Scanned
    D) Manipulated

Directions (For questions 31 to 33): Select the correct meaning for the following words:

31. Caucus

    A) a group of people taking part in a procession.
    B) a group of people making noise.
    C) a closed political meeting.
    D) a group of people dancing.

32. Flotilla

    A) A fleet of cars in a rally.
    B) A fleet of motorcycles.
    C) A fleet of ships.
    D) A fleet of planes.

33.Brood
- A) A collection of notebooks.
- B) A family of young animals.
- C) A family of old animals.
- D) A family of young and old animals

**Directions (For questions 34 to 36): Choose the option corresponding to the sentence in which the usage of the given word is incorrect or inappropriate.**

34. FINESSE
- A) He lacked the required finesse to handle the situation.
- B) It was a disappointing performance which lacked finesse.
- C) She finessed the interview by playing down her lack of experience and talking about her long-standing interest in the field.
- D) Typically, partygoers are finesse, recluse are not.

35. WRITHE
- A) A snake writhed out of the bushes.
- B) The prisoner writhed in discomfort.
- C) Her writhed mood soon cooled down.
- D) He was writhing on the floor in agony.

36. PERMEATE
- A) Dissatisfaction among the directors soon permeated down to members of the workforce.
- B) The smell of onions permeated the room.
- C) The permeate in the wind was intolerable.
- D) The belief in dowry culture permeates all levels of the Indian society.

**Directions (For questions 37 to 40): Select the appropriate pair for the below questions:**

37. PULSATE : THROB
- A) walk : run
- B) tired : sleep
- C) examine : scrutinize
- D) ballet : dancer

38. SIAMESE : CAT

A) type : breed

B) dog : puppy

C) mark : spot

D) romaine : lettuce

39. COTTON : BALE

A) butter : churn

B) wine : ferment

C) grain : shock

D) curd : cheese

40. ELEPHANT : PACHYDERM

A) mantis : rodent

B) poodle : feline

C) kangaroo : marsupial

D) zebra : horse

**Directions: (For Q 41 to Q 47): For each of the following questions, choose Antonyms / opposite of given word.**

41. **Callow**

A) Cunning                    B) Wealthy

C) Sophisticated              D) Complicated

42. **FACSIMILE**

A) Reproduction              B) Sincere

C) Original                   D) Engineered

43. **RESPITE**

    A) Tension                B) Continuation

    C) Regularity           D) Delay

44. **SPURIOUS**

    A) False                 B) Genuine

    C) Simple              D) Synthetic

45. **PERTINENT**

    A. Indifferent           B. Detached

    C. Determined          D. Irrelevant

46. **VIVACIOUS**

    A. Quarrelsome         B. Dull

    C. Notorious           D. Drunken

47. **COMATOSE**

    A. Asleep              B. Alert

    C. Faint               D. Counter-attack

**Directions (For Q 48 to Q 50): Read the following Passage and Answer the questions**

For fourteen and half months I lived in my little cell or room in Dehradun jail, and I began to feel as if I was almost a part of it. I was familiar with every bit of it, I knew every mark and dent on the whitewashed walls and on the uneven floors and on the ceiling with the moth eaten rafters. In the little yard outside I greeted little tufts of grass and odd bits of stone as old friends. I was not alone in my cell, for several colonies of wasp and hornets lived there, and many lizards found the home behind the rafters, emerging in the evening in search of prey.

48. Which of the following explains best the sentence in the passage "I was almost a part of it"?

    A) I was not alone in the cell

    B) I was familiar with every bit of the cell

    C) I greeted little tufts of grass like old friends.

    D) I felt quite at home in the cell

49. The passage attempts to describe:

    A) The general conditions of the country's jail

    B) The prisoner's capacity to notice the minute details of his surroundings

    C) The prisoner's conscious efforts to overcome the loneliness

    D) The prisoner's ability to live happily with other creatures

50. The author of the passage seems to suggest that

    A) It is possible to adjust one-self to uncongenial surroundings

    B) The conditions in Indian prisons are not bad

    C) It is not difficult to spend one's time in prison

    D) There is a need to improve the conditions in our jails

# SECTION 2: QUANTITATIVE APTITUDE (50 QUESTIONS)

51. Find the least number with which you multiply 882 so that the product may be a perfect square.

    A) 2

    B) 7

    C) 3

    D) 5

52. An army general trying to draw his 16,160 men in rows so that there are as many men in each row as the number of rows, found that he had 31 men left over. Find the number of men in the front row.

    A) 100

    B) 127

    C) 260

    D) 543

53.

Find the value of $\dfrac{4 - \sqrt{0.04}}{4 + \sqrt{0.04}}$

A) 0.2

B) 0.9

C) 2

D) 2.1

54. Find the number whose square is equal to the difference between the squares of 75.12 and 60.12

A) 45

B) 45.04

C) 46.2

D) 48.6

55. A, B and C earn Rs.120 per day while A and C earn Rs.80 per day and B and C earn Rs.66 per day. Find C's earning.

A) 26

B) 45

C) 66

D) 87

56. A contractor undertook to do a piece of work in 125 days and employs 175men to carry out the job, but after 40 days, he finds that only a quarter of the work had been carried out. How many more men should be employed to finish the work in time?

A) 67

B) 70

C) 72

D) 84

57. A cistern is normally filled in 6 hours, but takes 2 hours more to fill it because of a leak at its bottom. If the cistern is full, how long will it take for the leak to empty the cistern?

A) 7

B) 16

C) 20

D) 24

58. Two coal loading trucks handle 9000 tonnes of coal at an efficiency of 90% working 12 hours per day for 8 days. How many hours a day, 3 coal loading trucks should work at an efficiency of 80% so as to load 12000 tonnes of coal in 6 days.

A) 16
B) 19
C) 20
D) 24

59. How many seconds will it take for a train 120 meters long moving at the rate of 15 m/sec to overtake another train 150 m long running from the opposite side at the rate of 90 km/hr?

A) 5
B) 6
C) 6.75
D) 7.25

60. $2 + 2^2 + 2^3 + \dots + 2^8 = ?$

A) 52
B) 64
C) 254
D) 510

61. The traffic lights at three different road crossings change after every 48 sec., 72 sec and 108 sec. respectively. If they all change simultaneously at 8:20:00 hours, then at what time will they again change simultaneously?

A) 8:27:12 hrs
B) 8: 28 hrs
C) 8: 25:18 hrs
D) 8:30:15 hrs

62. 4/15 of 5/7 of a number is greater than 4/9 of 2/5 of the same number by 8.
What is half of that number?

A) 215
B) 315
C) 415
D) 515

63. If 2x+3y=34 and ((x + y)/y)=13/8,then find the value of 5y+7x.

    A) 70
    B) 82
    C) 94
    D) 75

64. In a race A has a start of 100mtrs and sets off 6 min before B, at the rate of 10 km/hr. How soon will B overtake A, if his speed of running is 12 km/hr.

    A) 30
    B) 33
    C) 45
    D) 60

65  A mixture of 40 litres of milk contains 20% of water. How much water must be added to make the water 25% in the new mixture?

    A) 2
    B) 2 2/3
    C) 3 1/3
    D) 3 4/5

66. When an amount was distributed among 14 boys, each of them got Rs.80 more than the amount received by each boy when the same amount is distributed equally among 18 boys. What was the amount?

    A) 2500
    B) 4500
    C) 5000
    D) 5040

67. A and B are friends and each has some money. If A gives Rs. 30 to B, then B will have twice the money left with A. But, if B gives Rs. 10 to A, then A will have thrice as much as is left with B. How much money does each have?

    A) A- 62, B-34
    B) A- 60, B-30
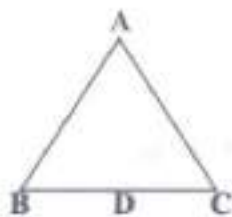    C) A- 43, B-50
    D) A- 62, B-52

68. Five years ago, the average of Raja and Rani's ages was 20 yrs. Now the average age of Raja, Rani and Rama is 30 yrs. What will be Rama's age 10 yrs hence?

    A) 30
    B) 40
    C) 50
    D) 55

69. The length of a rectangle is twice its breadth. If its length is decreased by 5 cm and breadth is increased by 5 cm, the area of the rectangle is increased by 25 sq. cm. Find the length of the rectangle.

    A) 13
    B) 15
    C) 20
    D) 25

70. The altitude drawn to the base of an isosceles triangle is 8 cm and the perimeter is 32 cm. Find the area of the triangle.



    A) 60
    B) 64
    C) 72
    D) 76

71. The area of a circular field is 13.86 hectares. Find the cost of fencing it at the rate of Rs. 4.40 per metre.

    A) 4509
    B) 5808
    C) 6132
    D) 6344

72. If the radius of a circle is decreased by 50%, find the percentage decrease in its area.

    A) 50%
    B) 65%
    C) 75%
    D) 80%

73. What was the day of the week on 16th August, 1947?

    A) Monday
    B) Tuesday
    C) Thursday
    D) Saturday

74 A clock is set right at 5 a.m. The clock loses 16 minutes in 24 hours. What will be the true time when the clock indicates 10 p.m. on 4th day?

    A) 11 p. m.
    B) 12 a.m.
    C) 10 p.m.
    D) 5 a. m.

75. Find the cost of 96 shares of Rs. 10 each at (3/4) discount, brokerage being (1/4) per share.

    A) 896
    B) 911
    C) 912
    D) 100

76. How many words can be formed by using all letters of the word 'DAUGHTER' so that the vowels always come together?

    A) 4320
    B) 4367
    C) 5647
    D) 6234

77. In how many ways, a committee of 5 members can be selected from 6 men and 5 ladies, consisting of 3 men and 2 ladies?

    A) 154
    B) 178
    C) 200
    D) 234

78. In a throw of a coin, find the probability of getting a head.

    A) 1/4
    B) 1/2
    C) 1/5
    D) 1/8

79. A ladder leaning against a wall makes an angle of 60 degree with the ground. If the length of the ladder is 19 m, find the distance of the foot of the ladder from the wall.

    A) 9 m
    B) 9.2 m
    C) 9.5 m
    D) 9.8 m

80 A man standing on the bank of a river observes that the angle subtended by a tree on the opposite bank is 60degrees. When he retires 36 m from the bank, he finds the angle to be 30 degrees. Find the breadth of the river.

    A) 18m
    B) 21 m
    C) 33 m
    D) 35 m

81. A sum of Rs. 800 amounts to Rs. 920 in 3 years at simple interest. If the interest rate is increased by 3%, it would amount to how much?

    A) 720
    B) 876
    C) 992
    D) 1012

82 The simple interest on a certain sum of money for 2 1/2 years at 12% pa is Rs. 40 less than the simple interest on the same sum for 3 1/2 years at 10% pa. Find the sum.

    A) 800
    B) 900
    C) 600
    D) 500

**(Q83-86) Study the following table carefully and answer the questions given below:**

Classification of 100 students based on the marks obtained by them in physics and chemistry in an Examination

| Marks out Of 50 Subject | 40 and above | 30 and Above | 20 and above | 10 and above | 0 and above |
|---|---|---|---|---|---|
| physics | 9 | 32 | 80 | 92 | 100 |
| chemistry | 4 | 21 | 66 | 81, | 100 |
| (aggregate Average) | 7 | 27 | 73 | 87 | 100 |

83. The number of students scoring less than 40% marks in aggregate is :

      (A) 13
      (B) 19
      (C) 20
      (D) 27

84. If at least 60% marks in Physics are required for pursuing higher studies in Physics, how many students will be eligible to pursue higher studies in Physics?

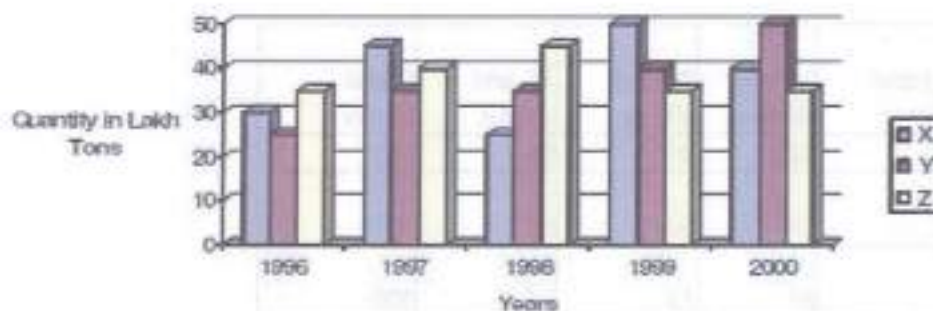      (A) 27
      (B) 32
      (C) 34
      (D) 41

85. The percentage of the number of students getting at least 60% marks in Chemistry over those getting at least 40% marks in aggregate, is approximately:

      (A) 21%
      (B) 27%
      (C) 29%
      (D) 31%

86. If it is known that at least 23 students were eligible for a Symposium on Chemistry, the minimum qualifying marks in Chemistry for eligibility to Symposium would lie in the range:

      (A) 40-50
      (B) 30-40
      (C) 20-30
      (D) Below 20

(Q87-92) The bar graph provided below gives the data of the production of paper (in lakh tonnes) by three different companies X,Y and Z over the years. Study the graph and answer the questions that follow :-

87 .What is the difference between the production of the company Z in 1998 and company Y in 1996?

A) 2 ,00,000 tons
B) 20,00,000 tons
C) 20,000 tons
D) 2,00,00,000 tons

88. What is the ratio of the average production of company X in the period 1998 to 2000 to the average production of company Y in the same period?

A) 1:1
B) 15:27
C) 23:25
D) 27:29

89. What is the percentage increase in the production of company Y from1996 to 1999?

A) 30%
B) 45%
C) 50%
D) 60%

90. The average production of five years was maximum for which company?
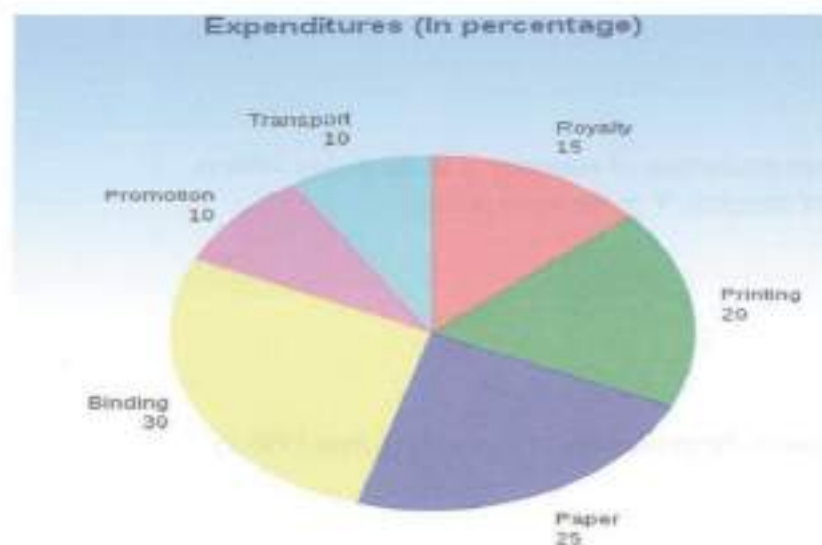
A) X
B) Y
C) X & Y both
D) X & Z both

91. For which of the following years the percentage rise / fall in production from Previous year is the maximum for company Y?

A) 1997
B) 1998
C) 1999
D) 2000

92. In which year was the percentage of production of company Z to the production of company Y the maximum?

A) 1996
B) 1997
C) 1998
D) 1999

(Q93-98). The following pie chart shows the percentage distribution of the expenditure incurred in publishing a book. Study the pie chart and answer the following questions.



Expenditures (In percentage)

93. What is the central angle of the sector corresponding to the expenditure incurred on Royalty?

A) 54 degree

B) 48 degree

C) 45 degree

D) 40 degree

94. Which two expenditures together have a central angle of 108 degree in the pie chart?

A) Binding cost + Royalty cost

B) Printing cost + Paper cost

C) Binding cost + Transportation cost

D) Printing cost + Transportation cost

95. If the difference between the two expenditures is represented by 18 degree in the pie chart, then which option of following can be correct?

A) Binding cost and Royalty cost

B) Paper cost and Printing cost

C) Paper cost and Royalty

D) Printing cost and Promotion cost

96. If for an edition of a book, the cost of paper is Rs. 56250, then find the promotion cost for this edition ?

A) Rs 21500

B) Rs 22300

C) Rs 22500

D) Rs 22700

**97.** If for a certain quantity of books, the publisher has to pay Rs 30,600 as printing cost, then what will be the amount of royalty to be paid for these books?

A) Rs 22650

B) Rs 22750

C) Rs 22850

D) Rs 22950

98. If 5500 copies are published and the transportation cost on them amounts to Rs. 82500, then what should be the selling price of the book so that the publisher can earn a profit of 25 % ?

A) Rs 180.50

B) Rs 182.50

C) Rs 183.50

D) Rs 187.50

(Q99-100) The following Line chart gives the ratio of the amounts of imports by a Company to the amount of exports from that Company over the period from 1995 to 2001. Answer the following questions based on following Line graph.



Ratio of value of Imports to Exports

99. In how many of the given years were the exports more than imports?

   A) 1

   B) 2

   C) 3

   D) 4

100. If the imports of the company in 1996 was Rs. 272 crores, the exports from the company in 1996 was:

   A) Rs 120 Crores

   B) Rs 220 Crores

   C) Rs 320 Crores

   D) Rs 420 Crores

# SECTION 3: DATA SUFFICIENCY & LOGICAL REASONING (40 QUESTONS)

Directions (101-105): Read the information given below and answer the questions

There are five race horses Abruzzi, Abnaki, Absinthe, Aachen and AJ Cook that finished a race    not necessarily in this sequence.

   i. Abruzzi finished two positions before Abnaki.

   ii. AJ Cook finished after Aachen but not immediately before Absinthe

   iii. Absinthe followed Abrussi and finished fourth

101. Which horse came second in the race?

   A) Abruzzi

   B) AJ Cook

   C) Aachen

   D) Abnaki