XCS–400

B. TECH. (FOURTH SEMESTER)
MID SEMESTER EXAMINATION, 2019

CAREER SKILLS

Time : 1 : 30 Hours

Maximum Marks : 50

Note : (i) Answer all questions. Each question carries 1 mark.

(ii) Use of calculator is not allowed.

(iii) Mention Set No. on the OMR Sheet.

Direction : Read the passage and answer the questions given below :

It is to progress in the human sciences that we must look to undo the evils which have resulted from a knowledge of physical world hastily and superficially acquired by population unconscious of the changes in themselves that the new knowledge has imperative. The road to a happier world than any known in the past lies open before

us if atavistic destructive passions can be kept in leash while the necessary adaptations are made. Fears are inevitable in time, but hopes are equally rational and far more likely to bear good fruit. We must learn to think rather less of the dangers to be avoided than of the good that will lie within our grasp if we can believe in it and let it dominate our thoughts. Science, whatever unpleasant consequences it may have by the way, is in its very nature a liberator, a liberator of bondage to physical nature and in time to come, a liberator from the weight of destructive passions. We are on the threshold of utter disaster or unprecedentedly glorious achievement. No previous age has been fraught with problems so momentous; and it is to science that we must look to for a happy future.

1. What does science liberate us from ? It liberates us from :

   (a) fears and destructive passions

   (b) slavery to physical nature and from passions

   (c) bondage to physical nature

   (d) idealistic hopes of glorious future

2. Should human sciences be developed ? They will :

   (a) provide more knowledge of the physical word

   (b) make us conscious of the changing world

   (c) make us conscious of the changing in ourselves

   (d) eliminate the destruction caused by a superficial knowledge of the physical world

3. If man's bestial yearning is controlled :

   (a) the future will be tolerable

   (b) the future will be brighter than the present

   (c) the present will be brighter than the future

   (d) the present will become tolerable

4. Fears and hopes according to the author :

   (a) are closely linked with the life of modern man

   (b) can bear fruit

   (c) can yield good results

   (d) are irrational

5. To carve out a bright future man should :
   (a) analyze dangers that lie ahead
   (b) try to avoid dangers
   (c) overcome fear and dangers
   (d) cultivate a positive outlook

Direction for Q. Nos. 6 to 10 : Read the passage and answer the questions given below :

Organizations are institutions in which members compete for status and power. They compete for resource of the organization, for example finance to expand their own departments, for career advancement and for power to control the activities of others. In pursuit of these aims, groups are formed and sectional interests emerge. As a result, policy decisions may serve the ends of political and career systems rather than those of the concern. In this way, the goals of the organization may be displaced in favor of sectional interests and individual ambition. These pre-occupations sometimes prevent the emergence of organic systems. Many of the electronic firms in the study had recently created research and development departments employing highly qualified and well

paid scientists and technicians. Their high pay and expert knowledge were sometimes seen as a threat to the established order of rank, power and privilege. Many senior managers had little knowledge of technicality and possibilities of new developments and electronics. Some felt that close co-operation with the experts in an organic system would reveal their ignorance and show their experience was now redundant.

6. The theme of the passage is :
   (a) groupism in organizations
   (b) individual ambitions in organizations
   (c) frustration of senior managers
   (d) emergence of sectional interests in organizations

7. "Organic System" as related to the organization implies its :
   (a) growth with the help of expert knowledge
   (b) growth with input from science and technology
   (c) steady all around development
   (d) natural and unimpeded growth

8. Policy decision in an organization would involve :

(a) co-operation at all levels in the organization

(b) modernization of the organization

(c) attracting highly qualified personnel

(d) keeping in view the larger objectives of the organizations

9. The author makes out a case for :

(a) organic system

(b) research and development in organisations

(c) an understanding between senior and middle level executives

(d) a refresher course for senior managers

10. The author tends to the senior managers as :

(a) ignorant and incompetent

(b) a little out of step with their work environment

(c) jealous of their younger colleagues

(d) robbed of their rank, power and privilege

Direction for Q. Nos. 11 to 15 : In the questions below the sentences have been given in Active/Passive voice. From the given alternatives, choose the one which best expresses the given sentence in Passive/Active voice.

11. After driving Professor Kumar to the museum she dropped him at his hotel :

(a) After being driven to the museum, Professor Kumar was dropped at his hotel.

(b) Professor Kumar was being driven dropped at his hotel.

(c) After she had driven Professor Kumar to the museum she had dropped him at his hotel.

(d) After she was driven Professor Kumar to the museum she had dropped him at his hotel.

12. I remember my sister taking me to the museum :

(a) I remember I was taken to the museum by my sister.

(b) I remember being taken to the museum by my sister.

(c) I remember myself being taken to the museum by my sister.

(d) I remember taken to the museum by my sister.

13. Who is creating this mess ?

(a) Who has been created this mess ?

(b) By whom has this mess been created ?

(c) By whom this mess is being created ?

(d) By whom is this mess being created ?

14. They greet me cheerfully every morning :

(a) Every morning I was greeted cheerfully.

(b) I am greeted cheerfully by them every morning.

(c) I am being greeted cheerfully by them every morning.

(d) Cheerful greeting is done by them every morning to me.

5. Darjeeling grows tea :

(a) Tea is being grown in Darjeeling.

(b) Let the tea be grown in Darjeeling.

(c) Tea is grown in Darjeeling.

(d) Tea grows in Darjeeling.

Direction for Q. Nos. 16 to 20 : Choose the correct form of verb in the following sentences :

16. The next term_____ on 16th November.

(a) begins

(b) beginning

(c) began

(d) begun

17. Oh dear ! I_____.

(a) will sneeze

(b) am going to sneeze

(c) will have sneeze

(d) shall have sneezing

18. By 2020, robots _____ many of the jobs that people do today.

(a) will be taking over

(b) will have taken over

(c) will be taking over

(d) is taking over

19. I'm sure she _____ the exam.

   (a) passes

   (b) will pass

   (c) passed

   (d) may pass

20. I _____ home next Sunday.

   (a) go

   (b) goes

   (c) am going

   (d) went

Direction for Q. Nos. 21 to 25 : Choose the correct option :

21. The concerto sounds more sophisticatedly in the 200-year-old concert hall than it did in the practice room, which has decidedly inferior acoustics ?

   (a) sound more sophisticated

   (b) sound more sophisticatedly

   (c) sounds with greater sophistication

   (d) sounds more sophisticated

22. The art studio is spacious, pleasantly cluttered, and has good lighting.

   (a) and the lighting is good

   (b) and being well-lit

   (c) and is lit well

   (d) and well-lit

23. The school board requested that a waiver be obtained and that the residency requirements are reviewed.

   (a) a review of the residency requirements

   (b) the residency requirements will be reviewed

   (c) the residency requirements be reviewed

   (d) to review the residency requirements

24. the professor's consistent late arrival is offset somewhat by the remarkable quality of his lectures.

   (a) The professor's consistent late arriving

   (b) The consistent late arrival of the professor

   (c) The professor's consistently late arrival

   (d) Lately, the professor's arriving consistently

25. Previously thought to have been extinct, <u>a tem of biologists rediscovered the New Caledonia crested in 1994</u>.

    (a) a team of biologists rediscovered the New Caledonia crested gecko in 1994.

    (b) a team of biologists, in 1994, rediscovered the New Caledonia. crested gecko.

    (c) in 1994 the New Caledonia crested gecko was rediscovered by a team of biologists.

    (d) in 1994 a team of biologists rediscovered the New Caledonia crested gecko.

Directions for Q. Nos. 26 to 35 :

In each of the following questions, a question is followed by 2 different statements. You need to decide whether the statements given are sufficient to answer the question asked. Mark your answer option as :

(a) If the question can be answered by using any 1 statement but not by other statement (i.e. either by 1 but not 2 or by 2 but not 1).

(b) If the question can be answered by using any of the given 2 statements.

(c) If the question cannot be answered by using both the statements together.

(d) If the question can answered by using the both given statements together.

26. Is F the granddaughter of B ?

    (1) B is the father of M. M is the sister of T. T is the mother of F.

    (2) S is the son of F. V is the daughter of F. R is the brother of T.

27. In a football match between Mohan Bagan and East Bengal at half-time, Mohan Bagan was trailing by 3 goals. Did it win the match ?

    (1) In the 2nd half, Mohan Bagan scored 4 goals.

    (2) East Bengal scored 4 goals in the match.

28. P, Q, R, S and T are the only members in a family out of which at least 3 are females. If P is the father of R and Q has 2 sons, then who is the uncle of R ?

    (1) Q is the grandmother of R.

    (2) T is the aunt of R.

P. T. O.

29. Seventeen people are standing in a straight line facing south. What is Bhavna's position from the left end ?

(1) Sandeep is standing second to the left of Sheetal. Only five people stand between Sheetal and the one who is standing at the extreme right end of the line. Four people stand between Sandeep and Bhavna.

(2) Anita is standing fourth to the left of Sheetal. Less than three people are standing between Bhavna and Anita.

30. Six people – S, I, U, V, W and X are sitting around a circular table facing the centre. What is T's position with respect to X ?

(1) Only two people sit between U and W. X is second to the left of W. V and T are immediate neighbours of each other.

(2) T is to the immediate right of V. There are only two people between T and S. X is an immediate neighbour of S but not of V.

31. Is it Sunday today ?

(1) 1st of January of this year was a Monday.

(2) Today is April 2nd.

32. In a college five different subjects, viz. Physics, Chemistry, Botany, Zoology and Mathematics are taught on five different days of the same week, starting from Monday and ending on Friday. Is Chemistry taught on Wednesday ?

(1) Two subjects are taught between Zoology and Mathematics. Mathematics is taught before Zoology. Chemistry is taught on the day immediately next to the day when Physics is taught. Botany is not taught on Friday.

(2) Three lectures are scheduled between the lectures of Botany and Zoology. Mathematics is taught immediately before Physics.

33. In a written test, Sita, Geeta, Reena and Asha have got their ranks. Who are the first and the last rank holders ?

    (1) Sita has scored more than Asha but less than Geeta.

    (2) Asha has scored more than Reena but less than Geeta and Sita.

34. What is the exact time ?

    (1) The time is between 3 P.M. to 4 P.M.

    (2) The hour hand and the minute hand are coinciding.

35. Five letters–A, E, G, N and R are arranged from left to right according to certain conditions. Which letter is placed third ?

    (1) G is placed second to the right of A. E is on the immediate right of G. There are only two letters between R and G.

    (2) N is exactly between A and G. Neither A nor G is at the extreme and of the arrangement.

Directions for Q. Nos. 36 to 38 :

In each of these question, two statements are given followed by two conclusions number I and II. Consider the two given statement to be true even if they seem to be absurd. Mark answer as :

    (a) If only conclusion I follows.

    (b) If only conclusion II follows.

    (c) If neither conclusion I nor II follows.

    (d) If both I and II follows.

36. **Statements :**

    (1) Some Engineer are Intelligent.

    (2) Some Intelligent are rich.

    Conclusions :

    (I) Some Engineers are rich.

    (II) Some rich are engineers.

37. **Statements :**

    (1) All Business-man are rich.

    (2) All rich are liar.

    Conclusions :

    (I) All liars are business-man.

    (II) All business-men are liar.

38. Statements :

   (1) All Balloons are kites.

   (2) All kites are aeroplanes.

Conclusions :

   (I) All balloons are aeroplanes.

   (II) All aeroplanes are balloons is a possibility.

Directions for Q. Nos. 39 to 41 :

In each of these questions, three statements are given which are followed by three conclusions number I, II and III. Consider the two given statement to be true even if they seem to be absurd. Choose the correct option for these questions as answer.

39. Statements :

   (1) All grey are green.

   (2) No orange is grey.

   (3) Some pink are orange.

Conclusions :

   (I) Some pink are grey.

   (II) Some pink are not grey.

   (III) No green is pink.

Options :

   (a) Only III follows

   (b) Only II follows

   (c) II and III follow

   (d) I and III follow

40. Statements :

   (1) All eagles are owls.

   (2) All pigeons are eagles.

   (3) All chickens are pigeons.

Conclusions :

   (I) Some owls are not chickens.

   (II) Some owls are chickens.

   (III) Some pigeons are owls.

Options :

   (a) I and III follow

   (b) Only II follows

   (c) II and III follow

   (d) Only III follow

41. Statements :

   (1) All houses are guest houses.

   (2) All guest houses are hotels.

   (3) Some hotels are huts.

Conclusions :

(I)   All houses are huts.

(II) No house is hut.

(III) All houses may be hut.

Options :

(a) Only III Follows

(b) Only II follows

(c) I and III follows

(d) II and III follows

Directions for Q. Nos. 42 and 43 :
Each of these questions contains five statements followed by four sets of combinations of these. Choose the set in which the third statement is a logical conclusion of the first two :

42. Statements :

(A) all gold are silver.

(B) all copper are silver.

(C) all copper are gold.

(D) no silver is copper.

(E) some copper are silver.

(a) CAB

(b) BEA

(c) BCA

(d) CEA

43. Statements :

(A) all shirt are lavish.

(B) some lavish are cheap.

(C) some shirts are cheap.

(D) all shirts are cheap.

(E) all shirts may be cheap.

(a) ACD

(b) BCD

(c) CBE

(d) ABE

Directions for Q. Nos. 44 to 47 : A cube of side 5 cms is painted red on 2 adjacent faces, green on 2 adjacent faces and yellow on 2 adjacent faces. It is now cut into 125 smaller cubes of side 1 cm each.

Answer the questions that follow :

44. How many of the smaller cubes will have 2 faces painted red ?

(a) 5

(b) 10

(c) 15

(d) 25

45. How many of the smaller cubes will have exactly 1 face painted ?

(a) 27

(b) 81

(c) 54

(d) None of these

46. How many of the smaller cubes will not have any face painted ?

(a) 0

(b) 27

(c) 36

(d) 45

47. How many cubes will have 2 faces painted green and 1 face painted red ?

(a) 1

(b) 2

(c) 3

(d) 4

Directions for Question Nos. 48 to 50 : Five students A, B, C, D and E enrolled at the ABC Education Pvt. Ltd. to prepare for the GRE exam

and availed 5 different products : Regular, Test Series, E-Tutor, Doubt classes and Notes not in any order. The basic price of the products availed by them was ₹ 3,500; ₹ 5,000; ₹ 7,000; ₹ 9,500 and ₹ 11,000 not in any order. Based on their past performance, they were given discounts of ₹ 250, ₹ 500, ₹ 750, ₹ 1,000 and ₹ 2,000 not in any order. Further information is as follows :

(1) The basic price of the E-Tutor and the Doubt classes was more than the average price of the mentioned 5 products.

(2) The student who got the maximum discount ended up paying the least amount which was same as the student who availed the Test Series.

(3) While A availed the E-Tutor which was the maximum priced product, E availed a product having a basic price of ₹ 2,000 more than the basic price of the product taken by D.

(4) The basic price of regular was more than the basic price of Notes.

(5) C got the least discount amongst all the 5 students.

(6) After discount, E paid double the minimum amount paid by any one of them.

48. What is the discount amount offered to the student who availed E-Tutor ?

   (a) ₹ 1,000

   (b) ₹ 500

   (c) ₹ 750

   (d) ₹ 250

49. What was the price paid by E after discount ?

   (a) ₹ 4,000

   (b) ₹ 6,000

   (c) ₹ 3,000

   (d) ₹ 10,250

50. What was the product availed by C ?

   (a) Notes

   (b) Doubt classes

   (c) Test Series

   (d) E-Tutor