Quiz Date: $10^{\text {th }}$ July 2020
Directions (1-5): There are five students who appeared for RBI Grade B exam. Paper consists of 100 questions with 1 mark for each correct answer and 0.25 marks for each wrong answer.

|  | Questions <br> attempted | Right <br> Questions | Wrong <br> Questions | Marks <br> obtained |
| :---: | :---: | :---: | :---: | :---: |
| Aditya | 78 | - | - | 70.5 |
| Puskar | 92 | 76 | - | - |
| Anshuman | 98 | - | 36 | - |
| Alka | - | 30 | - | 27.25 |
| Avanish | 56 | - | - | 53.50 |

Note: Data found in any question is valid for all other questions unless it is given any condition.
No. of wrong questions $=$ (total questions attempted-total marks obtained) $\times 4 / 5$
No. of right questions $=$ total questions attempted - total wrong questions
Q1. Difference between total right number of questions of all students together and total wrong no. of questions of all students together is
(a) 141
(b) 161
(c) 223
(d) 156
(e) None of these


Q2. Marks obtained by Aditya and Puskar together is what \% of the marks obtained by Anshuman, Avanish and Alka together? (rounded off to 2 decimal places)
(a) $106.54 \%$
(b) $91.16 \%$
(c) $95.20 \%$
(d) $96.71 \%$
(e) $101.71 \%$

Q3. If the penalty of wrong answer is 0.33 then marks obtained by Aditya, Anshuman and Puskar together is
(a) 192.21
(b) 224.19
(c) 190.86
(d) 219.14
(e) 194.22

Q4. If the passing \% marks in the exam is 50 marks then at least how many questions has to be answered right by Puskar? (He attempted 92 questions)
(a) 58
(b) 56
(c) 59
(d) 55
(e) 60

Q5. What is the percent of marks obtained by all of them together?
(a) $59.03 \%$
(b) $53.15 \%$
(c) $52.53 \%$
(d) $45.05 \%$
(e) $55.25 \%$


Directions (6-10): The given table shows the number of students recruited by 5 companies from a college and number of male female ratio in them.

| Company | Total students | male $:$ female |
| :---: | :---: | :---: |
| TCS | 640 | $11: 5$ |
| L\&T | 460 | $15: 8$ |
| HSBC | 270 | $7: 2$ |
| OLA | 750 | $11: 4$ |
| Airtel | 840 | $8: 13$ |

Q6. Female student recruited by TCS is how much percent of male student recruited by L\&T.
(a) $33 \frac{1}{3} \%$
(b) $66 \frac{2}{3} \%$
(c) $46 \%$
(d) $80 \frac{1}{2} \%$
(e) $52 \frac{1}{2} \%$

Q7. Find the ratio of male student recruited by OLA and TCS together to male students recruited by L\&T and Airtel together.
(a) $53: 47$
(b) $62: 99$
(c) $47: 53$
(d) $99: 62$
(e) $37: 41$

Q8. Find the average number of female recruited by these 5 companies.
(a) 246
(b) 217
(c)228
(d)194
(e)197

Q9. If $15 \%$ of total student recruited by TCS are recruited for USA and among them 60 students are male. Then find how much percent of girls are hired by TCS for USA.
(a) $18 \%$
(b) $12 \%$
(c) $34 \%$
(d) $8 \%$
(e) $5 \%$

Q10. Find the difference of male students hired by HSBC and female student hired by OLA.
(a) 13
(b) 19
(c) 10
(d) 6
(e) 32

Directions (11-15): The following table shows the percentage distribution of 21,000 professionals according to their professions and the percentage of females among professionals of each profession. Study it carefully and answer the questions given below.

| professionals | Total | Females out of <br> total |
| :--- | :--- | :--- |
| Doctors | $21 \%$ | $20 \%$ |
| Engineers | $18 \%$ | $60 \%$ |
| Architects | $11 \%$ | $40 \%$ |
| Lawyers | $19 \%$ | $40 \%$ |
| Teachers | $15 \%$ | $80 \%$ |
| Designers | $16 \%$ | $35 \%$ |

Q11. What is the average number of male professionals excluding those who are designers?
(a) 1880
(b) 1890
(c) 1980
(d) 1900
(e) 1885

Q12. Total numbers of female professionals are by what percent more or less than total male professionals?
(a) $18 \%$
(b) $18.2 \%$
(c) $21 \%$
(d) $18.5 \%$
(e) $19.5 \%$

Q13. Among Engineer professionals $25 \%$ are from civil background and among civil engineers males are 271 more than females. What is the number of female civil engineers?
(a) 328
(b) 317
(c) 327
(d) 338
(e) 337

Q14. What is the ratio of female engineers to female teachers?
(a) $10: 9$
(b) $9: 11$
(c) $9: 10$
(d) $11: 9$
(e) 7:9

Q15. What is the difference between total professionals and total male professionals?
(a) 9338
(b) 9363
(c) 9336
(d) 9366
(e) 8339

## Solutions

S1. Ans.(c)
Sol.
Required difference $=(72+76+62+30+54)-(6+16+36+11+2)$
=294-71=223

S2. Ans.(a)
Sol.
Required \% $=\frac{70.5+72}{53+27.25+53.50} \times 100$
$=106.54 \%$

S3. Ans.(c)
Sol.
Required marks $=(72+76+62)-0.33(6+16+36)=190.86$
S4. Ans.(c)
Sol.
Minimum marks which Puskar has to obtain to pass the exam $=50$
No. of wrong question in this case made by Puskar $=(92-50) \times 4 / 5$
$=33.6 \simeq 33$
$\therefore$ no. of right questions which Puskar has to make $=92-33=59$
S5. Ans.(e)
Sol.
Required $\%=\frac{70.5+72+53+27.25+53.50}{500} \times 100=55.25 \%$


S6. Ans.(b)
Sol.
No. of female students recruited by TCS
$=\frac{5}{16} \times 640=200$
No. of male students recruited by L \& T
$=\frac{15}{23} \times 460=300$
Required percent $=\frac{200}{300} \times 100=66 \frac{2}{3} \%$

S7. Ans.(d)
Sol.

Required ratio $=\frac{\frac{11}{15} \times 750+\frac{11}{16} \times 640}{\frac{15}{23} \times 460+\frac{8}{21} \times 840}$
$=\frac{550+440}{300+320}$
$=\frac{990}{620}$
$=99: 62$

S8. Ans.(c)
Sol.
Required no.
$=\frac{640 \times \frac{5}{16}+\frac{8}{23} \times 460+\frac{2}{9} \times 270+\frac{4}{15} \times 750+\frac{13}{21} \times 840}{5}$
$=\frac{200+160+60+200+520}{5}$
$=228$

S9. Ans.(a)
Sol.
Total hiring by TCS $=640$
Male student hired by TCS $=\frac{11}{16} \times 640=440$
Female student hired by TCS $=640-440=200$
Total student hired for USA $=640 \times \frac{15}{100}=96$
Male student hired for USA $=60$
So female student hired for USA $=96-60=36$
So required percent $=\frac{36}{200} \times 100=18 \%$

S10. Ans.(c)
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Sol.
Required difference $=\frac{7}{9} \times 270-\frac{4}{15} \times 750$
= 210 - 200
$=10$

S11. Ans. (b)
Sol.

| for reference |  |  |  |
| :--- | :--- | :--- | :--- |
|  | Total | Male | Female |
| Doctors | 4410 | 3528 | 882 |
| Engineers | 3780 | 1512 | 2268 |
| Architects | 2310 | 1386 | 924 |
| Lawyers | 3990 | 2394 | 1596 |
| Teachers | 3150 | 630 | 2520 |
| Designers | 3360 | 2184 | 1176 |

Required average
$=\frac{3528+1512+1386+2394+630}{5}=\frac{9450}{5}=1890$
S12. Ans. (e)
Sol.
Total male professional
$=3528+1512+1386+2394+630+2184=11634$
Total female professional
$=882+2268+924+1596+2520+1176=9366$
Required percentage
$=\frac{11634-9366}{11634} \times 100 \approx 19.5 \%$

S13. Ans. (e)
Sol.
Number of civil engineers
$=\frac{25}{100} \times 3780=945$
$\therefore$ Number of female civil engineers

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=\frac{945-271}{2}=337
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S14. Ans. (c)
Sol.

$$
\text { Required ratio }=\frac{2268}{2520}=\frac{9}{10}
$$



S15. Ans. (d)
Sol.
Total professionals $=21000$
Total male professionals $=11634$
$\therefore$ required difference $=21000-11634=9366$

