

JMET PAPER: (12-12-2010)DATA INTERPRETATIONSECTION - 4

Directions: Questions 91 to 93 are based on the following information.

The results of a General Studies Paper (GSP) administered to candidates appearing in the Civil Services Examination are given in the Table below. The GSP has four sections of 100 marks each. These sections are History, Sciences, Political Science, and Current Affairs. The numbers in the Table below represent the number of candidates securing the respective range of marks, given in discrete numbers, wherein all the candidates wrote all the four sections.

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Section	Range of Marks	Range of Marks	Range of Marks	Range of Marks	Range of Marks	Range of Marks	Range of Marks
	0 – 10	11 – 25	26 – 40	41 – 55	56 – 70	71 – 85	86 – 100
History	1520	9150	9210	13135	10785	8210	2990
Sciences	3300	6950	8910	12150	10125	9750	3815
Political Science	5175	6500	8625	14215	9590	5750	5145
Current Affairs	2750	8185	9190	16250	10140	6200	2285

Q.91 The total number of candidates who appeared for the Civil Services Examination, assuming that all the candidates wrote all the four sections, is

(A) 50000
(B) 55000
(C) 60000
(D) 65000

Q.92 If the minimum marks for qualifying in the Civil Services Examination is more than 40 % in each section, the ratio of the number qualifying in History to the number qualifying in Political Science is

(A) 1.112
(B) 1.012
(C) 0.912
(D) 0.812

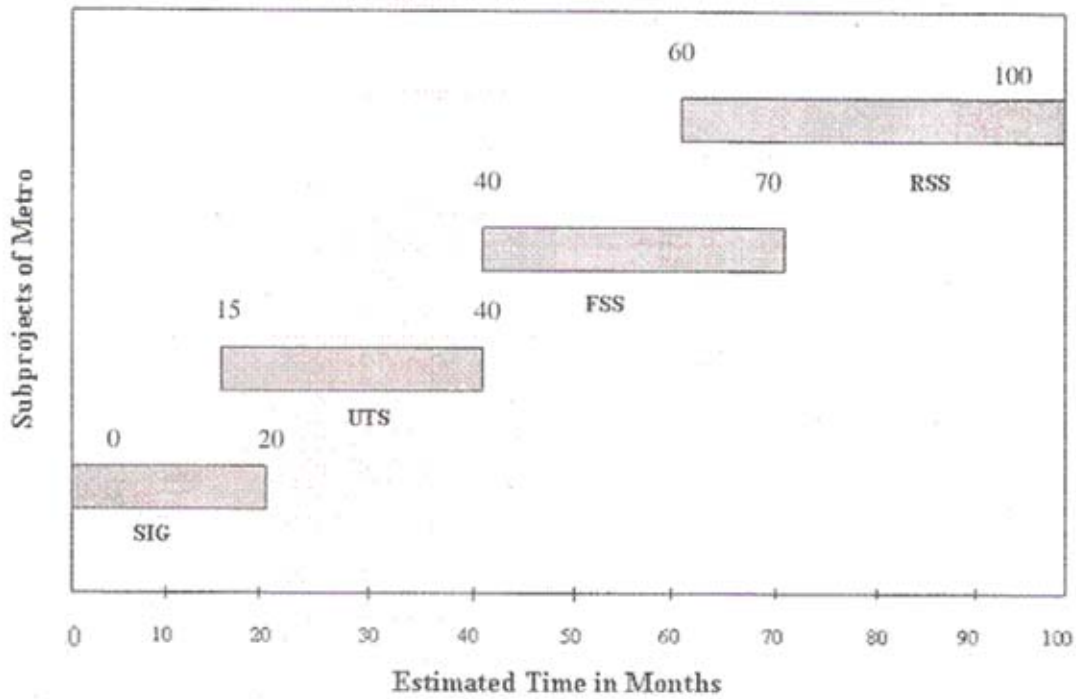
Q.93 Comparing the modal ranges of all the subjects, it is seen that the largest number of candidates got marks in the range of

(A) 11 – 25
(B) 56 – 70
(C) 41 – 55
(D) 26 – 40

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Directions: Questions 94 to 96 are based on the following information.

The performance in a Metro Infrastructure Project in a metropolitan city is being measured in terms of the following major subprojects: Soil Investigation and Geotechnical (SIG); Underground Tunnels and Structures (UTS); Flyovers and Super Structures (FSS); and Railway Stations and Shelters (RSS). The bar chart in the following figure shows the Estimated Time of each of the subprojects. The numbers above these bars represent either the start-time or the finish-time of the subproject. During the review of the project performance, the Actual Duration of each subproject, as a percentage of the Estimated Duration is shown in the following table.



Subproject	Actual Duration (As % of Estimated Duration)
SIG	100
UTS	100
FSS	60
RSS	80

- Q.94 In which of the following pairs of subprojects is the ratio of the Actual Duration to the Estimated Duration, the minimum? TCYonline.com
- (A) SIG and UTS
 (B) UTS and FSS
 (C) FSS and RSS
 (D) RSS and SIG
- Q.95 In the Metro Infrastructure Project, in how many subprojects is the difference between the Actual Duration of a subproject and that of its immediate predecessor not more than 9 months? TCYonline.com
- (A) 1
 (B) 2
 (C) 3
 (D) 4
- Q.96 What is the ratio of the actual time taken by the largest subproject to that of its immediate predecessor?
- (A) $(4/3)^2$
 (B) $(2/3)^2$
 (C) $(3/4)^2$
 (D) $(3/2)^2$

Directions: Questions 97 to 99 are based on the following information.

The Unique Identification (UID) Project has indicated the following demographic information about the residents of a district. The basic qualifications of the male and female citizens, as on the years 2000 and 2010, in different age groups, are shown in the following table.

UID Demographics in per cent

Gender	MALE									FEMALE								
	< 25 Years			25-40 Years			>40 Years			< 25 Years			25-40 Years			>40 Years		
Age																		
Qualification	School	College (UG)	College (PG)	School	College (UG)	College (PG)	School	College (UG)	College (PG)	School	College (UG)	College (PG)	School	College (UG)	College (PG)	School	College (UG)	College (PG)
2000	20	8	5	18	10	7	15	12	5	25	5	3	20	8	7	20	10	3
2010	18	6	9	16	10	9	17	8	7	20	7	6	18	5	12	15	15	3

Q.97 The largest increase in the percentage of PG qualified residents in the district, from 2000 to 2010, has occurred amongst
 (A) Females in the 25-40 years age group
 (B) Females in the below 25 years age group
 (C) Males in the below 25 years age group
 (D) Can not be determined

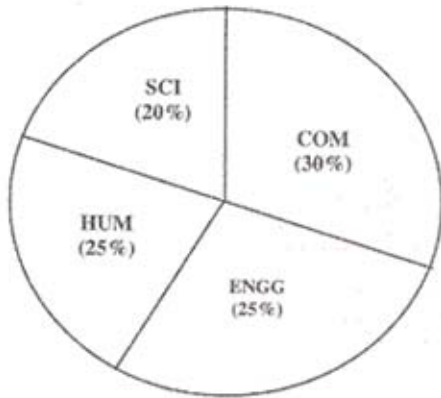
Q.98 Looking at the data trend from 2000 to 2010, the number of residents who have only high school qualifications as a percentage of the total district population has
 (A) Decreased for both females and males
 (B) Increased for females but decreased for males
 (C) Decreased for females but increased for males
 (D) Increased for both males and females

Q.99 The ratio of UG and PG qualified females of age 25 years and older to the UG and PG qualified males of age 25 years and older
 (A) Has remained the same in 2000 and 2010
 (B) Has increased from 2000 to 2010
 (C) Has decreased from 2000 to 2010
 (D) Can not be determined from the data given

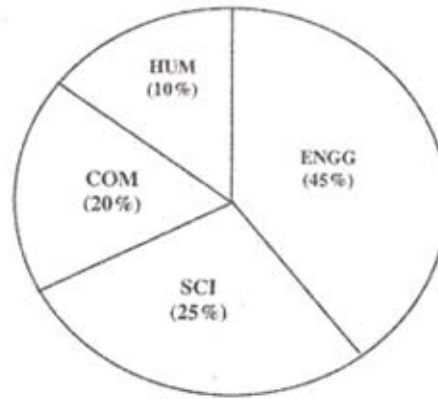
Handwritten calculations:
 $15 + 13 = 28$
 34

Directions: Questions 100 to 102 are based on the following information.

The National Institute of Management (NIM) has recently admitted 300 students in its Master of Business Administration (MBA) programme. Students have come either through the Common Aptitude Test (CAT) stream, which fetched 60 students out of 60000 applicants, or through the Joint Management Entrance Test (JMET), from which 240 students have been admitted out of 96000 applicants. The pie charts below show the distribution of the admitted students, based on their prior discipline, as being from either Engineering (ENGG), or Science (SCI), or Commerce (COM), or Humanities (HUM).



CAT (60 Students)



JMET (240 Students)

Q.100 The ratio of students with Humanities (HUM) background in CAT stream admissions in NIM, to those in JMET stream admissions in NIM is

- (A) 5.0
 (B) 2.5
 (C) Less than 0.5
 (D) 0.625

Q.101 Considering both CAT and JMET streams, the number of students in NIM with Science (SCI) and Engineering (ENGG) background exceeds the number of students with non-SCI and non-ENGG backgrounds by

- (A) Less than 50
 (B) Between 51 and 100
 (C) Between 101 and 150
 (D) More than 150

Q.102 The ratio of the number of students with Commerce (COM) discipline in NIM from JMET stream to those in NIM from CAT stream is

- (A) 3/8
 (B) 8/3
 (C) 18/12
 (D) 12/18

Directions: Questions 103 to 105 are based on the following information.

A National Business School (NBS) has organized three types of Management Education Programmes (MEP): a regular MBA programme (RMBA), a part-time evening MBA programme (EMBA) and a distance MBA programme (DMBA). In the year 2009, the demographics of students enrolled in RMBA, EMBA and DMBA are shown in the table below, wherein the work experience is represented as integers in number of years.

Work experience (years)	RMBA		EMBA		DMBA		TOTAL	
	Male	Female	Male	Female	Male	Female	Male	Female
0	20	20	10	10	10	20	40	50
1 to 3 (inclusive of both values)	50	20	20	20	20	60	90	100
4 to 6 (inclusive of both values)	30	10	10	10	50	60	90	80
> 6	50	10	20	20	10	40	80	70
Total	150	60	60	60	90	180	300	300

Q.103 The number of non-DMBA students having work experience of 1 to 3 years, as a percentage of the total number of students in NBS, is
 (A) 55.6 % (B) 45.3 %
 (C) 25.6 % (D) 18.3 %

Q.104 What proportion of all students in NBS are male students with work experience of more than 6 years ?
 (A) 8/60 (B) 24/60
 (C) 30/60 (D) 45/60

Q.105 The number of male students with more than 3 years experience in RMBA and EMBA differs from the number of female students with 3 years and lesser experience in EMBA and DMBA by
 (A) 0 (B) 20
 (C) 20 (D) 40

Directions: Questions 106 to 108 are based on the following information.

The table below gives the state-wise cumulative utilization of funds available under the Members of Parliament – Local Area Development Scheme (MP-LADS), by the Lok Sabha MPs, for the fiscal years 2005-06 and 2006-07.

(Amount in Rs. Crores)

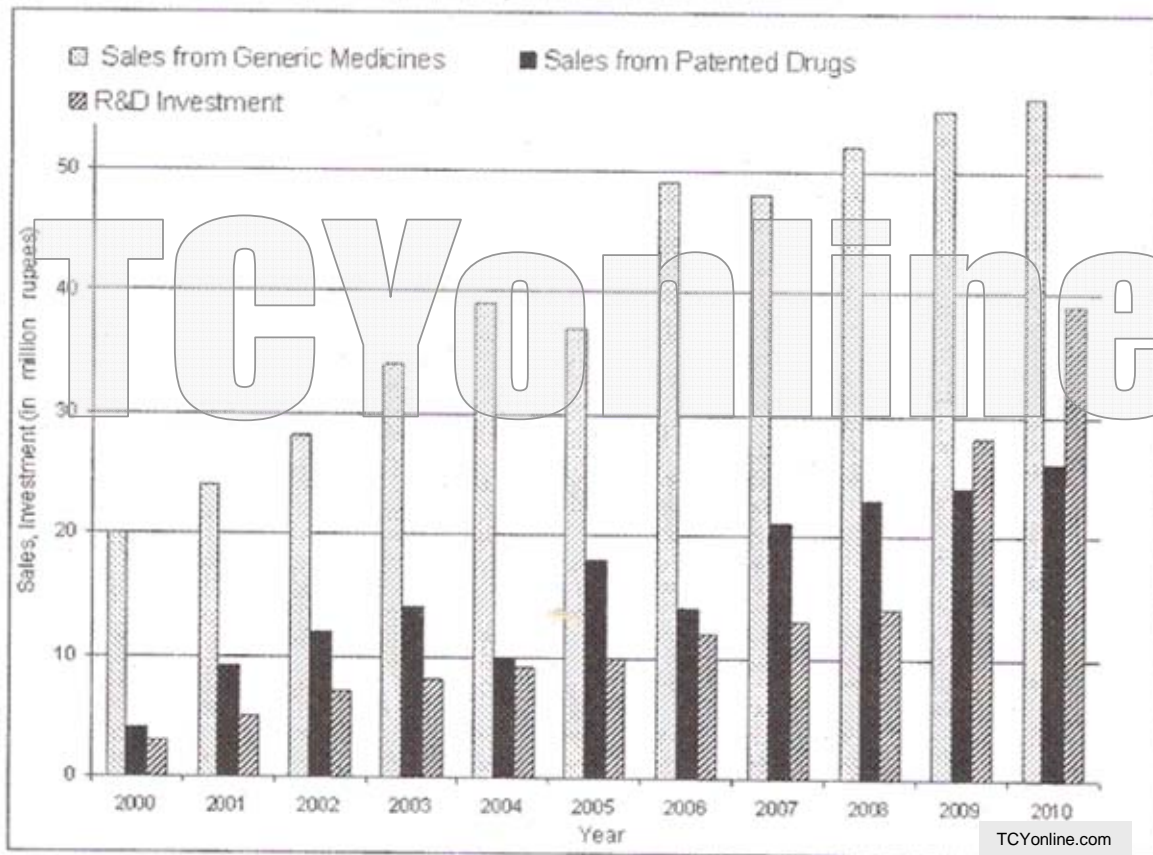
States having MP-LADS	Fiscal Year 2005-06		Fiscal Year 2006-07	
	Amount available	% Funds utilized	Amount available	% Funds utilized
Andhra Pradesh	888	95	974	93
Bihar	812	70	880	78
Gujarat	542	95	586	90
Karnataka	578	93	628	89
Madhya Pradesh	611	75	667	82
Maharashtra	977	89	1080	85
Rajasthan	530	82	587	88
Uttar Pradesh	1700	78	1843	87
Total (8 States)	6638	83.65	7245	86.4

Q.106 The percentage of funds utilized by Andhra Pradesh, Gujarat, Karnataka, and Maharashtra has changed in the following way from fiscal year 2005-06 to 2006-07
 (A) Increased by around 10 %
 (B) Remained the same
 (C) Decreased by around 10 %
 (D) Decreased by around 5 %

- Q.107 The ratio of the funds utilized by Bihar, as the percentage of the funds utilized by all the states in fiscal year 2005-06 to 2006-07 has
- (A) Decreased by around 1 %
 - (B) Decreased by around 5 %
 - (C) Increased by around 5 %
 - (D) Increased by around 1 %
- Q.108 The ratio of the funds available to Uttar Pradesh against those available to all other states in fiscal years 2005-06 and 2006-07 has
- (A) Decreased by around 1 %
 - (B) Decreased by around 5 %
 - (C) Increased by around 5 %
 - (D) Increased by around 1 %

Directions: Answer questions 109 to 112 on the basis of information provided below.

A pharmaceutical firm has an R&D division and every year investment is made to augment the innovation process in the organization. Total sales of the firm comprises sales from the generic medicines and sales from the patented drugs. The following diagram provides graphical presentation of data (in millions of rupees) on sales from the generic medicines, patented drugs and R&D investment from 2000 to 2010.



- Q.109 In which of the following years were sales from patented drugs more than one third of the sales from the generic medicines?
- (A) 2000
 - (B) 2004
 - (C) 2005
 - (D) 2006

Q.110 In which of the following years was the annual rate of growth of R&D investment the maximum?

- (A) 2001
- (B) 2003
- (C) 2007
- (D) 2009

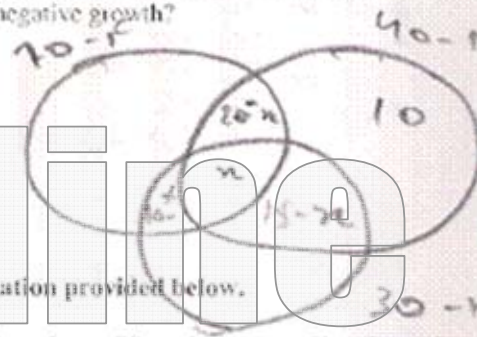
Q.111 What is the total number of years during which sales from the generic medicines or sales from the patented drugs or R&D investment i.e. at least one of the variables, have shown decline?

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

Q.112 In which of the following years did the sales from patented drugs register positive growth even when the sales from generic medicines have shown negative growth?

- (A) 2004
- (B) 2006
- (C) 2007
- (D) 2008

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Directions: Answer questions 113 to 115 on the basis of information provided below.

In a management institute, during the placement process of 100 students, 70 students got offers from the Finance area, 40 students got offers from the Marketing area and 30 students got offers from HR area. Of these, 20 students received offers from the Finance and Marketing areas, 15 students got offers from the Marketing and HR areas and 10 students got offers from the HR and Finance areas.

Q.113 How many students received offers only from two areas?

- (A) 10
- (B) 20
- (C) 30
- (D) 40

Q.114 How many students received offers from the Finance area but not from any other area?

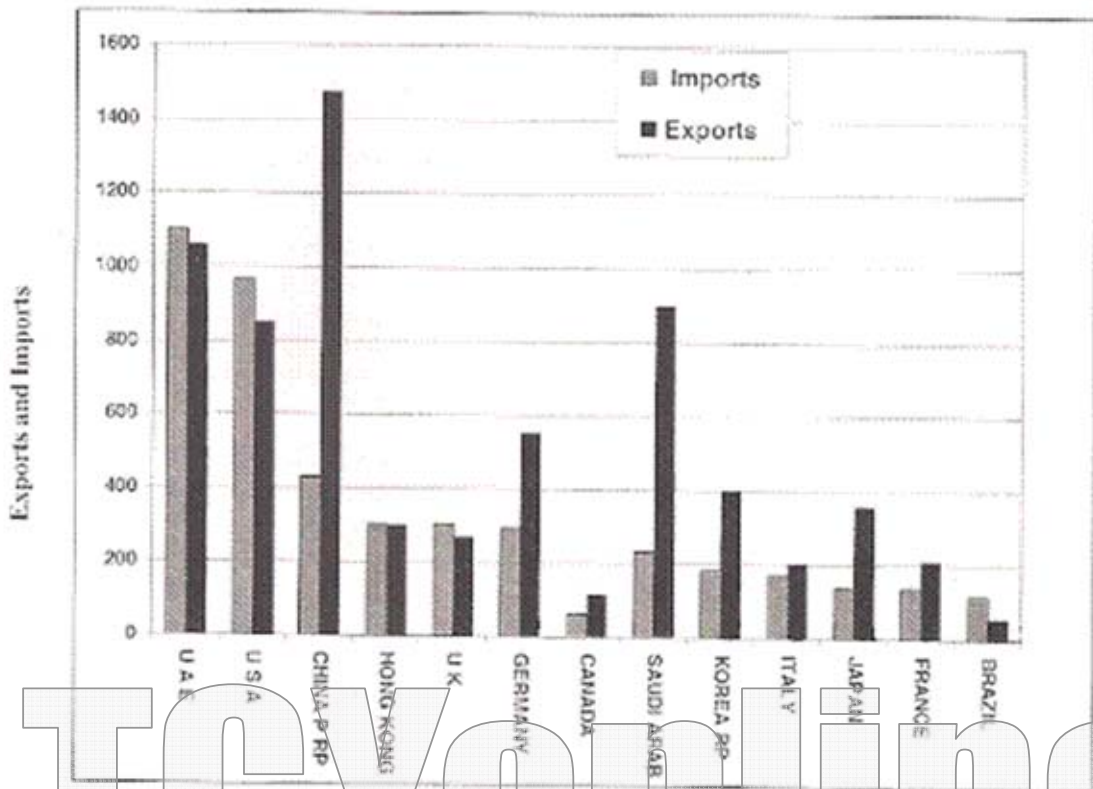
- (A) 45
- (B) 25
- (C) 35
- (D) 15

Q.115 What percentage of students received offers both from Finance and Marketing but not from HR?

- (A) 5 %
- (B) 10 %
- (C) 15 %
- (D) 20 %

140
185-30
25
2
= 1
+2

The following figure presents India's exports and imports for the year 2008-09 (in billions of rupees) with major trading partners.



Q.116 In which of the following pairs of countries is the ratio of India's exports to these countries approximately 2:1?

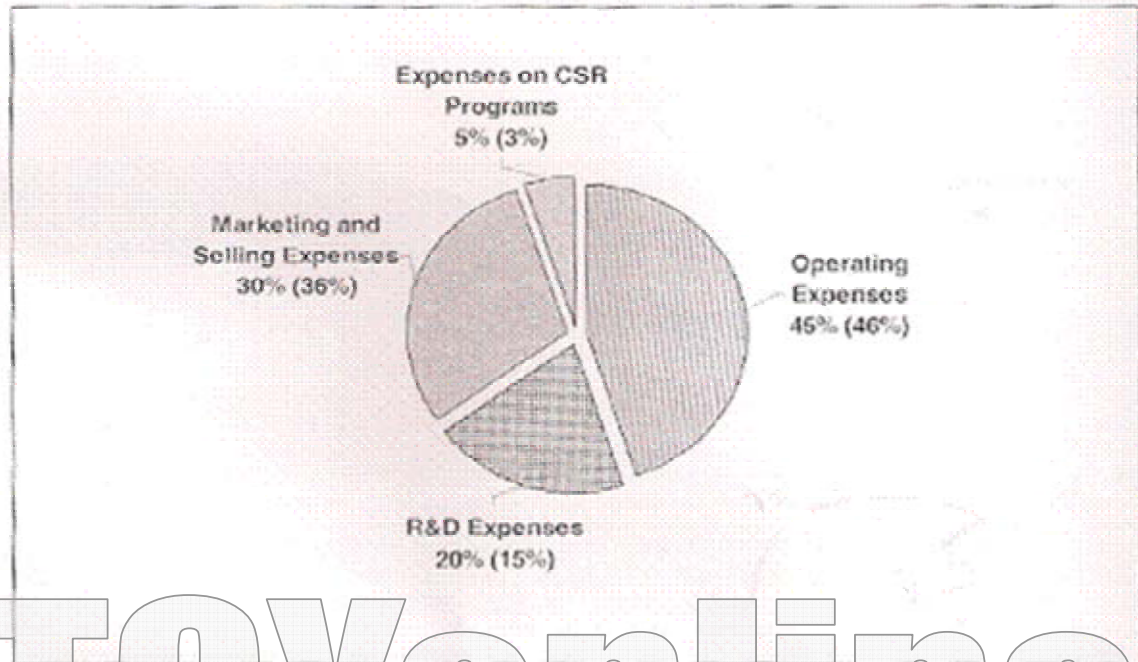
- (A) Korea : Italy
- (B) UAE : France
- (C) The USA : Japan
- (D) Saudi Arab : Germany

Q.117 If we rank the following country pairs by the difference between imports from these countries, which pair will be ranked second if the pair with minimum difference is ranked first?

- (A) UAE and France
- (B) Germany and Saudi Arab
- (C) Korea and Italy
- (D) The USA and Japan

Directions: Answer questions 118 to 120 on the basis of information provided below.

The following chart presents information on a firm's operating expenses, marketing and selling expenses, R&D expenses and expenses on the Corporate Social Responsibility (CSR) programs for the year 2009-10. The percentage figures in parentheses provide information on expenses on the same heads for the year 2008-09. The budget for 2008-09 and 2009-10 has been Rs. 550 million and Rs. 750 million, respectively.



Q.118 Which expenditure item has shown maximum change from 2008-09 to 2009-10 in terms of rupees?

- (A) Operating expenses
 (B) Marketing and selling expenses
 (C) R&D expenses
 (D) Expenses on CSR

Q.119 In the year 2009-10, the difference between the amount spent on operating expenses and CSR programs (in million rupees) is TCYonline.com

- (A) 100
 (B) 200
 (C) 300
 (D) 400

Q.120 Which of the following statements is correct?

- (A) In the year 2008-09, the operating expenses were 3 times the expenses on CSR programs.
 (B) In the year 2008-09, the R&D expenses were 5 times the expenses on CSR programs.
 (C) In the year 2009-10, the R&D expenses were 6 times the expenses on CSR programs.
 (D) In the year 2009-10, the operating expenses were double the marketing and selling expenses.