

**OPENMAT – XLI**  
**Entrance Test for Management Programmes 2017**  
**February, 2017**

*Total No. of Questions : 200*

*Time : 180 Minutes*

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- 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 digits 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 I**  
**GENERAL AWARENESS**

1. Pravara, Purna and Pranhita are the main tributaries of
  - (1) Mahanadi river
  - (2) Krishna river
  - (3) Godavari river
  - (4) Kaveri river
  
2. The largest number of hydrogen compounds are formed through
  - (1) Ionic bonding
  - (2) H-bonding
  - (3) Coordinate covalent bonding
  - (4) Covalent bonding
  
3. According to the immunity theory, ageing is due to
  - (1) Accumulation of errors
  - (2) Degeneration of thymus
  - (3) Reduced functioning of endocrine glands
  - (4) Accumulation of waste products
  
4. The radioactive particles or rays with the greatest penetrating power are the
  - (1) Gamma rays
  - (2) Alpha particles
  - (3) Beta particles
  - (4) Protons
  
5. Igneous rocks are mostly associated with
  - (1) Erosional activities
  - (2) Volcanic activities
  - (3) Seismic activities
  - (4) Tectonic activities
  
6. Silk is a product of
  - (1) Cuticle of larva
  - (2) Cuticle of adult
  - (3) Salivary gland of larva
  - (4) Salivary gland of adult
  
7. Which of the following qualities of coffee is mostly grown in India and is in great demand in the international market ?
  - (1) Liberica
  - (2) Robusta
  - (3) Mexican
  - (4) Arabica

8. The national motto of India, 'Satyamev Jayate' inscribed below the Emblem of India is taken from
- (1) Mundaka Upanishad (2) Katha Upanishad  
(3) Aitareya Upanishad (4) Chandogya Upanishad
9. The members of the Constituent Assembly, who drafted the Constitution of India, were
- (1) Nominated by the British Parliament  
(2) Elected by the Legislative Assemblies of various provinces  
(3) Nominated by the Governor General  
(4) Elected by the Indian National Congress and the Muslim League
10. The Constitution of India is declared to have been adopted and enacted by the
- (1) People of India (2) Constituent Assembly  
(3) British Parliament (4) Indian Parliament
11. Who amongst the following Chief Justices of India acted as the President of India for a short term ?
- (1) Justice A.K. Sarkar  
(2) Justice P.N. Bhagwati  
(3) Justice M. Hidayatullah  
(4) Justice K. Subba Rao
12. Which of the following is the largest Lok Sabha constituency in terms of area ?
- (1) Secunderabad (2) Ahmedabad  
(3) Kangra (4) Ladakh
13. The main exporter of copper in the world is
- (1) Ghana (2) India  
(3) Belgium (4) Zambia
14. The ports on either end of the Suez Canal are
- (1) Cairo and Alexandria  
(2) Cairo and Port Said  
(3) Port Said and Suez  
(4) Suez and Cairo

15. The terms 'Pithoro', 'Mithila Paintings' and 'Warli' are traditional forms of  
(1) Hardwood Paintings (2) Murals  
(3) Dye Paintings (4) Sketch Paintings
16. The 'Gross' concept of Income Accounting can be changed to 'Net' concept by  
(1) Adjusting for Depreciation  
(2) Adjusting for Inflation  
(3) Adjusting for Exchange rate fluctuations  
(4) Adjusting for Bad debts of banks
17. The agency that formulates Foreign Direct Investment (FDI) policy in India is  
(1) Foreign Investment Promotion Board  
(2) Cabinet Committee on Economic Affairs  
(3) Department of Industrial Policy and Promotion  
(4) Department of Commerce
18. 'Kayakalp Council' is related to which of the following ?  
(1) Ministry of Agriculture (2) Ministry of Railways  
(3) Ministry of Health (4) Ministry of Defence
19. The first 'Digital State of India' is  
(1) Kerala (2) Andhra Pradesh  
(3) Gujarat (4) Maharashtra
20. Which of the following Vedas contains the earliest evidence of agricultural activities in India ?  
(1) Rigveda (2) Samaveda  
(3) Atharvaveda (4) Yajurveda
21. The mobile app 'BHIM', which was launched by the Government of India, stands for  
(1) Build Interface for Money (2) Built-up Interface for Modi  
(3) Bharat Interface for Money (4) Business Interface for Money
22. Who has been selected for the prestigious Jnanpith Award, 2016 ?  
(1) Kedarnath Singh (2) Shankha Ghosh  
(3) Ravuri Bharadhwaja (4) Chandrashekhara Kambara

23. Which of the following countries is the first in the world to use 'Drones' for National Mail Services ?
- (1) France (2) United Kingdom  
(3) USA (4) China
24. The book "*The Other One Percent : Indians in America*" was authored by
- (1) Mohana Krishnan (2) Joe Harris  
(3) Balaji Vittal (4) Sanjoy Chakravorty
25. Who has become the first Indian to be elected as the President of the International Hockey Federation ?
- (1) Dhanraj Pillay (2) Narinder Batra  
(3) K.D. Singh (4) Kirtan Singh
26. "Lakshmi", India's first banking robot, was launched by
- (1) City Union Bank (2) State Bank of India  
(3) ICICI Bank (4) Axis Bank
27. The winner of the Nobel Peace Prize, 2016 is
- (1) Martti Ahtisaari (2) Shinzo Abe  
(3) Juan Manuel Santos (4) Shirin Ebadi
28. The first woman President of UN General Assembly was
- (1) Sarojini Naidu (2) Durgabai Deshmukh  
(3) Indira Gandhi (4) Vijaya Lakshmi Pandit
29. The last Mughal emperor was
- (1) Shah Alam II (2) Bahadur Shah Zafar  
(3) Nadir Shah (4) Jahandar Shah
30. Who founded the city of Amritsar ?
- (1) Guru Arjan Dev (2) Guru Harkishan  
(3) Guru Ram Das (4) Guru Gobind Singh

**TEST II**  
**ENGLISH LANGUAGE**

**Directions for questions number 31 to 45 :** *The section consists of two passages followed by questions based on the contents of the passages. Answer the questions following each passage on the basis of what is stated or implied in the passage.*

**Passage I**

Culture is such a complicated concept that it does not lend itself to a single definition or a simple description. It brings to mind different images to different people. In its broadest sense, it includes a wide variety of constructs such as the mental habits, personal prejudices, moral values, social customs, artistic achievements, and aesthetic preferences of particular societies. Recognizing the amorphous nature of the concept of culture, anthropologists thought it fit to distinguish between *Culture* with a capital C and *culture* with a small c. The former is a relatively societal construct referring to the general view of culture as creative endeavours such as theatre, dance, music, literature, and art. The latter is a relatively personal construct referring to the patterns of behaviour, values, and beliefs that guide the everyday life of an individual or a group of individuals within a cultural community.

Historically, the cultural orientation that informed L2 learning and teaching was confined mostly to Culture with a big C. It is only after World War II, when language communication became the primary goal of language learning and teaching, that learners and teachers alike started emphasizing the importance of everyday aspects of cultural practices, that is, culture with a small c. Whatever its orientation, culture teaching played a rather subterranean role in most L2 education. It became part of what Michael Byram (1989) has called “the hidden curriculum”, indirectly seeking to create in the learner an empathy towards and an appreciation for the culture of the target language community. This hidden agenda has been the order of things from time immemorial. In a comprehensive review of twenty-five centuries of language teaching, Louis Kelly (1966, p. 378) has pointed out that “the cultural orientation of language teaching has always been one of its *unstated* aims”.

According to a review by H.H. Stern (1992), culture teaching has generally included a cognitive component, an affective component, and a behavioural component. A focal point of the cognitive, affective and behavioural components of teaching culture has always been the native speaker of the target language. As Stern (1992) reiterates, “One of the most important aims of culture teaching is to help the learner gain an understanding of the native speaker’s perspective”. It is a matter of the L2 learner “becoming sensitive to the

state of mind of individuals and groups within the target language community". The teacher's task, then, is to help the learner "create a network of mental associations similar to those which the items evoke in the native speaker". The overall objective of culture teaching, then, is to help L2 learners develop the ability to use the target language in culturally appropriate ways for the specific purpose of empathizing and interacting with native speakers of the target language.

**31.** One of the following is the primary aim of the passage :

- (1) Learners must understand diverse cultures
- (2) Description of different components of culture
- (3) To understand the difference between Culture with a capital C and culture with a small c
- (4) Help second language learners use the target language in culturally appropriate ways

**32.** The phrase "Recognizing the amorphous nature of the concept of culture" means

- (1) knowing that the concept of culture cannot be understood
- (2) understanding that culture cannot be concretely defined
- (3) knowing that culture is a formless and shapeless entity
- (4) understanding that the concept of culture can never be fully understood

**33.** Culture with a small c refers to

- (1) artistic achievements in the daily life of individuals
- (2) social customs of learners of second language
- (3) behaviours and values in the daily life of individuals
- (4) creative and aesthetic aspects of society

**34.** The phrase "... culture teaching played a rather subterranean role in most L2 education" refers to

- (1) a subversive role
- (2) a rather cynical role
- (3) an invisible role
- (4) a subservient role

- 35.** An appropriate title to the passage would be
- (1) Raising Cultural Awareness of L2 Learners
  - (2) Celebrating Diversity among Learners
  - (3) The Hidden Agenda
  - (4) Cultural Profiling
- 36.** The author of the passage is likely to be
- (1) A sociologist
  - (2) An educationist
  - (3) An anthropologist
  - (4) A language teacher
- 37.** All the following are mentioned in the passage *except*
- (1) It was the general view of culture that was taught from the time of World War II.
  - (2) The “hidden curriculum” is rather insidiously included in the L2 classroom.
  - (3) There are three major components to teaching culture.
  - (4) The main emphasis of teaching culture in the L2 classroom is to enable learners to engage appropriately with native speakers of the target language.
- 38.** The most appropriate sentence following the passage would be :
- (1) While there are merits in the notions of Colour Purple and third culture, it seems to me that a true understanding of the cultural dynamics of the L2 classroom can emerge only through an understanding of the individual cultural identity that teachers and learners bring with them.
  - (2) One of the engines that drives both economic and cultural globalisation is global electronic communication, the Internet.
  - (3) Such an approach is based on a limited view of culture in at least two important ways.
  - (4) Second, the traditional approach to the teaching of culture also ignores the rich diversity of world views that learners bring with them to the language classroom.

## Passage II

Where does all this lead, in ethical and political terms? In our own concluding essay to *The Great Ape Project*, Paola Cavalieri and I point to an international organization that can serve as a political model for the liberation of the great apes: the Anti-Slavery Society. In the last two-hundred years, human slavery has been eliminated, or virtually so, from the face of the Earth. In laboratories, zoos, circuses, and elsewhere, the great apes remain the most abject of slaves. In 1991, the United States government set official minimum standards for cages for laboratory chimpanzees. The recommended cage size for permanently confining a single adult chimpanzee was  $5 \times 5 \times 7$  feet.

Can we put an end to the slavery of the great apes? Since the launch of the Great Ape Project in 1993 there have been promising signs of change in attitudes toward the non-human great apes. In Britain, the government has said that it will no longer allow great apes to be the subject of harmful scientific experimentation. In the United States, a National Science Foundation report on chimpanzees in laboratories recommended that — in contrast to the methods normally applied to other animals used in research — chimpanzees surplus to research requirements should not be killed but should be “retired”. In New Zealand, animal welfare legislation enacted in 1999 included a clause prohibiting the use of “non-human hominoids” — that is, great apes — in research, unless the research was intended to benefit them, either individually or as a species. In hailing the legislation as a world first, the government minister responsible for its passage through parliament specifically referred to “the advanced cognitive and emotional capacity of the great apes” as the reason for the special status being accorded to them.

These are the early signs of what could become a more fundamental change. It needs to happen soon, not only for the sake of those apes now enslaved in the developed world, but also for those still living freely in their original lands. In Africa, and in Indonesia, the great apes are everywhere endangered by the clearing and burning of the forests in which they live. In Africa, chimpanzees, bonobos and gorillas face an additional threat: foreign logging companies are building roads into the forests, providing access for hunters who shoot them for “bushmeat”, often to be sold at high prices in markets and restaurants hundreds of miles away. If this trade is not stopped soon, there will be very few free-living African apes left.

Extending the community of equals to the great apes is a first step towards the broader moral community that should eventually include all sentient creatures. We imagine that there is a vast gulf between us and other species. This gulf has disastrous consequences not only for the great apes, but for all animals. The Great Ape Project is not merely the champion of the one relatively small group of animals over others, but rather a bridge that will reduce this gulf, and so lead to a different attitude towards all sentient creatures.

39. The author is ultimately focussing on
- (1) an equitable attitude towards all life
  - (2) end of slavery of the apes
  - (3) end of destruction of habitats of apes
  - (4) description of threats to hominoids
40. The reason why the author is concentrating on apes is because
- (1) they are most used in medical experiments
  - (2) they have fairly advanced cognitive and emotional capacity
  - (3) this will help to reduce the gap between humans and other sentient creatures
  - (4) he is anti-slavery
41. The sentence "The recommended cage size for permanently confining a single adult chimpanzee was  $5 \times 5 \times 7$  feet" suggests that the author is
- (1) stating a fact
  - (2) a precise researcher
  - (3) unhappy with the arrangement
  - (4) satisfied with the arrangement
42. The legislation of 1999 included one of the following :
- (1) Apes could not be used for scientific experiments
  - (2) Apes could only be used for experiments which benefited them
  - (3) Apes should be retired after experimentation
  - (4) Only smaller animals could be used for experiments
43. The style of the passage is
- (1) Descriptive
  - (2) Argumentative
  - (3) Persuasive
  - (4) Narrative
44. A suitable title to the passage would be
- (1) Towards Equality of All Species
  - (2) Experimentation on Animals and their Disastrous Consequences
  - (3) The Great Ape Project
  - (4) Extinction of the Ape
45. All the points are mentioned in the passage *except*
- (1) Granting equality to apes is the first step towards a planet where all living beings have an equal right to existence.
  - (2) Granting basic rights to apes is gaining strong political support at an international level.
  - (3) Animal liberation is that basic principle of equality that entitles us to regard all human beings as equal.
  - (4) Human slavery has virtually been eliminated from society.

**Directions for questions number 46 to 50 :** Each of these questions consists of a word in capital letters followed by four alternative words. From among the alternatives, choose the word most nearly **similar** in meaning to the word in capital letters in each case.

**46. CAPRICE**

- |              |             |
|--------------|-------------|
| (1) Whim     | (2) Legend  |
| (3) Prisoner | (4) Honesty |

**47. AFFECTATION**

- |                    |                |
|--------------------|----------------|
| (1) Similarity     | (2) Emissary   |
| (3) Superannuation | (4) Pretension |

**48. NASCENT**

- |             |              |
|-------------|--------------|
| (1) Odious  | (2) Domestic |
| (3) Budding | (4) Insipid  |

**49. DEPORT**

- |                    |                  |
|--------------------|------------------|
| (1) Expulsion      | (2) Helplessness |
| (3) Impoverishment | (4) Denial       |

**50. DERISION**

- |               |                 |
|---------------|-----------------|
| (1) Depravity | (2) Devastation |
| (3) Devaluing | (4) Contempt    |

**Directions for questions number 51 to 55 :** Each of these questions consists of a word in capital letters followed by four alternative words. From among the alternatives, choose the word most nearly **opposite** in meaning to the word in capital letters in each case.

**51. NONENTITY**

- |               |              |
|---------------|--------------|
| (1) Important | (2) Immortal |
| (3) Amoral    | (4) Moral    |

**52. MULTIFARIOUS**

- |                 |              |
|-----------------|--------------|
| (1) Ardent      | (2) Manifold |
| (3) Misanthrope | (4) Singular |

**53. COUNTERMAND**

- |              |                 |
|--------------|-----------------|
| (1) Complete | (2) Accommodate |
| (3) Ratify   | (4) Preside     |

**54. IMMUTABLE**

- |               |              |
|---------------|--------------|
| (1) Uniform   | (2) Candid   |
| (3) Unvarying | (4) Volatile |

**55. PHILANTHROPIC**

- |                |              |
|----------------|--------------|
| (1) Unassuming | (2) Ungainly |
| (3) Callous    | (4) Dismal   |

**Directions for questions number 56 to 60 :** Each of these questions consists of a sentence with two blanks, followed by four alternative words or set of words. In each case select the word/set of words for each blank that best fits the meaning of the sentence as a whole.

- 56.** He is bound to succeed because his \_\_\_\_\_ nature will not permit him to \_\_\_\_\_ .  
(1) pernicious, subsist  
(2) devoted, shirk  
(3) imperious, follow  
(4) persistent, quit
- 57.** In a free and democratic country each and every person has rights as well as duties and it is of \_\_\_\_\_ importance that everything is \_\_\_\_\_ in the right perspective.  
(1) great, done  
(2) significant, examined  
(3) utmost, viewed  
(4) overwhelming, taken
- 58.** The speech \_\_\_\_\_ with subtle threats has resulted in \_\_\_\_\_ tension in the sensitive areas of the city.  
(1) started, reduced  
(2) replete, increased  
(3) full, escalating  
(4) forced, dissolving
- 59.** The education minister emphasized the need to deliver and \_\_\_\_\_ each student's \_\_\_\_\_ talents.  
(1) enhance, dormant  
(2) belittle, innate  
(3) suppress, potential  
(4) develop, intricate
- 60.** In India, governance has been a/an \_\_\_\_\_ problem, one very difficult to change, owing to the deep-rooted bureaucracy and \_\_\_\_\_ lines of power.  
(1) intractable, opaque  
(2) uncontrollable, clear  
(3) stubborn, obscure  
(4) indomitable, cloudy

**Directions for questions number 61 to 65 :** Identify that part of the sentence which is incorrect.

61. (1) The hotel owners want (2) to attract more tourists (3) though they (4) are advertising heavily.
62. (1) I have just now received (2) your letter and I have understood (3) that you will be coming (4) to Delhi next week.
63. (1) These days I generally (2) take my breakfast (3) at seven because (4) I waking up at five.
64. (1) After the burglary, (2) they installed a sophisticated alarm system (3) as an insurance (4) towards further losses.
65. (1) She hungered affection (2) from her children (3) but they neglected (4) her shamefully.

**Directions for questions number 66 to 70 :** Complete the sentences with the correct options.

66. The story is about a boy who \_\_\_\_\_ away from home and goes to the sea.  
(1) runs (2) ran  
(3) will run (4) has run
67. Smriti apologized \_\_\_\_\_ her brother's indecent behaviour.  
(1) of (2) in  
(3) for (4) at
68. We \_\_\_\_\_ the house when our parents returned.  
(1) has been cleaning (2) are cleaning  
(3) had cleaning (4) were cleaning
69. \_\_\_\_\_ no one except Rohit and Renu know the answer ?  
(1) Does (2) Do  
(3) Are (4) Has
70. \_\_\_\_\_ you mind shifting a little please ?  
(1) Could (2) Would  
(3) Should (4) Can

**Directions for questions number 71 to 75 :** In all these questions, either a part or the whole of the sentence is underlined. The sentence is followed by four ways of writing the underlined part. Select the alternative which represents the correct way of writing the underlined part as per standard English.

**71.** People are learning that their concept of a researcher, toiling alone in his laboratory and who discovers miraculous cures has been highly idealized.

- (1) toiling in his laboratory by himself and discovers miraculous cures
- (2) toiling alone in his laboratory to discover miraculous cures
- (3) who toil alone in the laboratory and discover miraculous cures
- (4) toiling in his laboratory to discover miraculous cures by himself

**72.** She not only was competent but also friendly in her behaviour.

- (1) Not only was she competent but friendly also
- (2) She not only was competent but friendly also
- (3) She was not only competent but also friendly
- (4) She was not only competent but friendly also

**73.** If they would have taken greater care in the disposal of nuclear waste, the disaster would not have occurred.

- (1) Unless they took greater care
- (2) Had they not taken greater care
- (3) If they had taken greater care
- (4) If they took greater care

**74.** The set of propositions which was discussed by the panel have been published in the journal.

- (1) which were discussed by the panel have
- (2) that was discussed by the panel has
- (3) which were discussed by the panel has
- (4) which was discussed, by the panel, has

**75.** In its final report, the commission proposed, raising the age of drinking legally from eighteen to twenty-one.

- (1) that the legal drinking age be raised
- (2) a rise of the legal drinking age
- (3) that the legal drinking could be raised
- (4) raising the age of drinking legally

**Directions for questions number 76 to 80 :** Each of these questions consists of an idiom, followed by four alternative words or phrases. Select the word or phrase which gives the closest meaning of the idiom in each case.

**76.** To beat a retreat

- (1) to retire before a superior force
- (2) to participate in the ceremony of the beating of the retreat
- (3) to push back when faced with an enemy
- (4) to injure someone badly

**77.** To bear the brunt of

- (1) to be ready to fight
- (2) to be able to bear pain
- (3) to take the main force of the attack
- (4) to be fiercely attacked

**78.** To steal a march on

- (1) to steal something precious
- (2) to march in a quiet manner
- (3) to go far away by marching steadily
- (4) to gain advantage

**79.** To pass muster

- (1) to be accepted as suitable
- (2) to pass things around on the table
- (3) to abandon an undertaking
- (4) to pass important exams easily

**80.** To be under a cloud

- (1) to escape from rain
- (2) to face rainy weather
- (3) to be out of favour
- (4) to feel unwell

**TEST III**  
**QUANTITATIVE APTITUDE**

81. A chemist was preparing a solution that should have included 35 milligrams of a chemical. If she actually used 36.4 milligrams, what was her percentage error (to the nearest 0.01%) ?
- (1) 0.05% (2) 1.40%  
(3) 3.85% (4) 4.00%
82. A retailer buys a radio from the wholesaler for ₹ 75.00. He then marks up the price by  $\frac{1}{3}$  and sells it at a discount of 20%. What was his profit on the radio (to the nearest paisa) ?
- (1) ₹ 5.00 (2) ₹ 6.67  
(3) ₹ 7.50 (4) ₹ 10.00
83. If the radius of a circle is increased by 50%, what will be the percent increase in the circumference of the circle ?
- (1) 25% (2) 50%  
(3) 100% (4) 150%
84. On a map, 1 inch represents 1,000 miles. If the area of a country is actually 16 million square miles, what is the area of the country's representation on the map ?
- (1) 4 square inches (2) 16 square inches  
(3) 4,000 square inches (4) 16,000 square inches
85. If the length of a rectangle is increased by 120%, and its width is decreased by 20%, what happens to the area of the rectangle ?
- (1) It decreases by 4% (2) It increases by 24%  
(3) It increases by 76% (4) It increases by 100%
86. If 10 men can survive for 24 days on 15 cans of rations, how many cans will be needed for 8 men to survive for 36 days ?
- (1) 15 cans (2) 16 cans  
(3) 18 cans (4) 19 cans
87. Two successive discounts of 20% and 12% are equivalent to a single discount of
- (1) 16.0% (2) 29.6%  
(3) 31.4% (4) 32.0%
88. A man rowed 3 miles upstream in 90 minutes. If the river flowed with a current of 2 miles per hour, how long did the man's return trip take ?
- (1) 20 minutes (2) 30 minutes  
(3) 45 minutes (4) 60 minutes

89. If a man can run  $p$  miles in  $x$  minutes, how long will it take him to run  $q$  miles at the same rate ?
- (1)  $pq/x$  minutes
  - (2)  $px/q$  minutes
  - (3)  $q/px$  minutes
  - (4)  $qx/p$  minutes
90. If 6 workers can complete 9 identical jobs in 3 days, how long will it take 4 workers to complete 10 such jobs ?
- (1) 3 days
  - (2) 5 days
  - (3) 6 days
  - (4) more than 6 days
91. If Robert can seal 40 envelopes in one minute, and Paul can do the same job in 80 seconds, how many minutes (to the nearest minute) will it take the two of them, working together, to seal 350 envelopes ?
- (1) 4 minutes
  - (2) 5 minutes
  - (3) 6 minutes
  - (4) 8 minutes
92. At a cost of ₹ 2.50 per square yard, what would be the price of carpeting a rectangular floor, 18 ft  $\times$  24 ft ?
- (1) ₹ 120
  - (2) ₹ 360
  - (3) ₹ 750
  - (4) ₹ 1,080
93. Ten litres of 15% salt solution is mixed with 15 litres of 10% salt solution. What is the concentration of the resulting solution ?
- (1) 10%
  - (2) 12%
  - (3) 12.5%
  - (4) 13%
94. A broken clock is set correctly at 12:00 noon. However, it registers only 20 minutes for each hour. In how many hours will it again register the correct time ?
- (1) 12
  - (2) 18
  - (3) 24
  - (4) 30
95. Which of the following figures has the largest area ?
- (1) A square with a perimeter of 12 inches
  - (2) A circle with a radius of 3 inches
  - (3) A right triangle with sides of 3, 4 and 5 inches
  - (4) A rectangle with a diagonal of 5 inches
96. If the diagonal of a square is 16 inches long, what is the area of the square ?
- (1) 64 square inches
  - (2)  $64\sqrt{2}$  square inches
  - (3) 128 square inches
  - (4) 256 square inches

97. The 20-inch-diameter wheels of one car travel at a rate of 24 revolutions per minute, while the 30-inch-diameter wheels of another car travel at a rate of 18 revolutions per minute. What is the ratio of the speed of the second car to that of the first ?
- (1) 1 : 1 (2) 3 : 2  
(3) 6 : 5 (4) 9 : 8
98. If the area of a circle is equal to the area of a rectangle, one of whose sides is equal to  $\pi$ , express the other side of the rectangle,  $x$ , in terms of the radius of the circle,  $r$ .
- (1)  $x = r$  (2)  $x = \pi r$   
(3)  $x = r^2$  (4)  $x = \sqrt{r}$
99. The area of a square is  $81p^2$ . What is the length of the square's diagonal ?
- (1)  $9p$  (2)  $9p\sqrt{2}$   
(3)  $18p$  (4)  $9p^2$
100. How many circles, each with a 4-inch radius, can be cut from a rectangular sheet of paper, measuring 16 inches  $\times$  24 inches ?
- (1) 6 (2) 7  
(3) 8 (4) 12

**Questions no. 101 – 105 are based on the following table chart :**

The following chart is a record of the performance of a cricket team for the first seven weeks of the season :

|              | <i>Games won</i> | <i>Games lost</i> | <i>Total no. of games played</i> |
|--------------|------------------|-------------------|----------------------------------|
| First Week   | 5                | 3                 | 8                                |
| Second Week  | 4                | 4                 | 16                               |
| Third Week   | 5                | 2                 | 23                               |
| Fourth Week  | 6                | 3                 | 32                               |
| Fifth Week   | 4                | 2                 | 38                               |
| Sixth Week   | 3                | 3                 | 44                               |
| Seventh Week | 2                | 4                 | 50                               |

101. How many games did the team win during the first seven weeks ?
- (1) 32 (2) 29  
(3) 25 (4) 21