Indian Institute of Management Kozhikode

Globalizing Indian Thought

IIMK - Kochi Campus

EMAT SAMPLE QUESTION PAPER
1. If \((1/5)m \times (1/4)18 = (1/2) \times (10)35\), Find 'm'.
   A. 18  
   B. 17  
   C. 21  
   D. 35  

2. Karuna feels her weight is greater than 60 kg but less than 65 kg. Her dietician does not agree with Karuna and he thinks that her weight is greater than 58 kg but less than 63 kg. If both of them are correct in their estimation, what is the average of different probable weights of Karuna?
   A. 61.5 kg  
   B. 60.5 kg  
   C. 61.0 kg  
   D. 62.0 kg
3. In what ratio Darjeeling tea of price Rs 32/- per kg should be mixed with Assam tea of price Rs. 25/- per kg, so that selling the mixed tea at price Rs. 32.40 would give 20% profit?
A. 2:3
B. 3:2
C. 3:5
D. 2:5

4. In the xy plane, line k has a positive slope and x-intercept 4. If the area of the triangle formed by line k and the two axes is 12, What is the y-intercept of line k?
A. 3
B. 6
C. -3
D. -6

5. A and B working separately can do a piece of work in 9 and 12 days respectively. If they work in alternate days and A first starts the work, then approximately after how many days the work will be finished?
A. 10.5 days
B. 10.33 days
C. 10.25 days
D. 10.75 days

6. In class X, the number of girls is 40% more than the number of boys. In a test, 75% of total students passed in the examination. Had four more boys failed in the test, the percentage of boys who cleared the test would have been 85%.Had eight more girls failed in the test, the percentage of boys who cleared the test would have dropped to 66.66%. What percentage of girl students cleared the test?
A. 95%
B. 60.7%
C. 75%
D. 67.8%

7. Solve for x in the equation \( \frac{x - \frac{1}{6}}{2} = \frac{5}{2x} \). If there is more than one value of x, then insert the smaller value in \( \frac{x}{2} + \frac{3}{2} \) and find this value.
A. \( \frac{2}{3} \)
B. \( \frac{9}{5} \)
C. \( \frac{5}{3} \)
D. \( \frac{15}{4} \)
8. For which \( n \) is the remainder largest when the number 926,280 is divided by \( n \)?
   A. 4  
   B. 5  
   C. 6  
   D. 8

9. What is the area of the shaded triangle?

\[ \text{Area} = \frac{d^2}{2} \]

A. \( d^2/2 \)  
B. \( d^2 \)  
C. \( 2d^2 \)  
D. \( d^2/4 \)

10. A man lent Rs.2500, part of this at 4.5% and the rest at 5.5% per annum simple interest. The whole annual interest amounted to Rs. 127.5. How much did he lend at 5.5%?
   A. Rs. 1200  
   B. Rs. 1100  
   C. Rs. 1000  
   D. Rs. 1500

11. If the digit in the unit's place of a two-digit number is halved and the digit in the ten's place is doubled, the number thus obtained is equal to the number obtained by interchanging the digits. Which of the following is definitely true?
   A. Sum of the digits is a two-digit number.  
   B. Digit in the unit's place is twice the digit in the ten's place.  
   C. Digits in the unit's place and the ten's place are equal.  
   D. Digit in the unit's place and the ten's place are equal.

12. A snail is at the bottom of a 20 meters deep pit. Every day the snail climbs 5 meters upwards, but at night it slides 4 meters back downwards. How many days does the snail take to reach the top of the pit?
   A. 20 days  
   B. 18 days  
   C. 17 days  
   D. 16 days
13. A merchant has 100 kgs of rice, part of which he sells at 7% profit and the rest at 17% profit. He gains 10% on the whole. Find how much is sold at 7% profit?
   A. 50 kgs
   B. 70 kgs
   C. 40 kgs
   D. 30 kgs

14. What least number must be added to 1056, so that the sum is completely divisible by 23?
   A. 2
   B. 3
   C. 18
   D. 21

15. A train when moves at an average speed of 40 kmph, reaches its destination on time. When its average speed becomes 35 kmph, then it reaches its destination 15 minutes late. Find the length of the journey
   A. 30 km
   B. 40 km
   C. 70 km
   D. 80 km

DATA INTERPRETATION AND LOGICAL REASONING

16. On your travels you meet an old man on the side of the road holding three cards from a standard deck face down. Trying to make conversation you ask him what the three cards are. He tells you, "To the left of the queen, are one or two jacks. To the right of the jack, are one or two jacks. To the right of the club, are one or two diamonds. To the left of the diamond, are one or two diamonds." What are the three cards?
   A. the jack of clubs, jack of diamonds, and queen of diamonds.
   B. jack of diamonds, jack of clubs, queen of diamonds
   C. Both A and B
   D. None of the above.

Directions: For the following TWO questions, replace the underlined part of the sentence with the most appropriate choice. If you think that the original is the best, choose 'A'.

17. Like the government that came before it, which set new records for road-construction, market economy is the cornerstone of the new government.
   A. market economy is the cornerstone of the new government
   B. the cornerstone of the new government is market economy.
   C. market economy is the new government's cornerstone.
   D. the new government has made market economy its cornerstone.
18. Income Tax Act 342-C requires that an B company with assets of greater than Rupees one crore send YG-67 forms to their full- and part-time employees on or before March 31.
   A. that an B company with assets of greater than Rupees one crore send YG-67 forms to their full- and part-time employees on or before March 31.
   B. an B company with assets of greater than Rupees one crore send YG-67 forms to their full- and part-time employees on or before March 31.
   C. that an B company with assets of greater than Rupees one crore send YG-67 forms to their full- and part-time employees on or before March 31.
   D. an B company with assets of greater than Rupees one crore to send YG-67 forms to their full- and part-time employees on or before March 31.

Directions for Questions 19 – 23: Answer the questions on basis of table given below

<table>
<thead>
<tr>
<th>Year</th>
<th>Aluminum</th>
<th>Coal</th>
<th>Copper</th>
<th>Gold</th>
<th>Iron Ore</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>69</td>
<td>91</td>
<td>71</td>
<td>15</td>
<td>100</td>
</tr>
<tr>
<td>2006</td>
<td>75</td>
<td>88</td>
<td>75</td>
<td>18</td>
<td>120</td>
</tr>
<tr>
<td>2007</td>
<td>81</td>
<td>97</td>
<td>79</td>
<td>21</td>
<td>102</td>
</tr>
<tr>
<td>2008</td>
<td>98</td>
<td>107</td>
<td>88</td>
<td>25</td>
<td>131</td>
</tr>
<tr>
<td>2009</td>
<td>93</td>
<td>110</td>
<td>92</td>
<td>24</td>
<td>143</td>
</tr>
<tr>
<td>2010</td>
<td>99</td>
<td>116</td>
<td>97</td>
<td>20</td>
<td>154</td>
</tr>
<tr>
<td>2011</td>
<td>105</td>
<td>122</td>
<td>103</td>
<td>25</td>
<td>163</td>
</tr>
</tbody>
</table>

19. Which mineral/metal witnessed the highest growth rate in production from 2005 to 2011?
   A. Iron ore
   B. Aluminum
   C. Gold
   D. Copper

20. Which year has witnessed highest absolute increase in total production of minerals and metals?
   A. 2006
   B. 2008
   C. 2011
   D. None of the above

21. Highest annual growth rate in production is recorded in:
   A. Iron ore in 2008
   B. Gold in 2011
   C. Aluminum in 2008
   D. Gold in 2006
22. If annual average growth rate in production exhibited during 2006 to 2011 continues for next 4 years, then what will be the approximate production of aluminum in 2015?
   A. 125 million tonnes
   B. 140 million tonnes
   C. 155 million tonnes
   D. 160 million tonnes

23. In which year the proportion of copper production in the total mineral and metal production the highest?
   A. 2010
   B. 2008
   C. 2009
   D. 2007

Questions 24-27

Blue Bus Transport (BBT) sells its tickets using four different channels. Ticket sales in the long distance services through Agents are half of the sales from Counter sales. Total revenues through Internet sales is one-fourth of the total sales from all channels put together. Ticket sales through Agents in the short distance services are 300% more than that of the Mobile ticket sales in the long distance services. Ticket sales in the short distance services through the Counters equals twice the sum of the sales through Agents and Mobile channels in the long distance services.

Revenue from Ticket sales (In lakhs)

<table>
<thead>
<tr>
<th></th>
<th>Mobile</th>
<th>Internet</th>
<th>Counter</th>
<th>Agent</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long distance services</td>
<td></td>
<td></td>
<td>106</td>
<td></td>
<td>371</td>
</tr>
<tr>
<td>Short distance services</td>
<td>159</td>
<td>106</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1060</td>
</tr>
</tbody>
</table>

24. Ticket sales (in Rs. Lakhs) through the Mobile in the long distance services are:
   A. 53
   B. 39
   C. 21
   D. 64

25. Which Channel is contributing the maximum revenues to the total sales?
   A. Mobile
   B. Internet
   C. Agent
   D. Counter

26. Total revenues from which two channels are the same:
   A. Mobile and Internet
   B. Internet and Agent
   C. Counter and Internet
   D. Counter and Mobile
27. In the long distance services which channel contribute the maximum revenue:
   A. Mobile or Agent
   B. Internet
   C. Agent or Counter
   D. Counter

Answer the following questions based on the table below (Q. No. 28-30).

The following table shows details about the sales achieved by a company with five product lines over the last three years. The figures represent Rupees in millions.

<table>
<thead>
<tr>
<th>Year</th>
<th>Product A</th>
<th>Product B</th>
<th>Product C</th>
<th>Product D</th>
<th>Product E</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>200</td>
<td>235</td>
<td>134</td>
<td>214</td>
<td>168</td>
</tr>
<tr>
<td>2010</td>
<td>183</td>
<td>214</td>
<td>138</td>
<td>218</td>
<td>169</td>
</tr>
<tr>
<td>2011</td>
<td>196</td>
<td>226</td>
<td>119</td>
<td>186</td>
<td>193</td>
</tr>
</tbody>
</table>

28. The sales of which product category fluctuates the least in the last three years.
   A. Product A
   B. Product B
   C. Product C
   D. Product D

29. Which of the following is a wrong statement?
   A. The rate of decrease in total sales from '09 to '10 is much greater than the rate of decrease in total sales from '10 to 2011
   B. The rate of decrease in sales is the highest for Product C
   C. The rate of decrease in total sales is greater than the rate of decline in total sales for Product A
   D. Both (b) and (c) are wrong

30. Three ladies X, Y and Z marry three men A, B and C. X is married to A, Y is not married to an engineer, Z is not married to a doctor, C is not a doctor and A is a lawyer. Then which of the following statements is correct?
   A. Y is married to C who is an engineer
   B. Z is married to C who is a doctor
   C. X is married to a doctor
   D. None of these
VERBAL ABILITY

Select the most appropriate word from the choices below and fill up the blanks:

31. It is expected that the assembly will ________ these treaties.
   A. force
   B. ratify
   C. notify
   D. check

32. His belief that he could do this is his ________.
   A. allusion
   B. illusion
   C. depict
   D. addict

33. The telephone connection was very poor and we only heard a ________ account of what the reporter was describing.
   A. Gesticulated
   B. Gambled
   C. Garrulous
   D. Garbled

34. Complete the paragraph by logically arranging the jumbled sentences:

A well-known and coordinated system of transport plays an important role in the sustained economic growth of a country.

(A) Transportation in India has recorded a substantial growth over the years both in spread of network and in output of the system.

(B) This is because, we Indians know that transport indeed plays a vital role in the progress of any country.

(C) The Ministry of Shipping, Road Transport and Highways is responsible for the formation and implementation of policies and programmes for the development of various modes of transport save the railways and the civil aviation.

(D) The present transport system of India comprises several modes of transport including rail, road, coastal shipping, air transport, etc.

A. DABC
   B. DACB
   C. ACDB
   D. CADB

Circle the ODD word out

35. A. Dump    B. Chuck    C. Preserve    D. Ditch

36. A. Strange  B. Regular  C. Bizarre    D. Weird
Choose the antonym from the four options for the underlined word in the sentence:

37. She had to listen to her garrulous guest for hours in courtesy.
   A. Arrogant
   B. Talkative
   C. Taciturn
   D. Interesting

38. The bellicose countries finally stopped fighting.
   A. Friendly
   B. Peaceful
   C. Troubling
   D. Hateful

Select the most appropriate analogy from the choices below:

39. BOUQUET : FLOWERS
   A. woodpile : logs
   B. forest : thicket
   C. mist : fog
   D. drift : snow.

40. STUBBORN : OBSTINATE
   A. mulish : tractable
   B. trepidation : confident
   C. gloomy : morose
   D. education : school