Joint Entrance Test

for Admission to

Bachelor of Computer Applications Programme

Test Date : 18th May 2015 Time : 10.00 – 11.00am

The following are the rules/guidelines for candidates appearing for the Joint Entrance Test for the BCA programme:-

- 1. The test question paper contains of question in three section
 - a. General Aptitude
 - b. English Language and Logical and analytical abilities
 - c. Basic Arithmetic and statistical aptitude
- 2. The test questions are purely multiple choice questions (MCQs).
- 3. The number of questions in each section is 20. The total number of questions is 60.
- 4. The total duration of the test is one hour.
- 5. Every question is of one mark each.
- 6. There shall be no negative marking.
- 7. Use of calculator and other communication devices is not allowed.
- 8. The scores of the joint test are valid across all participating colleges offering the BCA programme of Goa University for admission to the academic year 2015-2016.
- 9. The organisers reserve the right to amend these rules as and when necessary.
- 10. In case of any dispute the decision of the organisers will be final and binding.

Sample Question paper

General Aptitude

- 1) The coalition central government in power in India is a) UPSC c) UPA
 - b) Congress d) NDA
- 2) Canine is a term referred to the species of the _____ family.a) Cow c) Cat
 - b) Monkey d) Dog
- **3)** Recently a new government has been formed in UK under the leadership of a) Tony Blair
 - b) Gordon Brown
 - c) David Cameron
 - d) Grady Booch
- 4) The ongoing Census 2011 in India is the _____ National Census.a) 15thc) 16th
 - b) 13th d) 12th
- 5) The Eyjafjallajokul volcanic eruption happened in a) Moscow c) Ireland
 - b) Nigeria d) Iceland
- 6) The UN's Climate Change Conference, December 2009 was held in a) Copenhagen
 - b) Seoul
 - c) Geneva
 - d) New York
- 7) The FIFA World Cup 2010 will be held in a) Brazil
 - b) South Africa
 - c) Denmark

d) England

- 8) In the game of Hockey, each team has _____ players on the field at any one time
 - a) 11 c) 9
 - b) 13 d) 10
- 9) Wimbledon is associated with
 - a) Football c) Tennis
 - b) Basketball d) Cricket
- 10) Circle the odd man out:
 - a) P. V. Narasimha Rao
 - b) Atal Bihari Vajpayee
 - c) K. R. Narayanan
 - d) Lal Bahadur Shastri
- 11) _____ was awarded the Indira Gandhi peace prize of the year 2010.a) Manmohan Singh
 - b) Omar Abdullah
 - c) Sheikh Hasina
 - d) Chandrika Kumaratunga
- **12)** The largest mammal in the world is the a) Blue Whale c) Python
 - b) Giant Shark d) Elephant
- **13)** Alice's Adventures in Wonderland was written by a) Enid Blyton
 - c) Oliver Twist
 - b) Ruskin Bond
 - d) Lewis Carroll
- 14) The King of Pop is a title given toa) Elton John

- b) Michael Jackson
- c) Elvis Presley
- d) Engelbert Humperdinck
- **15)** A person who starts a business venture is calleda) Entrepreneurc) Icon
 - b) Hedonist d) Mentor
- **16)** Choose the proper sequence for the following parts of the sentence:-It is <u>a car (P) to drive(Q) without good brakes(R) dangerous(S)</u>.
 - a) SQPR c) QSPR
 - b) PRSQ d) PQRS
- **17)** Identify the option that best explains the following idiom:-The Alpha and the Omega.
 - a) All the relevant details
 - b) The beginning and the end.
 - c) All Greek and Latin
 - d) The Best Swiss watches

Read the following passage and answer questions 18 to 20.

The great advantage of the electric train over the steam train , is that it does not smell. When you are in a train drawn by a steam locomotive, you always have the unpleasant odour of burning coal around you. If you open the window to look out at the view and to get some fresh air, you are covered with little bits of coal-ash which gets into your hair and eyes and soon forces you to shut the window again and withdraw into the impure atmosphere of your compartment. In a tunnel, your misery reaches a peak, for there the smoke is forced into a small area , from which it escapes into the train itself through small cracks it may find. In a long tunnel, the smell grows worse and worse, while your eyes smart and the electric light in the carriage grows dim , hidden behind the wreathing smoke.

18) Odour refers toa) Smokeb) Ashd) Dust

- **19)**Passengers in steam trains prefer to keep the windows shut because
 - a) there are difficult to open.
 - b) Coal-ash enters inside.
 - c) Tunnels are full of gases.
 - d) AC Cooling will leak out.
- **20)**Which among the following titles suits the above passage? a)Benefits of electric trains.
 - b)Disadvantages of Tunnels.
 - c)Journey by a Steam Train.
 - d) Coal a polluting fuel.

English Language and Logical and analytical abilities

21) In a certain code KNIFE is written as \$3%#5 and LAKE is written as 7@\$5. How is FAIL written in that code?

a) %\$#7 c) #@%7 b) \$@%7 d) \$%@7

Read the following information carefully and answer questions 22 to 26.

(*i*) 'A \times B' means 'A is father of B'.

(ii) 'A + B' means 'A is daughter of B'.

(*iii*) 'A \div B' means 'A is mother of B'.

(iv) 'A – B' means 'A is brother of B'.

22) If 'P + Q – R \div T', how is T related to P?

a) Aunt c) Aunt/Uncle

b) Father d) Cousins

23) Which of the following means that R is wife of P? a) $P \times R - Q - T$

b) $P \div T + R - Q$

c) $P \div R - Q + T$

d) $P \times T - Q + R$

24) If 'P × T \div Q + R' how is R related to P? a) Daughter

b) Husband

c) Son-in-law

d) Son-in-law/Daughter-in-law

25) If 'P \div R – Q \times T', how is P related to T? a) Grandmother

b) Mother-in-law

c) Sister

d) Grandfather

26) If ' $R \div Q + R \times T$ ', how is T related to Q? a) Aunt c) Sister b) Brother (d) Grandson

27) What will come in place of question mark (?) in the following series? TG HU VI JW ?

- a) KY c) KX
- b) YK d) XK
- 28) Which one does not belong to the group?a) Year c) Month

b) Day d) Time

- 29) If GOAL is coded as EMYJ, then POST will be coded as :a) NKRQc) NPQO
 - b) NMQR d) OQTU
- 30) Which one does not belong to the group?a) Pencilc) Chalk
 - b) Notebook d) Pen

In question 31 & 32, Choose the group of words that show the same relationship as given by the group above:-

31)FLOWERS : FLORIST a) Stethoscope : Doctor

- b) Weddig : Caterer
- c) Rings : Jeweller
- d) Pharmacist : Pharmacist

32) SKEPTICAL : DOUBT

- a) Resolute : Determination
- b) Pristine : Grace
- c) Tainted : Honoour
- d) Stringent : Suggestions

In question 33, identify the word that forms a part of the group stated on top:-

33)CONCEAL. COVER, HIDE a) Bury c) Expose b) Discover d) Disguise

34) Count the number of triangles in the following figure



a) l c)M

b) P d) K

In question 36 which of the figure should appear in the right if the series is to be continued





- **37)**In a row of girls , when 'A' was shifted by two places towards the left , she became 7th from the left end. What was her earlier position from the right end of the row.
 - a) 8th c) 9th
 - b) 10th d) 11th

38) Insert the missing number 857, 969, 745, 1193, ?

- a) 2093 c) 297
- b) 1400 d) 2089

39)Pick up the pair of words having identical meanings i) BALL ii) BOX iii) CUBE

iv) SPHERE v) TRIANGLE

- a) i & iv c) i & ii
- b) iii & v d) i & v

Basic Arithmetic and statistical aptitude

40) Which part contains the fractions in ascending order?

- a) 11/14, 16/19, 19/21
- b) 16/19, 11/14, 19/21
- c) 16/19, 19/21, 11/14
- d) 19/21, 11/14, 16/19
- **41)**Two apples and three mangoes cost Rs.86. Four apples and a mango cost Rs.112. Find the cost of an apple.
 - a) 35 c) 20
 - b) 30 d) 25

42)75% of 48 is

- a) 64 c) 48
- b) 36 d) 0.36

43)A mother is three times as old as her son. After 15 years she will be twice as old as her son. What is the present age in years of the mother?

- a) 30 c) 45
- b) 50 d) 60

44)Divide 378 into two parts in the ratio of 2:7.

- a) 84 & 294 c) 80 & 298
- b) 42 & 336 d) 126 & 252

45)A semi-circular protractor having diameter 20 cms, its perimeter is a) 31.4 cm c) 51.4 cm

b) 62.8 cm d) 42.1 cm

46)The average of 11, 23, K is 40, the value of K is

- a) 86 c) 120
- b) 35 d) 12
- 47) The number of diagonals that can be drawn by joining the vertices of an octagon isa) 28 c) 48

b) 20 d) 24 48) The probability that a leap year contains 53 Sundays is a) 7/366 c) 26/183 b) 1/7 d) 2/7 49) The LCM of 24, 39, 60 and 150 is c) 3900 a) 7800 b) 15600 d) 5200 50) Rs 6200 amounts to Rs 9176 in 4 years at simple interest. If the interest rate is increased by 3%, it would amount to how much? a) 8432 c) 9920 b) 10,920 d) 9820 51) Which natural number is nearest to 8485, which is completely divisible by 75? a) 8475 c) 8500 b) 8550 d) 8525 52) A train travels 82.6 km/hour. How many metres will it travel in 15 minutes? c) 206.50 a) 20.65 b) 2065 d) 20650 53) If the sides of a square are doubled, the percentage increase in new area will be a) 100% c) 300% b) 400% d) 200% 54) The median of the following frequency distribution is X :8 5 6 10 9 4 7 Freq:6 4 5 8 9 6 4 a) 9 c) 10 b) 8 d) 7.5 55) The circumference of a Compact Disc can be measured as a) Πr^2 c) 2∏r

b) $2\Pi r^2$ d) $\Pi r^2 h$

56) is a prime number. a) 6 c) 22

. .

b) 11 d) 42

Study the following graph and answer question 57 to 60



57)In which two years the ratio of the wastage of petrol to diesel the same. a) 2001 & 2004

- b) 2001 & 2003
- c) 2002 & 2005
- d) 2003 & 2004

58) Which year recorded the least wastage of diesel.

- a) 2001 c) 2003
- b) 2004 d) 2005

59) In which year is the diesel to petrol ratio highest.

- a) 2003 c) 2004
- b) 2001 d) 2002

60)The wastage of diesel in 2001 is what percentage of diesel wastage in the years 2003 & 2005 together.

a) 55%c) 50%

b) 60% d) 65%