# VASAVI COLLEGE OF ENGINEERING (Autonomous), HYDERABAD B.E. III Year I-Semester Main \& Backlog Examinations, December-2017 Finishing school-III: Softs Skills <br> (Common to all branches) 

Time: $1 \frac{1}{2}$ hours
Max. Marks: 35
Note: Answer ALL questions in Part-A and any FIVE from Part-B
Part-B $(5 \times 2=10$ Marks $)$

1. H.C.F of 3240,3600 and a third number is 36 and their L.C.M is $\left(2^{\wedge} 4\right)^{*}\left(3^{\wedge} 5\right)^{*}\left(5^{\wedge} 2\right)^{*}$ $\left(7^{\wedge} 2\right)$. The third number is $\qquad$ .
2. The average age 9 members of a committee are the same as it was 2 years ago, because an old member has been replaced by a younger member. Find how much younger is the new member than the old member?
3. Two trains, 250 metres and 150 metres long respectively, are running on parallel lines. If they are running in the same directions, the faster train crosses the slower train in 40 seconds. If they are moving in the opposite direction they pass each other in eight seconds. What is the speed of the slower train?
4. X and Y start moving towards each other from two places 200 m apart. After walking 60 $\mathrm{m}, \mathrm{B}$ turns left and goes 20 m , then he turns right and goes 40 m . He then turns right again and comes back to the road on which he had started walking. If A and B walk with the same speed, what is the distance between them now?
5. If letters in the word UNIVERSAL are arranged in the alphabetical order and each letter is assigned numerical value equal to its serial number from the left in this rearranged order, what is the difference in the total of numerical values of vowels and that of consonants?

Part-B ( $5 \times 5=25$ Marks)
6. a) A number exceeds by 25 from its $3 / 8$ part. Then the number is $\qquad$ .
a. 32
b. 35
c. 40
d. 45
b) $17,19,23,29,31,37$,
a. 43
b. 41
c. 42
d. 39
c) $12,14,15,16,18,20$,
a. 22
b. 23
c. 21
d. 24
d) If a number is subtracted from its square we get 272 . Find the number.
a. 24
b. 17
c. 19
d. None
e) Four bells begin to toll together respectively at the intervals of $8,10,12$ and 16 seconds. After how many seconds will they toll together again?
a. 246 s
b. 243 s
c. 242 s
d. 240 s

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[1+1+1+1+1]
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7. a) How much $60 \%$ of 50 is greater than $40 \%$ of 30 ?
a. 18
b. 13
c. 15
d. 20
b) A batsman in his 17 th innings makes a score of 85 and their by increasing his average by 3 . What is his average after the 17th innings?
a. 34
b. 35
c. 36
d. 37
c) An amount of money is to be divided between $P, Q$ and $R$ in the ratio of $3: 7: 12$. If the difference between the shares of $P$ and Q is Rs 2400 , what will be the difference between Q and R's share?
a. Rs. 2800
b. Rs. 3000
c. Rs. 3200
d. Rs. 2400
d) If cost of sugar increases by $25 \%$. How much percent consumption of sugar should be decreased in order to keep expenditure fixed?
a. 10\%
b. $15 \%$
c. $20 \%$
d. $25 \%$
e) A mixture of 150 liters of wine and water contains $20 \%$ water. How much more water should be added so that water becomes $25 \%$ of the new mixture?
a. 7 liters
b. 15 liters
c. 10 liters
d. 9 liters

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[1+1+1+1+1]
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8. a) A train passes a station platform in 36 seconds and a man standing on the platform in 20 seconds. If the speed of the train is $54 \mathrm{~km} / \mathrm{hr}$, what is the length of the platform?
a. 120 m
b. 240 m
c. 300 m
d. None of these
b) In a 1000 m race Usha beats Shiny by 50 m . In the same race, by what time margin Shiny beat Mercy who runs at $4 \mathrm{~m} / \mathrm{s}$ ?
a. 20 s
b. 9 s
c. 25 s
d. Data insufficient
c) Walking with $4 / 5$ of my usual speed, I miss the bus by 5 minutes. What is my usual time?
a. 24 min
b. 20 min
c. 14 min
d. 30 min
d) Excluding stoppages, the speed of a train is 45 kmph and including stoppages it is 36 kmph . For how many minutes does the train stop per hour?
a. 10 min
b. 12 min
c. 15 min
d. 8 min
e) Two taps can separately fill a cistern 10 minutes and 15 minutes respectively and when the waste pipe is open, they can together fill it in 18 minutes. The waste pipe can empty the full cistern in $\qquad$ -
a. 12 min
b. 8 min
c. 9 min
d. None of these

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[1+1+1+1+1]
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9. a) 353510123517
a. 2235
b. 3519
c. 1935
d. Cannot be determined
b) QPO, NML, KJI, $\qquad$ , EDC
a. HGF
b. CAB
c. JKL
d. GHI
c) $\mathrm{QN}, \mathrm{RP}, \mathrm{TS}, \mathrm{WW}$, $\qquad$ FH
a. WX
b. YB
c. AB
d. ZY
d) In a certain code, MONKEY is written as XDJMNL. How is TIGER written in that code?
a. QDFHS
b. SDFHS
c. UJHFS
d. None
e) A, B, C and D playing cards. A and B are partners. D faces towards North. If A faces towards West, then who faces towards South?
a. B
b. C
c. D
d. None of these

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[1+1+1+1+1]
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10. a) Arrange the given words in alphabetical order and tick the one that comes in the middle.
a. Reprimand
b. Reverence
c. Amazed
d. Aquire
e. Disturb
b) How many pairs of letters are there in the word CRYSTALLIZE, which have as many between them as in the alphabet?
a. 1
b. 2
c. 3
d. 4
c) In this question, five words have been given, out of which four are alike in some manner and the fifth one is different. Choose out the odd one?
a. Blaze
b. Glint
c. Simmer
d. Shimmer
e. Glimmer
d) Man : Biography :: Nation : ?
a. Leader
b. Democracy
c. History
d. Geography
e) $23: 530:: 27$ : $\qquad$
a. 570
b. 870
c. 730
d. 770

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[1+1+1+1+1]
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11. a) i) Three numbers are in the ratio 1:2:3 and their H.C.F is 12 . The numbers are $\qquad$ .
a. $4,8,12$
b. $5,10,15$
c. $10,20,30$
d. $12,24,36$
ii) Find the H.C.F of $12,16,18$ and 24 ?
a. 4
b. 3
c. 2
d. 1
b) i)A and B's salaries together amount to Rs. 2,000 . A spends $95 \%$ of his salary and B spends $85 \%$ of his. If now their savings are the same, what is A's salary in Rupees?
a. 500
b. 750
c. 1500
d. 1000
ii) The ratio of the number of boys and girls in a college is $7: 8$. If the percentage increase in the number of boys and girls be $20 \%$ and $10 \%$ respectively. What will be the new ratio?
a. 8:9
b. 17:18
c. $21: 22$
d. None

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[1.5+1]+[1.5+1]
$$

12. Answer any two of the following:
a) i) A man leaves home 10 min late and travels at $9 / 7$ times of his usual speed. He reaches office 2 min late at $9: 00 \mathrm{am}$. What time did he reach office today?
a. 8:24 am
b. 8:32 am
c. 8:36 am
d. 8:28 am
ii) $A$ and $B$ together can do a work in 6 days. If $A$ alone can do it in 15 days. In how many days can B alone do it?
a. 10 days
b. 12 days
c. 15 days
d. 20 days
$[1.5+1]$
b) i) The town of Paranda is located on Green Lake. The town of Akram is west of Paranda. Tokhada is east of Akram but west of Paranda. Kakran is east of Bopri but west of Tokhada and Akram. If they are all in the same district, which town is the farthest west?
a. Paranda
b. Tokhada
c. Kakran
d, Bopri
ii) If FRAGRANCE is written as SBHSBODFG, how can IMPOSING be written?
a. NQPTJHOJ
b. NQPTJOHI
c. NQTPJOHJ
d. NQPTJOHJ
$[1.5+1]$
c) i) $25: 37:: 49:$ ?
a. 41
b. 57
c. 61
d. 65
ii) What will come in the place of question (?) mark in the following series? GPW, GPUW, GIPUW, GIPSUW?
a. GIHPSUW
b. GIPQSUW
c. GIJPSUV
d. GIKPSUW
