

**OPENMAT - XXVII : Entrance Test for
Management Programmes 2010**

February, 2010

14452

Total No. of Questions : 200

Time : 180 Minutes

- All questions are *Compulsory*.
- Use of calculator is *not* allowed. Rough work may be done in the space provided at the end of the Test Booklet.
- The Test Booklet has the following *four* tests :

Test - I	General Awareness	No. of Questions 30
Test - II	English Language	No. of Questions 50
Test - III	Quantitative Aptitude	No. of Questions 50
Test - IV	Reasoning	No. of Questions 70

Read the instructions given on the OMR Response Sheet carefully before you start.

**How to fill up the information on the OMR Response Sheet
(Examination Answer Sheet)**

1. Write your complete enrolment no. in 9 digits. This should correspond to the enrolment number indicated by you on the OMR Response Sheet . Also write your correct name, address with pin code in the space provided. Put your signatures on the OMR Response Sheet with date. Ensure that the Invigilator in your examination hall also puts his signatures with date on the OMR Response Sheet at the space provided.
2. On the OMR Response Sheet student's particulars are to be filled in by pen. However use HB pencil for writing the Enrolment No. and Examination Centre Code as well as for blackening the circle bearing the correct answer number against the serial number of the question.
3. Do not make any stray remarks on this sheet.
4. Write correct information in numerical digit in Enrolment No. and Examination Centre Code Columns. The corresponding circle should be dark enough and should be filled in completely.
5. Each question is followed by four probable answers which are numbered 1, 2, 3 and 4. You should select and show only one answer to each question considered by you as the most appropriate or the correct answer. Select the most appropriate answer. Then by using HB pencil, blacken the circle bearing the correct answer number against the serial number of the question. If you find that answer to any question is none of the four alternatives given under the question, you should darken the circle with '0'.
6. If you wish to change your answer, ERASE completely the already darkened circle by using a good quality eraser and then blacken the circle bearing your revised answer number. If incorrect answer is not erased completely, smudges will be left on the erased circle and the question will be read as having two answers and will be ignored for giving any credit.
7. No credit will be given if more than one answer is given for one question. Therefore, you should select the most appropriate answer.
8. You should not spend too much time on any one question. If you find any particular question difficult, leave it and go to the next. If you have time left after answering all the questions, you may go back to the unanswered ones. There is no negative marking for wrong answers.

GENERAL INSTRUCTIONS

1. No cell Phones, calculators, books, slide-rules, note-books or written notes, etc. will be allowed inside the examination hall.
2. You should follow the instructions given by the Centre Superintendent and by the Invigilator at the examination venue. If you violate the instructions, you will be disqualified.
3. Any candidate found copying or receiving or giving assistance in the examination will be disqualified.
4. The Test Booklet and the OMR Response Sheet (Answer Sheet) would be supplied to you by the Invigilators. **After the examination is over, you should hand over the OMR Response Sheet to the Invigilator before leaving the examination hall.** Any candidate who does not return the OMR Response Sheet will be disqualified and the University may take further action against him/her.
5. All rough work is to be done on the test booklet itself and not on any other paper. Scrap paper is not permitted. For arriving at answers you may work in the margins, make some markings or underline in the test booklet itself.
6. The University reserves the right to cancel scores of any candidate who impersonates or uses/adopts other malpractices or uses any unfair means. The examination is conducted under uniform conditions. The University would also follow a procedure to verify the validity of scores of all examinees uniformly. If there is substantial indication that your performance is not genuine, the University may cancel your score.
7. In the event of your qualifying the Entrance Test, the hall ticket should be enclosed with your admission form while submitting it to the University for seeking admission in Management programmes along with your testimonials and programme fee. Admission forms received without hall ticket in original will be summarily rejected.

TEST - IV
REASONING

Answer the Questions (131 to 134) after studying the following information :

- (i) There are six people in a family A, B, C, D, E and F.
- (ii) C is the wife of B and mother of F.
- (iii) F is the granddaughter of E.
- (iv) D is the grandmother of A and mother of B.
- (v) There are two married couples in the family.

131. What is C to A ?

- (1) Mother (2) Grandmother (3) Daughter (4) None of these

132. How many male members are there in the family ?

- (1) 2 (2) 3 (3) 4 (4) None of these

133. Which of the following is true ?

- (1) A is the sister of F (2) A is the brother of F
(3) B has two daughters (4) None of these

134. Who among the following is one of the couples ?

- (1) C and D (2) E and B (3) D and E (4) None of these

Read the following information to answer the Questions (135-138) :

- (i) A, B, C, D, E and F are six members in the family. There are two pairs of couples in the group.
- (ii) There are two engineers, one teacher, one sociologist and two artists. Both the engineers are of the same sex.
- (iii) A and C are the same profession.
- (iv) The teacher is married to the engineer and an artist is married to the lady sociologist.
- (v) A is an Artist. E is a male engineer. Both of them are unmarried.
- (vi) F is B's husband.

135. Who is married with the teacher ?

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

136. Who is sociologist by profession ?

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

137. Which of the following are the pair of couples ?

- (1) FD and BD (2) CD and FB (3) CD and FD (4) FC and AD

138. What is the profession of B ?

- (1) Engineer (2) Sociologist (3) Teacher (4) Artist

139. Sudha's rank from bottom in a class of 31 students is 11th. What is her rank from the top ?

- (1) 21st (2) 22nd (3) 20th (4) 19th

140. From 1 o'clock in the morning till 12 noon, how many times will the pendulum of a clock strike ?

- (1) 78 (2) 87 (3) 68 (4) 86

In each of the following Questions (141-145), certain relationship is expressed in three words, find out the suitable fourth word from the given options :

141. India : New Delhi :: Pakistan : ?

- (1) Lahore (2) Islamabad (3) Peshawar (4) Hyderabad

142. Tariatana : Muslin :: Poplin : ?

- (1) Jute (2) Wool (3) Cotton (4) Rayon

143. Flying : Bird :: Creeping : ?

- (1) Aeroplane (2) Snail (3) Ground (4) Flower

144. Culprit : Crime :: Judge : ?

- (1) Court (2) Case (3) Law (4) Verdict

145. Lukewarm : Hot :: Pat : ?

- (1) Fondle (2) Step (3) Worship (4) Scold

In the following Questions (146-150), decipher the relationship using given relationship in the question :

146. Flower is to Bud as Fruit is to :

- (1) Taste (2) Seed (3) Flower (4) Twig

147. Dam is to Mad as Drab is to :

- (1) Barb (2) Brab (3) Bard (4) Badr

148. 'Hour' is related to Second in the same way as 'Tertiary' is related to :

- (1) Ordinary (2) Secondary (3) Primary (4) Intermediary

149. 'Dogs' bark so also 'Goats' :

- (1) Bleat (2) Crow (3) Grunt (4) Howl

150. 'Cuboid' is related to square in the same way as 'Square' is related to :

- (1) Plane (2) Triangle (3) Line (4) Point

151. 'Horse' is related to Neigh in the same way as 'Jackal' is related to :

- (1) Bray (2) Howl (3) Chatter (4) Squeak

152. 'Water' is related to Ocean in the same way as 'Snow' related to :

- (1) Glacier (2) Ice (3) Hail (4) Mountain

153. 'Breeze' is related to Cyclone in the same way as 'Drizzle' is related to :

- (1) Decay (2) Flood (3) Heavy rain (4) Spray

154. What is related to 'Defamation' in the same way as 'Honour' is related to Award ?

- (1) Punishment (2) Charge (3) Fault (4) Crime

155. What is related to 'Student' in the same way as 'Venus' is related to Solar System ?

- (1) Teacher (2) Class (3) Friend (4) Book

156. What is related to 'River' in the same way as 'Summer' is related to Winter ?

- (1) Agriculture (2) Tree (3) Barren (4) Coast

In the following Questions (157-162), find the missing group of letter after studying the relationship given in the question :

157. TALK : YFHG :: MIND : ?

- (1) RNJZ (2) RMNQ (3) QMRH (4) QMHR

158. ACEG : DFHJ :: ? : ZXVT

- (1) WUSQ (2) SQOM (3) USQO (4) YWUS

159. CDE : ZXY :: EDC : ?

- (1) ZXY (2) ZYX (3) XZY (4) YXZ

160. ACEG : ZXVT :: HJLN : ?

- (1) TRPN (2) SQOM (3) OQSU (4) RPNL

161. LAKE : PEOI :: MEAT : ?

- (1) PILO (2) REXO (3) QIEX (4) QEIX

162. LOSE : MQVI :: GAIN : ?

- (1) HCLR (2) GCLR (3) HCLS (4) HLCR

Choose the pair of words that shows the same relationship as given at the top of every pair in Questions (163-168) :

163. Cells : Cytology

- | | |
|---------------------------|--------------------------|
| (1) Diseases : Physiology | (2) Worms : Ornithology |
| (3) Insects : Entomology | (4) Tissues : Morphology |

164. Goose : Gander

- | | |
|--------------------|-------------------|
| (1) Duck : Drake | (2) Hen : Chicken |
| (3) Horse : Bridle | (4) Donkey : Bray |

165. Inherit : Acquire

- | | |
|----------------------|------------------------------|
| (1) Loss : Gain | (2) Learn : Discover |
| (3) Instinct : Habit | (4) Hierarchial : Succession |

166. Summer : Raining

- | | |
|------------------------|-----------------------|
| (1) Monday : Sunday | (2) Summer : Winter |
| (3) December : January | (4) Licence : Driving |

167. Scalp : Hair

- | | |
|-------------------|-----------------------|
| (1) Home : Cattle | (2) Nail : Nailpolish |
| (3) Green : Earth | (4) Fur : Cap |

168. Mountain : Height

- | | |
|-------------------|--------------------|
| (1) River : Water | (2) Valley : Depth |
| (3) Moon : Shadow | (4) Cave : Depth |

169. In any year on 28th February is Tuesday. If the leap year is excluded, then the day on 28th March will be :

- | | | | |
|------------|------------|-------------|--------------|
| (1) Sunday | (2) Monday | (3) Tuesday | (4) Saturday |
|------------|------------|-------------|--------------|

170. Traffic light at one particular crossing changes after every 25 seconds. The traffic light at the next crossing changes after every 30 seconds. At a certain time they change together. After what time they will again change together ?

- | | | | |
|-----------------|-----------------|----------------|-----------------|
| (1) 120 seconds | (2) 180 seconds | (3) 90 seconds | (4) 150 seconds |
|-----------------|-----------------|----------------|-----------------|

171. In the Olympic Games, the flags of 6 nations were flown on the masts in the following way. The flag of America was found to the left of India Tricolour and to the right of the flag of France. The flag of Australia was on the right of the Indian flag but was to the left of the flag of Japan which was to the left of the flag of China. Find the two flags which are in the centre ?

- (1) America and India (2) Japan and Australia
(3) America and Australia (4) India and Australia

172. A cube is painted on all sides. It is then cut into 64 cubes of equal size. How many of these smaller cubes are painted on one side only ?

- (1) 8 (2) 4 (3) 16 (4) 24

173. In the context of preceding question, how many smaller cubes are not painted at all ?

- (1) 8 (2) 4 (3) 6 (4) 1

174. In the context of the same cube, how many of these smaller cubes would have 3 sides painted ?

- (1) 6 (2) 4 (3) 8 (4) 12

175. What is the minimum number of ducks which can swim in the following manner : two ducks are in front of one : two ducks are behind one duck and one duck is between two ducks ?

- (1) 11 (2) 9 (3) 7 (4) 3

176. The quantity of water in a cistern doubles every minute. It gets filled in 60 minutes. In how many minutes will it be half-filled ?

- (1) 20 (2) 30 (3) 40 (4) 59

177. Each match-stick is of length 4 cm. Number "eight" is formed using minimum number of the match-sticks. If the same number of match-sticks are placed along a straight line close to each other, the length of the straight line is :

- (1) 36 cm (2) 32 cm (3) 28 cm (4) 24 cm

178. Shivani's mother was three times older than Shivani 5 years ago. After 5 years, she will be twice as old as Shivani. How old is Shivani today ?

- (1) 10 years (2) 5 years (3) 15 years (4) 12 years

179. A directional post is erected on a crossing. In an accident, it was turned in such a way that the arrow which was first showing east is now showing south. A passerby went in wrong direction thinking it is west. In which direction is he actually travelling now ?

- (1) South (2) North (3) East (4) West

180. A is B's sister, C is B's mother, D is C's father, E is D's mother. Then how is 'A' related to D ?

- (1) Grand-father (2) Daughter
(3) Grand mother (4) Grand Daughter

181. On a shelf are placed six volumes side by side labelled ABCDEF. BCEF have green covers while others have yellow covers. ADB are new volumes while the rest are old volumes. ACB are law reports while the rest are old medical extracts. Which two volumes are old medical extracts and have green covers ?

- (1) BC (2) CD (3) CE (4) EF

Study the trend in the following questions (182-190) and insert the missing number :

182.

28	60	48
5	6	7
14	39	27
7	?	16

(1) 23

(2) 24

(3) 27

(4) 18

183.

42	44	38
23	55	28
37	?	39

(1) 77

(2) 66

(3) 22

(4) 33

184. 9, 11, 20, 31, ?, 82

(1) 71

(2) 51

(3) 60

(4) 41

185. 8, 13, 23, 43, 83, ?

(1) 173

(2) 183

(3) 163

(4) 193

186. 225, 336, 447, ?, 669, 780

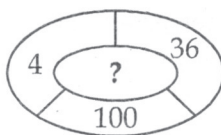
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(3) 991

(4) 558

187.



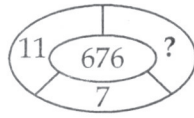
(1) 4268

(2) 2856

(3) 5832

(4) 6464

188.



(1) 6

(2) 4

(3) 7

(4) 8

189.

2 B	3 C	5 B
5 C	8 B	17 A
13 A	15 A	?

(1) 10 C

(2) 13 B

(3) 16 C

(4) 20 A

190.

AZ	DW	GT
BY	EV	?
CX	FU	IR

(1) KT

(2) HS

(3) JI

(4) AD

Answer the Questions (191-195) based on the information given below :

A case is cut into two equal parts along a plane parallel to one of its faces. One piece is then coloured red on the two larger faces and green on the remaining, while the other is coloured green on the two smaller adjacent faces and red on the remaining. Each is then cut into 32 cubes of the same size. The 64 resultant cases are all mixed up.

191. How many cases have no coloured face at all ?

(1) 8

(2) 0

(3) 16

(4) 12

192. How many cases have only one coloured face each ?

(1) 0

(2) 8

(3) 16

(4) 32

193. How many cases have two red and one green face each ?

(1) 0

(2) 4

(3) 8

(4) 16

194. How many cases have each one red and another green face ?

(1) 0

(2) 8

(3) 16

(4) 24

195. What is the number of cases with at least one green face each ?

(1) 32

(2) 36

(3) 38

(4) 40

Answer the Questions (196–199) based on the information given below :

- (i) A, B, C or W may cause D.
- (ii) B, C or W may cause E.
- (iii) W and X may cause F.
- (iv) D or E may cause G or H only if D and E are caused by B or C; D or E may cause I only if D and E are caused by C.
- (v) Only E and F together may cause M or N.
- (vi) F may cause H only if it is caused by W or X.

196. Which can result from the largest number of immediately preceding events ?

- (1) D (2) E (3) F (4) M

197. Which can result in the smallest number of subsequent events, counting both those that follow immediately and those that follow after another event ?

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

198. How many different events or combination of events may cause H ?

- (1) 5 (2) 6 (3) 7 (4) 8

199. Which may be a result of the smallest number of different combinations of events ?

- (1) G (2) H (3) I (4) M

200. A man walks 10 kilometres towards north. From there he walks 6 kilometres towards south. Then he walks 3 kilometres towards east. How far and in which direction is he with reference to his starting point ?

- (1) 5 km towards west (2) 7 km towards east
(3) 5 km towards north east (4) 7 km towards west

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SPACE FOR ROUGH WORK

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