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**VASAVI COLLEGE OF ENGINEERING (Autonomous), HYDERABAD**  
**B.E. (CBCS) VI-Semester Advanced Supplementary Examinations, July-2019**

**Finishing School-IV : Soft Skills**

(Common to All Branches)

Time: 90 Minutes

Max. Marks: 35

Note: Answer ALL questions in Part-A and any FIVE from Part-B

**Part-A (5 X 2 = 10 Marks)**

1. 1.a. A train covers a distance in 50 min, if it runs at a speed of 48 kmph on an average. The speed at which the train must run to reduce the time of journey to 40 min will be.

1. 45 kmph    2. 60 kmph    3. 75 kmph    4. None of these

1.b. Anil does a work in 90 days, Bittu in 40 days and Chintu in 12 days. They work one after another for a day each, starting with Anil followed by Bittu and then by Chintu. If the total wages received are Rs 360 and Anil, Bittu, Chintu share them in the ratio of the work done, find their respective individual wages.

1. Rs 40, Rs 60 and Rs 260.                      2. Rs 36, Rs 81 and Rs 243

3. Rs 42, Rs 86 and Rs 232.                      4. Rs 38, Rs 88 and Rs 234

2. 2.a. Statements: All the bottles are boxes. All the boxes are bags. Some bags are trays.

Conclusions: 1. Some bottles are trays. 2. Some trays are boxes.

3. All the bottles are bags. 4. Some trays are bags.

1. Only 3 & 4 follows

2. Only 1 & 2 follows

3. Only 2 & 3 follows

4. Only 1 & 4 follows

2.b. In a class of 345 students, the students who took English, Math and Science are equal in number. There are 30 students who took both English and Math, 26 who took both Math and Science, 28 who took Science and English and 14 who took all the 3 subjects. There are 43 students who didn't take any of the subjects. Answer the following question according to the data given above.

What percent of students took English and Math but not Science?

1. Less than 55%

2. approx. 59%

3. 72%

4. 79%

3. 3.a. Continue the series of problem figures

Problem Figures:



(A) (B) (C) (D) (E)

Answer Figures:



(1) (2) (3) (4) (5)

1. 1    2. 2    3. 3    4. 4    5. 5

- 3.b. Continue the series of problem figures

Problem Figures:



(A) (B) (C) (D) (E)

Answer Figures:



(1) (2) (3) (4) (5)

1. 1    2. 2    3. 3    4. 4    5. 5

4. **Directions 4a & 4b:** Give answer

1. If only assumption I is implicit
2. If only assumption II is implicit
3. If either I or II is implicit
4. If neither I nor II is implicit
5. If both I and II are implicit.

4. a. Statement: "Please put more people on the job to make up for the delay."

**Assumptions:** I. Delay is inevitable in most jobs.

II. Output will increase with more number of people on the job.

4. b. Statement: "If you are an engineer, we have a challenging job for you."

**Assumptions:** I. We need an engineer II. You are an engineer

5. **Directions 5a & 5b:** Give answer as

1. If statement I is the cause and statement II is its effect;
2. If statement II is the cause and statement I is its effect;
3. If both the statements I and II are independent causes;
4. If both the statements I and II are effects of independent causes; and
5. If both the statements I and II are effects of some common cause

**5.a. Statements**

I. The prices of vegetables have fallen considerably during the last few days.

II. There has been considerable improvement in quality of vegetable produces.

**5.b. Statements**

I. To fulfill the increasing demand of the public, cable operators have started broadcasting cricket matches.

II. An increasing number of people crowd in stadiums wanting to watch these matches in stadium.

**Part-B (5 X 5 = 25 Marks)**

*(All sub-questions carry equal marks)*

6. **6.a.** A thief steals a car and drives it at 15 km/hr. The theft has been discovered after one hour and the owner of the car sets off in another car at 25 km/hr. When will the owner overtake the thief from the starting point?

1. 1 hr      2. 1.5 hr      3. 2 hr      4. 2.5 hr

**6.b.** A ship 77 km from the shore, springs a leak which admits to  $9/4$  tonnes of water in  $11/2$  minutes. 92 tonnes of water would sink it. But the pumps can throw out 12 tonnes of water per hour. Find the average rate of sailing so that the ship may just reach the shore as it begins to sink.

1. 10.5 km/hr      2. 11 km/hr      3. 10 km/hr      4. 12.5 km/hr

**6.c.** Ram covers a part of the journey at 20 kmph and the balance at 70 kmph taking total of 8 hours to cover the distance of 400 km. How many hours has he been driving at 20 kmph?

1. 2 hours      2. 3 hours 20 minutes      3. 4 hours 40 minutes      4. 3 hours 12 minutes

6.d. A can build up a structure in 8 days and B can break it in 3 days. A has worked for 4 days and then B joined to work with A for another 2 days only. In how many days will A alone build up the remaining part of the structure?

1. 10      2. 9      3. 12      4. None

6.e. A and B borrowed a tractor for 23 days. A ploughed 12 acres per day for a certain number of days and then B used it to plough 15 acres per day for the remaining days. If they paid Rs 3,000 and Rs 2,000 respectively, for how many days did A use the tractor?

1. 12      2. 15      3. 16      4. 18

7. **Directions (7a-7e):** For all the questions below, Give answer:

1. If only 1 conclusion follows
2. If only 2 conclusion follows
3. If either 1 or 2 follows
4. If neither 1 nor 2 follows and
5. If both 1 and 2 follow.

7.a. **Statement :** Some mangoes are yellow. Some tixo are mangoes.

Conclusions: 1. Some mangoes are green. 2. Tixo is a yellow.

7.b. **Statements:** All the harmoniums are instruments. All the instruments are flutes.

Conclusions: 1. All the flutes are instruments. 2. All the harmoniums are flutes.

7.c. **Statements:** Some papers are pens. All the pencils are pens.

Conclusion: 1. Some pens are pencils. 2. Some pens are papers.

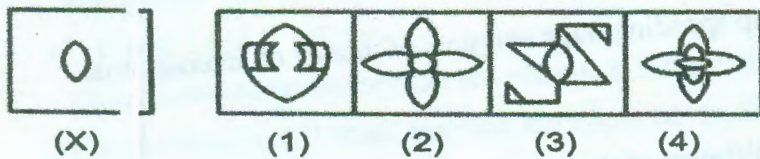
7.d. **Statements:** All the actors are girls. All the girls are beautiful.

Conclusions: 1. All the actors are beautiful. 2. Some girls are actors.

7.e. **Statements:** All the windows are doors. No door is a wall.

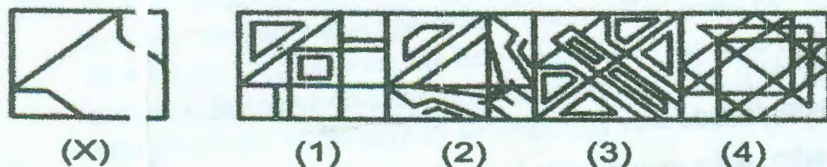
Conclusions: 1. Some windows are walls. 2. No wall is a door.

8. 8.a. Find out the alternative figure which contains figure (X) as its part.



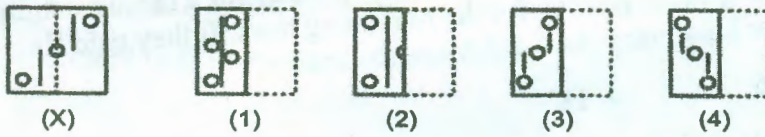
1. 1      2. 2      3. 3      4. 4

8.b. Find out the alternative figure which contains figure (X) as its part.



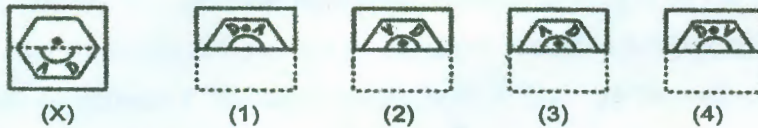
1. 1      2. 2      3. 3      4. 4

8.c. Find out from amongst the four alternatives as to how the pattern would appear when the transparent sheet is folded at the dotted line.



1. 1      2. 2      3. 3      4. 4

8.d. Find out from amongst the four alternatives as to how the pattern would appear when the transparent sheet is folded at the dotted line.



1. 1      2. 2      3. 3      4. 4

8.e. Continue the series of problem figures

Problem Figures:

Answer Figures:



- (A) (B) (C) (D) (E) (1) (2) (3) (4) (5)

1. 1      2. 2      3. 3      4. 4      5. 5

9. 9. a. Should higher education be restricted to only those who can bear the expenditure?

**Arguments**

I. Yes. Higher education is very costly; hence it should not be given free.

II. No. There are a large number of brilliant students who cannot afford to pay and they should be given higher education.

9. b. **Statements:** Should government stop spending huge amounts of money on international sports?

**Arguments**

I. Yes. This money can be utilized for up liftment of the poor.

II. No. Sports persons will be frustrated and will not get international exposure.

9. c. **Statements:** Should agriculture in rural India be mechanized?

**Arguments**

I. Yes. It would lead to higher production.

II. No. Many villagers would be left unemployed.

9. d. **Statements:** Should all refugees, who make unauthorized entry into a country, be forced to go back to their homeland?

**Arguments**

I. Yes. They make their colonies and occupy a lot of land.

II. No. They leave their homes because of hunger or some terror and on human grounds, should not be forced to go back.

**9. e. Statements:** Should there be more than one High Court in each state in India ? **Arguments**

I. No. This will be a sheer wastage of taxpayers' money.

II. Yes. This will help reduce the backlog of cases pending for a very long time.

10. **Directions(10a – 10c):** Read the data given and choose appropriate answer for each question.

Give answer as:

1. if the inference is 'definitely true'

2. if the inference is 'probably true'

3. if 'data are inadequate'

4. if the inference is 'probably false'

5. if the inference is 'definitely false'.

Cotton Acreage in India during the current year has fallen by 10% as cotton growers had moved on cultivation of other cash crops. This is the result of the cotton glut in world markets post-September 11 and the consequent slow down in the world economy. But this scenario brought with it benefits to one segment of the industry yarn manufacturers as they got higher prices for their produce. Some yarn manufacturers too had stuck up on low-priced cotton last year. The combined effect of all this is evident in the rise in net profits and net margins of yarn manufacturers

**10.a. Inference:** There has been a huge drop in the supply of cotton during the current year.

**10.b. Inference:** The yarn manufacturers have marginally suffered during post-September 11 period.

**10.c. Inference:** World economy witnessed an upward trend during pre-September 11 period.

**Directions(10d & 10e):** Give answer as

1. If only I follows

2. If only II follows

3. If either I or II follows

4. If neither I nor II follows

5. If both I and II follow.

**10.d. Statements:** Some men are educated. Educated persons prefer small families

**Conclusions:** I. All small families are educated. II. Some men prefer small families.

**10.e. Statements:** All educated people read newspapers. Rahul does not read newspaper.

**Conclusions:** I. Rahul is not educated. II. Reading newspaper is not essential to be educated.

11. **11.a.** A ship develops a leak 12 km from the shore. Despite the leak, the ship is able to move towards the shore at a speed of 8 km/hr. However, the ship can stay afloat only for 20 minutes. If a rescue vessel were to leave from the shore towards the ship and it takes 4 minutes to evacuate the crew and passengers of the ship, what should be the minimum speed of the rescue vessel in order to be able to successfully rescue the people aboard the ship?

1. 53 km/hr    2. 37 km/hr    3. 28 km/hr    4. 44 km/hr

**11.b.** In a 500 m race Dishu beats Abhishek by 100 m or 5 seconds. In another race on the same track at the same speeds. Abhishek and Prashant start at one end while Dishu starts at the opposite end. How many metres would Abhishek have covered, by the time Dishu meets Prashant given that Dishu's speed is 10 m/sec more than that of Prashant.

1. 200 m    2. 225 m    3. 250 m    4. 275 m

11.c. Pipes A and B can fill a tank in 12 min and 16 min respectively. Both are kept open for 'n' min and then B is closed and A fills the rest of the tank in 5 min. The time 'n' after which B was closed is:

1. 3 min      2. 2 min      3. 5 min      4. 4 min

Data 11d & 11e: In a survey conducted at a University, it was found that 51% of the students wanted to learn French as a foreign language, 48% wanted to learn German and 52% wanted to learn Russian. Of the surveyed students, 21% wanted to learn both French and German, 23% wanted German and Russian and 24% wanted French and Russian. Only 12% wanted to learn all three languages. A total of 500 students were surveyed.

11.d. How many more students (apart from those who wanted to learn French and Russian only) were interested in either French or Russian?

1. 320      2. 325      3. 330      4. 335

11.e. What is the ratio of the number of students interested in exactly two languages to those interested in only one language?

1. 30/51      2. 32/51      3. 40/51      4. 42/51

12.a. Choose the alternative which is closely resembles the water-image

12.

NhRqSy  
 (1) NpRdSz      (2) NpRdSz  
 (3) NpRdSz      (4) NpRdSz

1. 1      2. 2      3. 3      4. 4

12.b. Choose the correct mirror image of the given image



image

a      b      c      d

1. a      2. b      3. c      4. d

Directions(12c - 12e): Give answer as

1. If only I follows
2. If only II follows
3. If neither I nor II follows
4. If both I and II follow.

12.c. Statement: A very large number of students have failed in the final high school examination due to faulty questions in one of the subjects.

Courses of Action: I. All the students who have failed in the subject should be allowed to take supplementary examination.

II. All those who are responsible for the error should be suspended and an enquiry should be initiated to find out the facts.

12.d. Statement: The sale of a particular product has gone down considerably causing great concern to the company.

Courses of Action: I. The company should make a proper study of rival products in the market.

II. The price of the product should be reduced and quality improved.

**12.e. Statement:** On an average, about twenty people are run over by trains and die every day while crossing the railway tracks through the level crossing.

**Courses of Action:** I. The railway authorities should be instructed to close all the level crossings.

II. Those who are found crossing the tracks, when the gates are closed, should be fined heavily

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